

# **A.H.E.R.A.**

## **Management Plan for Asbestos Containing Building Materials**

Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068

TRE Project No. 1020-90

Conducted By:

Prepared by



## INTRODUCTION

Each LEA must develop an Asbestos Management Plan for school buildings under its authority. This plan is to be submitted to the state Governor (or designee), no later than October 12, 1988. LEA's are required to begin implementation of their management plan by July 9, 1989 and to complete in stages. A copy of the plan must be available in the school administrative offices for viewing by the public.

A Management Plan should be used as a guidance document for asbestos control. A brief description of the elements of the plan as required by AHERA follows. Other sections of the notebook provide detailed information on the various components of the plan.

Management plans should be considered working documents. They set forth a framework for short and long-term actions to be taken by the LEA to protect building occupants. They must be kept up to date (e.g., response actions, dates and results of surveillance).

This survey was performed using non-destructive sampling methods in order to maintain the integrity of occupied spaces. Any unknown or suspect materials revealed during renovation or demolition of the structure should be tested for asbestos content prior to their disturbance.

The Management Plan represents the combination of the Inspection Report with a game plan for responding to and maintaining the asbestos containing materials. It is a flexible document that you can easily update. It is designed on an AHERA format and currently exceeds state and federal requirements for managing asbestos materials in commercial properties.

The Management Plan is a document the Owner must continue to use and update. The notebook will be an aid for the following activities:

- Identifying and performing initial cleaning
- Scheduling response actions
- Training your personnel
- Maintaining the asbestos containing materials in place
- Learning to budget for asbestos activities
- Setting building asbestos policies
- Notifying affected parties
- Keeping records

Remember this plan is not an encyclopedia of all asbestos facts, nor a recitation of the many rules affecting asbestos, nor a substitute for training.

## CONCLUSION

The Management Plan should provide elaboration on all aspects of the plan. For example, in selecting a response action, justification is necessary for the particular choice, rationale for its prioritization and explanation of the resources required to implement the response should appear in the plan.

The Management Plan is viewed as a planning or working document. It not only sets out a course of action for the LEA, but it becomes documentary evidence of progress in implementing asbestos control options. Give the cost and financing information contained in the plan, it provides guidance on matters such as annual and long-term school budgeting and community tax and bond issues. In addition, the Management Plan will help school administrators identify potential funding sources to implement their asbestos control program.

LEA DESIGNATE

Tim Woodley  
West Linn-Wilsonville School District 3Jt  
22201 S.W. Stafford Road  
Tualatin, OR 97068

The Local Education Agency Designate is required by the Final Rules to ensure the School's continuing compliance with the AHERA requirements. The LEA Designates specific requirements are described in 40 CFR Section 763.84 of the Final Rules.

SCHOOL ASBESTOS COORDINATOR

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

As is option, the School may appoint a school asbestos coordinator to ensure compliance within a specific school. The coordinator's responsibilities parallel those of the LEA Designate.

## LEA DESIGNATE DOCUMENTATION

The school district must designate and train a person to ensure compliance with the requirements of Section 763.84 of the Final Rules. The responsibilities of the LEA Designate's signature and statement of acceptance appears in the last TAB of the Management Plan. If the school board or superintendent has formally assigned the LEA Designate with a letter, memorandum, or similar conveyance, a copy should be filed under this Tab.

The West Linn-Wilsonville School District's Superintendent Roger L. Woehl acknowledges the undersigned person to act as the LEA Designate throughout the West Linn-Wilsonville School District.

Signature: Roger L. Woehl

Date: 11/1/99

## LEA DESIGNATE

Tim Woodley  
West Linn-Wilsonville School District 3Jt  
22210 S.W. Stafford Road  
Tualatin, OR 97062  
(503) 638-9869

## LEA DESIGNATE TRAINING

Course Name: AHERA DP  
TRAINING

Training Date: 10-14-99

Total hours: \_\_\_\_\_

Description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## LEA DESIGNATE RESPONSIBILITIES

Responsibilities are listed in the federal register included in this section.

