

Appendix 8.2

**Example of a Risk Assessment Report for a
Large Multi-Family Housing Development**

Part I: Identifying Information:

Lead-Based Paint Risk Assessment Report

For Home Sweet Home Apartment Building

**5678 Main St.
Anywhere, Any State 300000**

Prepared For:

**Mr. Joseph H. Smith, Owner
4444 Podunck Way
Anywhere, Any State 300000
400-777-7777**

By:

**Michael L. Hazard, Certified Assessor
5678 Snowflake St.
Anywhere, Any State 300000
400-333-3333**

**Any State License No. 94-567
EPA Certificate No. 33456**

April 19, 1994

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Summary

Part I: Identifying Information

Identity of dwelling(s) covered by report, identity of property(ies).

1. Risk Assessor, Name of Certificate (or License) and Number and State issuing certificate/license.
2. Property Owner Name, Address, and Phone Number.
3. Date of Report, Date of Environmental Sampling.

Part II: Completed Management, Maintenance, and Environmental Results Forms and Analyses

4. List of Location and Type of Identified Lead Hazards including an indication of which hazards are priorities (this summary should be suitable for use as notification to residents).
5. Optional Management Information (Form 5.6) (not required for homeowners).
6. Maintenance/Paint Condition Information (Form 5.2 or 5.7).
7. Building Condition (Form 5.1).
8. Brief Narrative Description of Dwelling Selection Process (not required if all dwellings were sampled).
9. Analysis of Previous XRF Testing Report (if applicable).
10. Deteriorated Paint Sampling Results (Form 5.3 or 5.3a).
11. Dust Sampling Results (Form 5.4 or 5.4a).
12. Soil Sampling Results (Form 5.5).
13. Other Sampling Results (if applicable).

Part III: Lead Hazard Control Plan

14. Lead-Based Paint Policy Statement (not applicable for homeowners).
15. Name of Individual in Charge of Lead-Based Paint Hazard Control Program.
16. Recommended Changes to Work Order System and Property Management (optional, not applicable for homeowners or property owners without work order systems).
17. Acceptable Interim Control Options and Estimated Costs.
18. Acceptable Abatement Options and Estimated Costs.
19. Reevaluation Schedule (if applicable).
20. Interim Control/Abatement to Be Implemented in This Property.
21. A Training Plan for Managers, Maintenance Supervisors, and Workers (this should include named individuals), if applicable.
22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program (not applicable for homeowners). Note: This section should include a discussion of how residents are to be educated about lead poisoning, *before* the risk assessment results are released.
23. Signatures (Risk Assessor) and Date.

Part IV: Appendix

24. All laboratory raw data.

Summary

Part I: Identifying Information

A lead-based paint risk assessment was conducted at the Home Sweet Home Apartment Building at 5678 Main St. in Anywhere, Any State 300000 for Mr. Joseph H. Smith, Owner, who is located at 4444 Podunck Way, Anywhere, Any State 300000 (400-777-7777) on April 1, 1994. The risk assessment was conducted by Michael L. Hazard, a Certified Risk Assessor (Any State License No. 94-567).

Home Sweet Home contains 438 apartments distributed through 15 stories. All the apartments are of a similar construction and have been repainted over the years in a similar fashion (the apartment owner's maintenance crew does most of the painting). Twenty-three of the units were targeted for sampling and visual assessment for this risk assessment using the criteria established in the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. One of these 23 targeted dwellings had been recently prepared for reoccupancy.

Part II. Results

4. List of Location and Type of Identified Lead-Based Paint Hazards

The building and its paint are in relatively poor condition overall, with water leaks and structural deficiencies evident throughout. The risk assessment showed that lead hazards exist in the following locations:

- Hazard A: Deteriorated lead-based paint on the exterior doors, window troughs, exterior trim and on the interior kitchen and bathroom walls.
- Hazard B: Leaded dust on window troughs and in common hallways.
- Hazard C: Contaminated soil in the play area located at the front of the building and around the building perimeter.

Paint chip sampling indicated that lead-based paint is present on exterior doors, window troughs, exterior trim, and on interior kitchen and bathroom walls. Previous lead-based paint testing at this location indicated that lead-based paint was present on all interior walls and kitchen cabinets, but in no other location. A review of the testing report showed that many painted surfaces had not been tested at all. For those that were tested, no attempt had been made to correct for the substrate underneath the paint. For example, the previous report indicated that lead-based paint was present on the kitchen cabinets. However, laboratory analysis of this paint indicated that the cabinets do not in fact contain lead-based paint and therefore do not require treatment. A more complete lead-based paint testing effort is needed if the exact locations of lead-based paint is to be determined. The previous testing report should not be relied upon to determine how maintenance and other repair work should be done.

Dust testing showed that leaded dust on window troughs in all rooms sampled averaged 30,532 µg/ft², more than 10 times greater than the HUD standard of 800 µg/ft².

Soil lead levels around the perimeter of the building and in the playground in front of the building were between 3,000 - 4,000 µg/g, well above the HUD Interim Standard of 2,000 µg/g for building perimeters and 400 µg/g for play areas.

After considering a number of options, the owner has decided to use interim controls in the immediate future, since the building is scheduled for comprehensive renovation within several years. These interim controls include:

- Stabilizing the paint on all surfaces that have deteriorated lead-based paint
- Removal of leaded dust located on window troughs and in common hallways
- Covering the bare soil with new sod and planting thorny bushes around the building perimeter to prevent children from entering this area. The play area will be covered with a suitable ground liner and then covered with sand at least 12 inches deep.

Mr. Smith has chosen to use interim controls until the building is renovated, which is scheduled to occur in 1998. A lead-based paint inspection will be performed at that time with the intent of including abatement in the renovation plans. The ten maintenance workers (some of whom work in other nearby apartment buildings owned by Mr. Smith), will all be trained in lead-based paint work practices. Certain property management practices will also be adopted to ensure that the normal repair work done will not disturb those surfaces with lead-based paint.

After the interim control work has been completed, a clearance examination, including dust sampling must be completed to make certain that the dwelling is lead-safe before the family moves back into the affected rooms.

Reevaluation:

Because the levels of leaded dust were more than 10 times greater than the HUD standard, this property should be reevaluated according to Schedule 4 in the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. This schedule calls for a reevaluation in September 1994 (6 months from now). If no lead-based paint hazards are identified, another reevaluation is not needed until September 1995 (1 year later). Assuming no new lead-based paint hazards are identified, a final reevaluation should be performed in September 1997, according to the HUD Guidelines. If the building passes the reevaluation, no further reevaluation is required, although the owner should still monitor the condition of the paint at least annually or whenever there is information that the paint is deteriorating.

After explaining the control measures that will be undertaken, Mr. Smith has agreed to share the results of this report with the residents in the building, and to provide each family with the EPA brochure and a brochure from the Anywhere Childhood Lead Poisoning Prevention program as a way of educating the residents.

Form 5.6
Management Data For Rental Dwellings

Part 1: Identifying Information

Identifying Information:

Name of Building or Development Home Sweet Home Apartment Building

Number of Buildings 1

Number of Individual Dwelling Units/Building: 438

Number of Total Dwelling Units: 438

Date of Construction 1937

Date of Substantial Rehab, if any None

List of Addresses of Dwellings (attach list if more than 10 dwellings are present)

Dwelling Unit No.	Address	No. Children Aged 0 - 6 Years Old	Recent Code Violation Reported by Owner?	Chronic Maintenance Problem?
1	5678 Main St. Anywhere, Any State	209	No	No
2		2	No	No
3		1	No	No
4		3	No	No
5		0	No	No
6		0	No	No
7		0	No	No
8		2	No	No
9		3	Yes	Yes
10		0	No	

(Other pages of this form would be included to list all 438 units)

Record number and locations of common child play areas (on-site playground, backyards, etc.)

Number 1 On-Site Playground in Front of Building

Part 2: Management Information

1. List names of individuals who have responsibility for lead-based paint. Include owner, property manager (if applicable), maintenance supervisor and staff (if applicable) and others. Include any training in lead hazard control work (inspector, supervisor, worker, etc.) that has been completed. Use additional pages, if necessary.

This information will be needed to devise the risk management plan contained in the risk assessor's report.