# **ASBESTOS MANAGEMENT PLAN**

## **FOR**

**Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068**

**ASBESTOS PROGRAM COORDINATOR:**

**Tim Woodley  
(503) 673-7041**

**INSPECTION CONDUCTED BY:**



**P.O. BOX 216 Gladstone OR, 97027 Phone: (503) 557-2396 Fax: 557-3025**

# **WEST LINN-WILSONVILLE SCHOOL DISTRICT**

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  - Asbestos Location Diagrams
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  - Annual (Parent/Legal Guardian/Occupant) Notification Records
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  - Contractor Notification/Acknowledgment
  - Contractor Asbestos Awareness Training Records
- 5. Training Records**
  - LEA Designate/Asbestos Awareness Training Records
  - Maintenance/Custodial Staff
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- 10. Asbestos Removal Activity/Response Action Recordkeeping**
  - Operations & Maintenance (<3 sq. feet or 3 ln. feet)
  - Small Scale (>3 sq. feet or 3 ln. feet) (<40 ln. feet or 80 sq. feet)
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  - Flow Charts to Determine Adequate Response Actions
- 11. Operations and Maintenance Plan**
- 12. Regulatory Agency Correspondence/Overview of Requirements (EPA, DEQ, Oregon OSHA)**
- 13. Certificates (Management Planner, Building Inspector, Project Designer, NVLAP) NIOSH 582, 7400 Method Certification**

### **Summary of Asbestos Containing Building Materials (ACBM) in this facility.**

This section reflects requirements outlined in 40 CFR 763.85 (vi) (B) (c) (d) and (e)

The following subsections contain this required information:

- AHERA General Data Sheet
- Locations and quantities of Asbestos Containing Building Materials
- Asbestos location diagrams
- Consultants cost estimates for asbestos removal

### **SAMPLE/MATERIAL LOCATION DIAGRAMS**

As part of the AHERA Asbestos Inspection the locations of samples collected are recorded on building diagrams. In addition to the sample locations, specific damage areas are recorded where found. The following pages provide the sample location diagrams for the School District. These drawings are organized in the same manner as the inspection/management plan data, i.e., campus one building one is first.

The title block contains the specific state, district, campus, and building or code with a 12 digit number. Next is the District Name, the Campus Name, and finally the Building Name. The next block provides the date the drawing was made, the street number and finally the drawing number.

Location of Caution Label: The AHERA regulations require the use of labels indicating the presence of Asbestos Containing Building Materials (ACBM). The label is to be placed on or near ACBM in routine maintenance areas in all school buildings. When this label is applied in the field the inspector identifies its' location on the sample location diagram. On the drawing, the label symbol contains information about its placement within the routine maintenance area so that it may be readily found by the LEA. The label states the following:

**CAUTION  
ASBESTOS. HAZARDOUS.  
DO NOT DISTURB  
WITHOUT PROPER TRAINING  
AND EQUIPMENT**

The presence of sample numbers, crosshatching and damage areas does not mean that all of the areas indicated contain asbestos. These location diagrams are a record of the field inspection only and are meant to show where samples were taken and what areas may be affected if asbestos is present. To determine which areas are affected, a review of the Inspection/Management Plan Data and the Petrographic Results contained in Sections 4 and 5 should be made. If desired, the location diagrams can be highlighted by the school district's asbestos coordinator to indicate the presence of asbestos containing material.

# **AHERA GENERAL DATA SHEET**



SECTION 01314  
CERTIFICATION OF NO ~~HAZARDOUS~~ MATERIAL  
ASBESTOS

020  
**ORIGINAL**

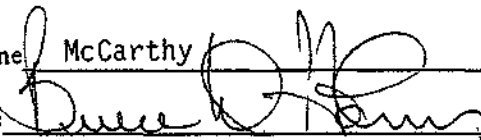
No final payment shall be made until the Contractor shall file with the Owner, prior to acceptance of the Work, a notarized Certification of No ~~Hazardous~~ Material in the following form:  
Asbestos

\*\*\*\*\*

ASBESTOS  
"TO THE BEST OF MY KNOWLEDGE NO ~~HAZARDOUS~~ MATERIAL IS USED IN THE CONSTRUCTION OF THIS PROJECT. MATERIAL SAFETY DATA SHEETS WILL BE PROVIDED AS REQUESTED BY THE OWNER FOR ALL MATERIALS WHICH MAY BE QUESTIONED IN THE FUTURE."

In WITNESS WHEREOF, the undersigned has signed and sealed this instrument this  
17th day of November, 19 99.

Firm Name McCarthy

Signature 

Title Sr. Vice President

  
(Attest)

(SEAL IF CONTRACTOR IS A CORPORATION)

As determined necessary, evidence of compliance may be required to be submitted with and made a part of this Certificate.