Name	Position	Training Completed (if none, enter "None")
Joseph Smith	Owner	None
Madeline Fairfield	Property Manager	None
Joe Sweat	Maintenance Supervisor	None

2. Has there been previous lead-based paint evaluations?
 Yes No (If yes, attach the report)
3. Has there been previous lead hazard control activity?
 Yes No (If yes, attach the report)
4. Maintenance usually conducted at time of dwelling turnover:

Repainting X
 Cleaning X
 Repair As Needed

Comments:

The dwelling has all trash removed after the resident has left. Joe Sweat inspects the dwelling and decides whether repainting is needed or other repairs to building systems are necessary. After performing any repainting or other repairs, the floors are mopped and the kitchen counters and bathrooms cleaned. All other floors are vacuumed.

5. Employee and Worker Safety Plan
- a. Is there an occupational safety and health plan for maintenance workers?
 Yes No (If yes, attach plan)
- b. Are workers trained in lead hazard recognition?
 Yes No If yes, who performed the training?

- c. Are workers involved in a hazard communication program?
 _____ Yes X No
- d. Are workers trained in proper use of respirators?
 _____ Yes X No
- e. Is there a medical surveillance program
 _____ Yes X No
6. Is there a HEPA Vacuum available?
 _____ Yes X No
7. Are there any on-site licensed or unlicensed day-care facilities.
 _____ Yes X No If yes, give location _____
8. Planning for Resident Children with Elevated Blood Levels
- a. Who responds for the owner if a resident children with elevated blood lead levels is identified?
 Madeline Fairfield
- b. Is there a plan to relocate such children?
 _____ Yes X No If Yes, Where? _____
- c. Do you (the owner) know if there ever has been a resident child with an elevated blood lead level?
 _____ Yes _____ No X Unknown
9. Owner Inspections
- a. Are there periodic inspections of all dwellings by the owner?
 X Yes _____ No If Yes, how often? Every year or whenever the unit is vacant
- b. Is the paint condition assessed during these inspections?
 X Yes _____ No
10. Do you (the owner) know if any of the dwellings have ever received a housing code violation notice?
 _____ Yes X No _____ Unknown If yes, describe code violation

11. If previously detected, unabated lead-based paint exists in the dwelling, have the residents been informed? _____ Yes X No

**Form 5.7
Maintenance Data for Rental Dwellings**

Condition of Paint on Selected Surfaces (Separate Page For Each Targeted Dwelling)

Building Component	Paint Condition (Intact, Fair, Poor, or Not Present) To Be Completed by Risk Assessor	Deterioration Due to Friction or Impact?	Deterioration Due to Moisture?	Location of Painted Component with Visible Bite Marks
Building Siding	Fair			
Exterior Trim	Poor	No	No	
Window Troughs	Poor	No	No	
Exterior Doors	Poor	Yes	No	
Railings	Fair	Yes	No	
Porch Floors	Not Applicable			
Other Porch Surfaces	Not Applicable			
Interior Doors	Fair	Yes	No	
Ceilings	Fair		No	
Walls	Intact (Kitchen and Bathroom Walls are Poor)			
Interior Windows	Fair	Yes	No	
Interior Floors	Fair	Yes	No	
Interior Trim	Intact			
Stairways	Fair	Yes	No	
Radiator (Or Radiator Cover)	Intact			
Kitchen cabinets	Poor	No	No	
Bathroom cabinets	Intact			
Other surfaces				

If the overall condition of a component is similar throughout a dwelling, that condition should be recorded. If a component in a couple of locations is in poor condition, but the overall condition is good or fair, the specific sites of the badly deteriorated paint should be noted. The specific locations of any component with bite marks should be recorded.