ASBESTOS  
END OF CERTIFICATION OF NO ~~HAZARDOUS~~ MATERIAL SECTION

Mar-99

1999 PHASE II RENOVATION PROJECT  
WEST LINN - WILSONVILLE SCHOOL DISTRICT

01314-1

SECTION 01314  
CERTIFICATION OF NO ~~HAZARDOUS~~ MATERIAL  
ASBESTOS

ORIGINAL

No final payment shall be made until the Contractor shall file with the Owner, prior to acceptance of the Work, a notarized Certification of No ~~HAZARDOUS~~ Material in the following form:  
Asbestos

\*\*\*\*\*

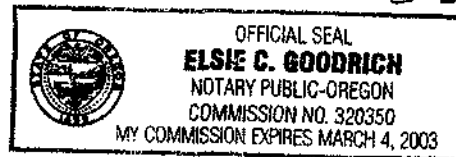
## ASBESTOS

"TO THE BEST OF MY KNOWLEDGE NO ~~HAZARDOUS~~ MATERIAL IS USED IN THE CONSTRUCTION OF THIS PROJECT. MATERIAL SAFETY DATA SHEETS WILL BE PROVIDED AS REQUESTED BY THE OWNER FOR ALL MATERIALS WHICH MAY BE QUESTIONED IN THE FUTURE."

In WITNESS WHEREOF, the undersigned has signed and sealed this instrument this  
16TH day of NOV. 19 99.

Firm Name INTERSTATE MECHANICALSignature Fred L. KoslowskiTitle PRESIDENT*Elsie C. Goodrich*

(Attest)  
(SEAL IF CONTRACTOR IS A CORPORATION)



As determined necessary, evidence of compliance may be required to be submitted with and made a part of this Certificate.

ASBESTOS  
END OF CERTIFICATION OF NO ~~HAZARDOUS~~ MATERIAL SECTION

Mar-99

1999 PHASE II RENOVATION PROJECT  
WEST LINN - WILSONVILLE SCHOOL DISTRICT

01314-1

NOV 18 1999

370950-006-001

OREGON DEPARTMENT OF EDUCATION  
700 Pringle Parkway SE  
Salem, Oregon 97310-0290

Office of School District Services  
378-6964

### SUMMARY DATA SHEET

Facility Name and Address Williamette

Preparer Name and Phone No. Kathy Cameron (913) 865-9455 Date 4/27/87

AHERA Damage Category	Type of Asbestos-Containing Building Materials (ACBM)			
	Surfacing	Thermal System Insulation (TSI)		Miscellaneous
		Linear Feet	Square Feet	
1. Damaged or significantly damaged TSI ACM				
2. Damaged friable surfacing ACM				
3. Significantly damaged friable surfacing ACM	4960			
4. Damaged or significantly damaged friable miscellaneous ACM				
5. ACBM with potential for damage	4250	1641	1113	45000
6. ACBM with potential for significant damage	700			
7. Other friable ACBM, or friable suspected ACBM				
8. Nonfriable ACBM, or nonfriable suspected ACBM				
• Total ACBM (Total 1 through 8)	Ft <sup>2</sup>	10110	1113	45000
	L.F.	1641		
Total Friable ACBM (Total 1 through 7)	Ft <sup>2</sup>	10110		
	L.F.			

Oregon Department of Education  
700 Pringle Parkway SE  
Salem, OR 97310-0290

Office of School District Services

**AHERA GENERAL DATA SHEET**

<u>Williamette - Main</u> Name of School Building	<u>West Linn School District</u> LEA (District)	<u>                    </u> County
<u>PO Box 100</u> Address	<u>West Linn</u> City	<u>97068-0100</u> Zip Code
<u>                    </u> Building Telephone Number	<u>Samuel Nutt</u> District's Asbestos Program Manager	<u>(503)638-9869</u> Telephone Number
Public <input checked="" type="checkbox"/>	Private <input type="checkbox"/>	State <input type="checkbox"/>

**CONSTRUCTION DATA**

Year Built: Before 1930 1930-44 1945-60 1961-75 After 1975 Actual             

Additions Dates:                      Size (Sq. Ft. all floors)                     

Construction Type: Steel ☐ Wood ☐ Concrete ☐ Masonry ☐ Other ☐

Roof Framing: Steel ☐ Wood ☐ Concrete ☐

Heating System: Steam ☐ Hot Water ☐ Forced Air ☐ Electric Baseboard ☐ Heat Pump ☐ Other ☐

Renovation: Yes ☐ No ☐ Year:             

**USE AND OCCUPANCY**

Primary Use: School ☐ Athletic Facility ☐ Office ☐ Warehouse ☐  
Maintenance Building ☐ Other (describe)                     

No. of Occupants: Staff ☐ Students ☐ Maint./Custodial Personnel ☐

**INSPECTOR\***

Name Gary Adler

Business Hall-Kimbrell

# 80026 Exp. Date             

**MANAGEMENT PLANNER\***

Name John Newlin

Business Hall-kimbrell

# 80046 Exp. Date             

Course Provider Hall-Kimbrell

\*Primary person if more than one person.