Form 5.7 (continued)

1. Painting Frequency and Methods
 - a. How often is painting completed? every 5 years
 - b. Is painting completed upon vacancy, if necessary?
 X Yes No
 - c. Who does the painting? X Property Owner Residents
IF Residents, SKIP to Q.2
 - d. Is painting accompanied by scraping, sanding, or paint removal?
 X Yes No
 - e. How are paint dust/chips cleaned up? (check one)
 X Sweeping Vacuum Mopping HEPA/TSP/HEPA
 - f. Is the work area sealed off during painting?
 Yes X No
 - g. Is furniture removed from the work area?
 Yes X No
 - h. If no, is furniture covered during work with plastic?
 Yes X No
2. Is there a preventive maintenance program?
 Yes X No
3. Describe work order system (if applicable, attach copy of work order form)

Ms. Madeline Fairfield, property manager, receives complaints from residents and prepares a written work order for Mr. Joe Sweat, maintenance supervisor, who assigns the job to one or more individual workers
4. How are resident complaints received and addressed? How are requests prioritized? If formal work orders are issued, is the presence or potential presence of lead-based paint considered in the work instructions?

Resident complaints are received directly by the property manager, who then authorizes the maintenance supervisor to complete the necessary repairs. The presence of lead-based paint is not routinely considered in the repair and maintenance work.
5. Record location of dwellings recently prepared for reoccupancy.

Apartment 234

**Form 5.1
Building Condition Form**

Condition	Yes	No
Roof Missing Parts of Surfaces (tiles, boards, etc.)		X
Roof Has Holes or Large Cracks	X	X
Gutter or Downspouts Broken	X	
Chimney Masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior or interior walls have obvious large cracks or holes, requiring more than routine painting		X
Exterior siding has missing boards or shingles	X	X
Water stains on interior walls or ceilings	X	X
Plaster walls deteriorated		X
Two or more windows or doors broken, missing, or boarded up	X	X
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structural leans, or visibly unsound		X
Total	6	

If the "Yes" column has 4 or more checks, the dwelling is considered to be in poor condition. Less than 4 checks in the "Yes" column means that the dwelling appears to be well maintained.

8. Dwelling Selection Process

HUD Guidelines state that for buildings with 438 apartments with a similar painting history and management history, 23 of those apartments can be selected to characterize the lead-based paint risks throughout the building. These 23 apartments were selected using a targeted approach, as defined in the HUD Guidelines. Information on maintenance history, code violations, and presence of young children was used to select those apartments likely to have the highest risks. The dwellings were not selected randomly. Walkthrough surveys could not be conducted in all 438 apartments.

9. Analysis of Previous XRF Testing

A preliminary assessment of an XRF Lead-Based Paint inspection conducted 5 years ago by Joe Crook Inspections was performed using the criteria in the HUD Guidelines. The results of this assessment indicate that the earlier results are unreliable and that further testing will be needed before any substantial renovation or disturbance of surfaces with lead-based paint.

	Review of Previous Lead-Based Paint Inspections	YES	NO
1	Did the report clearly explain the entire testing program and include an executive summary in narrative form?		X
2	Did the report provide an itemized list of similar building components (testing combinations) and the percentage of each component that tested positive, negative, and inconclusive? (Percentages are not applicable for single family dwellings.)		X
3	Did the report include test results for the common areas and building exteriors as well as the interior of the dwelling units?	X	
4	Were all of the painted surfaces that are known to exist in the dwelling units, common areas, and building exteriors included in the itemized list of components that were tested?		X
5	Does the owner fully comprehend the report and completely understand their responsibilities regarding further testing or hazard control?		X
6	If confirmation testing (laboratory testing) was necessary, did the testing firm amend the final report and revise the list of surfaces that tested positive, negative, and inconclusive?		X
7	Was the unit selection process performed randomly?	X	
8	Is the name of the XRF Manufacturer, Model Number, and Serial Number of the XRF that was used in each unit recorded in the report?		X
9	Did the report record the XRF calibration checks for each day that testing was performed?	X	
10	Did the calibration checks indicate that the instrument was operating within the Quality Control Value (see chapter 7)?		X
11	Were three readings collected for each surface?	X	
12	Were substrate corrections performed (if necessary)?	X	
13	Were confirmatory paint chip samples collected if XRF readings were in the inconclusive range?		
14	Was the procedure that was used to collect the paint chip samples described?		X
15	Was the laboratory that analyzed the paint samples identified?		X

Form 5.3
Field Sampling Form for Deteriorated Paint

(Use a Separate Page for Every Unit in Multi-Family Housing)

Name of Risk Assessor Michael Hazard
 Name of Property Owner Joseph Smith
 Property Address 5678 Main St, Anywhere Any State 300000 Apt. No. 9

Sampling Protocol All Dwellings Targeted Worst-Case Random
 Target Dwelling Criteria (Check All That Apply)
 Code Violations
 Judged to be in Poor Condition
 Presence of 2 or More Children between Ages of 6 Months and 6 Years
 Serves as Day-Care Facility
 Recently Prepared for Reoccupancy
 Random Sampling

Sample Number	Room	Building Component	Lead (µg/g or mg/cm ²)
1	Southeast Child's Bedroom (Bobby's Room)	Window Trough Frame	12,638 µg/g
2	Kitchen	Cabinets	238 µg/g
3	Kitchen	Walls	7,893 µg/g
4	Bathroom	Walls	10,487 µg/g
HUD Standard			5,000 µg/g or 1 mg/cm ²

Sample all layers of paint, not just deteriorated paint layers
 Total Number of Samples This Page 4
 Page 1 of 1
 Date of Sample Collection 4 / 1 / 94 Date Shipped to Lab 4 / 1 / 94
 Shipped by _____ Received by _____
 (signature) (signature)
 Date Results Reported 4 / 10 / 94 Analyzed by Lisa Baker
 Approved by Jim Zimmerman

Form 5.4a
Field Sampling Form for Dust

(Composite Sampling) (A separate page is used for each unit or common area)

Name of Risk Assessor Michael Hazard
 Name of Property Owner Joseph Smith
 Property Address 5678 Main St Apt. No. 9

Dwelling Selection Protocol All Dwellings Targeted Worst-Case Random

Target Dwelling Criteria (Check All That Apply)

- Code Violations
 Judged to be in Poor Condition
 Presence of 2 or More Children between Ages of 6 Months and 6 Years
 Serves as Day-Care Facility
 Recently Prepared for Reoccupancy
 Random Sampling

Sample Number	Record Name of Rooms Used by Owner or Resident to be Included in Sample	Dimension ¹ of Surface Sampled in Each Room (inches x inches)	Total Surface Area Sampled (ft ²)	Type of Surface Sampled	Is Surface Smooth and Cleanable?	Lab Result (µg/ft ²)
1	<u>Kitchen</u> <u>Living Room</u> <u>Child's Bedroom</u> <u>2nd Bedroom</u>	<u>12</u> x <u>12</u> <u>12</u> x <u>12</u> <u>12</u> x <u>12</u> <u>12</u> x <u>12</u>	4	Smooth Floors	Yes	124
	<u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> x <u> </u> <u> </u> x <u> </u> <u> </u> x <u> </u> <u> </u> x <u> </u>		Carpeted Floors		
2	<u>Kitchen</u> <u>Living Room</u> <u>Child's Bedroom</u> <u>2nd Bedroom</u>	<u>3</u> x <u>33.5</u> <u>3.25</u> x <u>33.5</u> <u>3.25</u> x <u>33.5</u> <u>3.25</u> x <u>33.5</u>	2.97	Interior Window Sills	Yes	336
3	<u>Kitchen</u> <u>Living Room</u> <u>Child's Bedroom</u> <u>2nd Bedroom</u>	<u>2.4</u> x <u>33.5</u> <u>2.5</u> x <u>33.5</u> <u>2.5</u> x <u>33.5</u> <u>2.5</u> x <u>33.5</u>	2.30	Window Troughs	No	30,456

¹ Measure to the nearest 1/8 inch

Total Number of Samples This Page 3

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Date of Sample Collection 4 / 1 / 94 Date Shipped to Lab 4 / 1 / 94

Shipped by _____ Received by _____
 (signature) (signature)

HUD Standards: 100 µg/ft² (floors), 500 µg/ft² (interior window sills), 800 µg/ft² window troughs

Form 5.4a
Field Sampling Form for Dust
 (Composite Sampling)

Name of Risk Assessor Michael Hazard
 Name of Property Owner Joseph Smith
 Property Address 5678 Main St Apt. No. COMMON AREAS

Dwelling Selection Protocol All Dwellings Targeted Worst-Case Random
 Target Dwelling Criteria (Check All That Apply)
 Code Violations
 Judged to be in Poor Condition
 Presence of 2 or More Children between Ages of 6 Months and 6 Years
 Serves as Day-Care Facility
 Recently Prepared for Reoccupancy