**LOCATIONS &  
QUANTITIES OF  
ASBESTOS  
CONTAINING BUILDING  
MATERIALS**

Campus: 006 Williamette

[illegible]

LABORATORY:  
HALL-KIMBRELL ENVIRONMENTAL SERVICES  
4840 W. 15th Street  
Lawrence, Kansas 66044

PETROGRAPHIC ANALYSIS FOR ASBESTOS  
West Linn S.D. 3JT  
37-0050

LAB SUPERVISOR: Thomas Bergin

A S B E S T O S										O T H E R M A T E R I A L S							TOT%	DATE	MICROSCOPIST
USGROUP	SAM#	CONT	ASB	CHRY	AMOS	CROC	ANTH	ACT/TRM	%ASB	MIN	WOOD	VERM	PUMC	BIND	OTH1	OTH2			
— USA # 01 —																			
37005000600101	85	Y	Y	30%	45%	0%	0%	0%	75%	0%	0%	0%	0%	25%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	86	Y	Y	45%	35%	0%	0%	0%	80%	0%	0%	0%	0%	20%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	87	Y	Y	40%	40%	0%	0%	0%	80%	0%	0%	0%	0%	20%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	88	Y	Y	35%	40%	0%	0%	0%	75%	0%	0%	0%	0%	25%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	89	Y	Y	40%	35%	0%	0%	0%	75%	0%	0%	0%	0%	25%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	90	N	Y	35%	30%	0%	0%	0%	65%	0%	10%	0%	0%	25%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	91	N	Y	20%	40%	0%	0%	0%	60%	0%	10%	0%	0%	30%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	92	N	Y	50%	20%	0%	0%	0%	70%	0%	0%	0%	0%	30%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	93	N	Y	2%	2%	0%	0%	0%	4%	0%	90%	0%	0%	6%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	94	N	Y	40%	30%	0%	0%	0%	70%	0%	0%	0%	0%	30%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	95	N	Y	20%	2%	0%	0%	0%	22%	0%	68%	0%	0%	10%	0%	0%	100%	09/15/88	Susan Hoff
37005000600101	96	N	Y	35%	30%	0%	0%	0%	65%	0%	10%	0%	0%	25%	0%	0%	100%	09/15/88	Susan Hoff
— USA # 02 —																			
37005000600102	97	Y	Y	35%	0%	0%	0%	0%	35%	0%	35%	0%	0%	10% SF	20%	0%	100%	09/15/88	Susan Hoff
37005000600102	98	Y	Y	5%	0%	0%	0%	0%	5%	60%	0%	0%	0%	10% SF	25%	0%	100%	09/15/88	Susan Hoff
37005000600102	99	Y	Y	50%	0%	0%	0%	0%	50%	0%	20%	0%	0%	10% SF	20%	0%	100%	09/15/88	Susan Hoff
— USA # 03 —																			
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37005000600103	01	Y	Y	5%	60%	0%	0%	0%	65%	0%	0%	0%	0%	35%	0%	0%	100%	09/19/88	Mary Holland
37005000600103	02	Y	Y	5%	55%	0%	0%	0%	60%	0%	0%	0%	0%	40%	0%	0%	100%	09/19/88	Elaine Cook
— USA # 04 —																			
37005000600104	03	Y	Y	14%	0%	0%	0%	0%	14%	0%	76%	0%	0%	10%	0%	0%	100%	09/19/88	Mary Holland
37005000600104	04	Y	Y	12%	0%	0%	0%	0%	12%	0%	78%	0%	0%	10%	0%	0%	100%	09/19/88	Mary Holland

10/8/88



LABORATORY:  
HALL-KIMBRELL ENVIRONMENTAL SERVICES  
4840 W. 15th Street  
Lawrence, Kansas 66044