Sample Number	Record Name of Rooms Used by Owner or Resident to be Included in Sample	Dimension ¹ of Surface Sampled in Each Room (inches x inches)	Total Surface Area Sampled (ft ²)	Type of Surface Sampled	Is Surface Smooth and Cleanable?	Lab Result (µg/ft ²)
C-1	1st Floor Hallway_ 5th Floor Hallway_ 9th Floor Hallway_ 13th Floor Hallway_	_12_ x _12_ _12_ x _12_ _12_ x _12_ _12_ x _12_	4	Smooth Floors	Yes	124
C-2	_1st Floor Hallway_ _5th Floor Hallway_ _9th Floor Hallway_ _13th Floor Hallway_	_3_ x _33.5_ _3.25_ x _33.5_ _3.25_ x _33.5_ _3.25_ x _33.5_	2.97	Window Troughs	No	47,894
C-3	_1st Floor 5th Floor 9th Floor 13th Floor	8 x 12 8x12 8x12 8x12	2.67	Stair Treads	No	336
C-4	_1st Floor_ _5th Floor_ _9th Floor_ _13th Floor_	_12_ x _12_ _12_ x _12_ _12_ x _12_ _12_ x _12_	4	Landings	No	16,456

¹ Measure to the nearest 1/8 inch

Total Number of Samples This Page 4

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Date of Sample Collection 4/1/94 Date Shipped to Lab 4/1/94

Shipped by _____ Received by _____
 (signature) (signature)

HUD Standards: 100 µg/ft² (floors), 500 µg/ft² (interior window sills), 800 µg/ft² window troughs

Form 5.5
Field Sampling Form For Soil
 (Composite Sampling Only)

Name of Risk Assessor Michael Hazard

Name of Property Owner Joseph Smith

Property Address 5678 Main St. Anywhere, Any State

Sample No.	Location	Bare or Covered	Lab Result (µg/g)
S-1	Building Perimeter (North & East Sides)	Bare	3,989
S-2	Building Perimeter (South & West Sides)	Bare	3,498
S-3	Play Area <u>Front Playground</u>	Bare	3,897
	Play Area 2 (describe) _____		
HUD Interim Standard			400 for bare play areas, 2000 for other yard ares

Collect only the top 1/2" of soil

Total Number of Samples This Page 3

Page 3 of 27

Date of Sample Collection 4/1/94 Date Shipped to Lab 4/1/94

Shipped by _____ Received by _____
 (signature) (signature)

Part III: Lead Hazard Control Options

14. Lead-Based Paint Policy Statement

Home Sweet Home has decided to adopt a lead-based paint policy statement, as follows:

Home Sweet Home Property Management Company is committed to controlling lead-based paint hazards in all its apartments. Madeline Fairfield, Property Manager, has my authority to direct all activities associated with lead hazard control, including directing training, issuing special work orders, informing residents, responding to cases of children with elevated blood lead levels, correcting lead-based paint hazards on an emergency repair basis, and any other efforts that may be appropriate. The company's plan to control such hazards is detailed in a risk assessment report and lead hazard control plan.

(Signed) Joseph Smith _____ (Date)

(Owner)

(Signed) Madeline Fairfield _____ (Date)

(Lead Hazard Control Program Manager)

15. Name of Individual in Charge of Lead-Based Paint Hazard Control Program Madeline Fairfield

16. Recommended Changes to Work Order System and Property Management

If painted surfaces will be disturbed during a particular repair job, the painted surface should be tested to determine if it has lead-based paint on it, unless it has been tested previously by reliable testing. The results in this report indicate that lead-based paint is definitely present on exterior doors, window trough frames, exterior trim, and kitchen and bathroom walls. All other surfaces should be considered to be suspected lead-based paint until they have been tested. If lead-based paint is present (or is suspected to be present), the maintenance worker should take the necessary precautions by wetting down the surface and performing cleanup. If the surface area is large, clearance testing should be completed before residents move back in. As general guidance, the table shown below can be used. The work order should indicate whether respirators and protective clothing are needed, how extensive the cleaning should be, and any other special precautions. The Appendix to this report contains a sample of a work order form for lead-based paint work.

Paint chips are now cleaned up by sweeping. Mopping or other wet cleaning methods should be used instead.

If residents are present, the work area should be sealed off so that leaded dust does not enter the living area. Any furniture present should be moved or covered with plastic. Further details are provided in the Appendix. The possible presence of lead-based paint should be considered in all repair and maintenance work.

A lead-based paint inspection should be completed at some point in the future to determine exactly where all the lead-based paint is located so that it can be properly managed.

**Table 17.1 (from HUD Guidelines)
Summary of Low- and High-Risk Job Designations for Surfaces Known or Suspected to Have Lead-Based Paint**

Job Description	Low Risk	High Risk*
Repainting (includes surface preparation)		√
Plastering or wall repair		√
Window repair		√
Water or moisture damage repair (repainting and plumbing)		√
Door repair	√	
Building component replacement		√
Welding on Painted Surfaces		√
Door lock repair or replacement	√	
Electrical fixture repair	√	
Floor refinishing		√
Carpet replacement		√
Groundskeeping	√	
Radiator leak repair	√	
Baluster repair (metal)		√
Demolition		√

* High-risk jobs typically disturb more than 2 square feet per room. If these jobs disturb less than 2 square feet, then they can be considered low-risk jobs.

**Table 17.2 (from HUD Guidelines)
Summary of Protective Measures For Low- and High-Risk Jobs**

Protective Measure	Low Risk	High Risk
Worksite preparation with plastic sheeting (6 mil thick)	Plastic sheet no less than 5 feet by 5 feet immediately underneath work area	Whole floor, plus simple airlock at door or tape door shut
Children kept out of work area	Yes	Yes
Resident relocation during work	No	Yes
Respirators	Probably not necessary*	Recommended
Protective clothing Note: Protective shoe coverings are not to be worn on ladders, scaffolds, etc.	Probably not necessary*	Recommended
Personal hygiene (enforced hand washing after job)	Required	Required
Showers	Probably not necessary	Recommended
Work practices	Use wet methods, except near electrical circuits	Use wet methods, except near electrical circuits
Cleaning	Wet cleaning with lead-specific detergent trisodium phosphate or other suitable detergent around the work area only (2 linear feet beyond plastic)	HEPA vacuum/wet wash/ HEPA vacuum the entire work area
Clearance	Visual examination only	Dust sampling during the preliminary phase of the maintenance program and periodically thereafter (not required for every job)

* Employers must have objective data showing that worker exposures are less than the OSHA Permissible Exposure Limit of 50µg/m³ if respirators and protective clothing will not be provided.

The Appendix to this report contains a list of training providers who can train the maintenance workers to handle lead-based painted surfaces safely.

A HEPA vacuum should be purchased for routine use.

The Appendix also contains information on medical surveillance, respirator use, and other important considerations.

The practice of examining the condition of the paint annually or upon vacancy is a good one and should be continued.

Since the paint has not yet been fully and adequately tested, it should be assumed to contain lead-based paint. The owner should tell residents to report any paint that is peeling, chipping, flaking, chalking, or otherwise deteriorating so that it can be repaired quickly and safely.

17. Acceptable Interim Control Options and Estimated Costs

The costs shown below include labor, materials, worker protection, site containment and cleanup. These are only very rough estimates that may not be accurate; a precise estimate and a full lead hazard control plan should be obtained from a certified lead-based paint abatement contractor. I would be pleased to help you develop such a plan if you request.

Hazard A: Deteriorated Lead-Based Paint on Exterior Doors, Exterior Side of Windows, Exterior Trim, Kitchen Walls and Bathroom Walls

- a. Repair of Water Leaks, followed by Paint Film Stabilization \$xx
- b. Repair of Water Leaks, followed by Encapsulation of Exterior Door and Window Frames with a Liquid Encapsulant Coating plus sash replacement \$xx

Hazard B: Leaded Dust On Window Troughs and Common Hallways

- a. Dust removal followed by sealing concrete stairway floors with concrete sealant and paint film paint film stabilization of window troughs.

Hazard C: Contaminated Soil in the Playground and Around the Building Perimeter

- a. Fence off playground and building perimeter to eliminate access \$xx
- b. Cover soil with a suitable material such as bark, gravel, sand, astroturf and plant dense thorny bushes around building perimeter to limit access

18. Abatement Options and Estimated Costs

Hazard A: Deteriorated Lead-Based Paint on Exterior Doors, Exterior Side of Windows, Exterior Trim, Kitchen Walls and Bathroom Walls (all options assume repair of water leaks occurs first)

- a. Replace doors \$xx
- b. Chemically remove paint from doors and repaint \$xx
- c. Replace windows and exterior trim \$xx
- d. Chemically remove paint from windows and trim and repaint \$xx
- e. Remove paint from trim using heat guns operating below 1100°F \$xx
- f. Enclosure of kitchen and bathroom walls \$xx
- g. Demolish and replace kitchen and bathroom walls \$xx

Hazard B: Leaded Dust On Window Troughs and Common Hallways

- a. Cover exterior sills with aluminum coil stock \$xx
- b. Replace exterior sills \$xx
- c. Install new tiles in common hallways \$xx

Hazard C: Contaminated Soil in the Playground and Around the Building Perimeter

- a. Remove and replace top soil around building and in playground \$xx
- b. Pave soil around building perimeter with asphalt or cement plus eliminate playground \$xx
- c. Pave soil around building perimeter and cover play area with a geotextile fabric and cover with new sand, soil, bark or other material providing adequate fall protection. Do not pave playground area. \$xx

19. Reevaluation Schedule

Because the levels of leaded dust in window troughs were more than 10 times greater than the HUD standard, this property should be reevaluated according to Schedule 4 in the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. This schedule calls for a reevaluation in September 1994 (6 months from now). If no lead-based paint hazards are identified, another reevaluation is not needed until September 1995 (1 year later). Assuming no new lead-based paint hazards are identified, a final reevaluation should be performed in September 1997, according to the HUD Guidelines. If the building passes the reevaluation, no further reevaluation is required, although the owner should still monitor the condition of the paint at least annually or whenever there is information that the paint is deteriorating.

Part IV: Site-Specific Lead Hazard Control Plan

20. Lead Hazard Control Option To Be Implemented in This Property

Hazard A: Deteriorated Lead-Based Paint on Exterior Doors, Exterior Side of Windows, Exterior Trim, Kitchen Walls and Bathroom Walls

Repair of Water Leaks, followed by Paint Film Stabilization \$xx

Hazard B: Leaded Dust On Window Troughs and Common Hallways

Dust removal followed by sealing concrete stairway floors with concrete sealant and paint film paint film stabilization of window troughs.

Hazard C: Contaminated Soil in the Playground and Around the Building Perimeter

Soil in the playground will be covered by a liner and sand at least 12 inches deep. Dense thorny bushes will be planted around building perimeter to limit access.

21. Training Plan for Managers, Maintenance Supervisors and Workers

Ms. Madeline Fairfield will attend the lead hazard awareness training course offered by the Anywhere Childhood Lead Poisoning Prevention Program. She will be responsible for ensuring that all maintenance workers and their supervisors are trained in lead-based paint work practices.

22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program

The results of this report will be described by the owner to the residents in the dwelling through a brief summary that will be placed in each resident's mailbox. The brochure in the Appendix will be provided to the residents. The owner will explain to the resident that the lead hazards at the property will be corrected within two weeks and that all residents should report any deteriorating paint in the future to Ms. Fairfield. The dwelling will be tested after the work has been completed to make certain that it was effective.

23. Signatures (Risk Assessor and Owner), Date and Certificate of Lead-Based Paint Compliance

After the work has been completed and clearance established, a certificate will be appended to this report.

Joseph Smith, Owner (date) _____

Michael Hazard, Certified Risk Assessor (date) _____

Example of Certificate of Lead-Based Paint Compliance

I hereby certify that on May 1, 1994 the apartment building located at 5678 Main St, Anywhere, Any State meets the criteria established by the Department of Housing and Urban Development for lead safety. Either no lead-based paint hazards were identified or all lead-based paint hazards have been corrected.

Owner

Authorized Signature

Expiration Date: September 1, 1994

**Any State
Department of Health
Division of Childhood Lead Poisoning Prevention**