PETROGRAPHIC ANALYSIS FOR ASBESTOS  
West Linn S.D. 3JT  
37-0050

LAB SUPERVISOR: Thomas Bergin

USGROUP	SAM#	CONT	ASB	A S B E S T O S						O T H E R M A T E R I A L S							TOT%	DATE	MICROSCOPIST
				CHRY	AMOS	CROC	ANTH	ACT/TRM	ASB	MIN	WOOD	VERM	PUMC	BIND	OTH1	OTH2			
37005000600104	05	Y	Y	13%	0%	0%	0%	0%	13%	0%	77%	0%	0%	10%	0%	0%	100%	09/19/88	Mary Holland
== USA # 05 ==																			
37005000600105	06	Y	Y	5%	60%	0%	0%	0%	65%	0%	0%	0%	0%	35%	0%	0%	100%	09/19/88	Mary Holland
37005000600105	07	Y	Y	3%	57%	0%	0%	0%	60%	0%	0%	0%	0%	40%	0%	0%	100%	09/19/88	Mary Holland
37005000600105	08	Y	Y	7%	53%	0%	0%	0%	60%	0%	0%	0%	0%	40%	0%	0%	100%	09/19/88	Mary Holland
== USA # 06 ==																			
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37005000600106	10	Y	N	0%	0%	0%	0%	0%	0%	0%	80%	0%	0%	10% SF	10%	0%	100%	09/19/88	Mary Holland
37005000600106	11	Y	N	0%	0%	0%	0%	0%	0%	0%	80%	0%	0%	10% SF	10%	0%	100%	09/19/88	Mary Holland
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37005000600107	13	Y	Y	10%	45%	0%	0%	0%	55%	0%	0%	0%	0%	45%	0%	0%	100%	09/19/88	Mary Holland
37005000600107	14	Y	Y	5%	55%	0%	0%	0%	60%	0%	0%	0%	0%	40%	0%	0%	100%	09/19/88	Mary Holland
== USA # 08 ==																			
37005000600108	15	N	N	0%	0%	0%	0%	0%	0%	30%	50%	0%	10%	10%	0%	0%	100%	09/19/88	Mary Holland
== USA # 09 ==																			
37005000600109	16	N	N	0%	0%	0%	0%	0%	0%	20%	55%	0%	15%	10%	0%	0%	100%	09/19/88	Mary Holland
== USA # 10 ==																			
37005000600110	17	Y	Y	15%	0%	0%	0%	0%	15%	0%	0%	50%	0%	35%	0%	0%	100%	09/19/88	Mary Holland
37005000600110	18	Y	Y	10%	0%	0%	0%	0%	10%	0%	0%	50%	0%	40%	0%	0%	100%	09/19/88	Mary Holland
37005000600110	19	Y	Y	15%	0%	0%	0%	0%	15%	0%	0%	40%	0%	45%	0%	0%	100%	09/19/88	Mary Holland
37005000600110	20	Y	Y	10%	0%	0%	0%	0%	10%	0%	20%	40%	0%	30%	0%	0%	100%	09/19/88	Mary Holland
37005000600110	21	Y	Y	15%	0%	0%	0%	0%	15%	0%	10%	40%	0%	35%	0%	0%	100%	09/19/88	Mary Holland
== USA # 11 ==																			
37005000600111	22	Y	Y	10%	0%	0%	0%	0%	10%	0%	0%	50%	0%	30% O	10%	0%	100%	09/19/88	Mary Holland

10/88

## LABORATORY:

HALL-KIMBRELL ENVIRONMENTAL SERVICES  
4840 W. 15th Street  
Lawrence, Kansas 66044

## PETROGRAPHIC ANALYSIS FOR ASBESTOS

West Linn S.D. 3JT  
37-0050

LAB SUPERVISOR: Thomas Bergin

A S B E S T O S									O T H E R M A T E R I A L S										
USGROUP	SAM#	CONT	ASB	CHRY	AMOS	CROC	ANTH	ACT/TRM	%ASB	MIN	WOOD	VERM	PUMC	BIND	OTH1	OTH2	TOT%	DATE	MICROSCOPIST
37005000600111	23	Y	Y	15%	0%	0%	0%	0%	15%	0%	0%	45%	0%	40%	0%	0%	100%	09/19/88	Mary Holland
37005000600111	24	Y	Y	15%	0%	0%	0%	0%	15%	0%	0%	50%	0%	35%	0%	0%	100%	09/19/88	Mary Holland
= USA # 12 =																			
37005000600112	25	Y	Y	20%	0%	0%	0%	0%	20%	0%	0%	60%	0%	20%	0%	0%	100%	09/19/88	Mary Holland
37005000600112	26	Y	Y	20%	0%	0%	0%	0%	20%	0%	0%	35%	0%	45%	0%	0%	100%	09/19/88	Mary Holland
37005000600112	27	Y	Y	15%	0%	0%	0%	0%	15%	0%	0%	65%	0%	20%	0%	0%	100%	09/19/88	Mary Holland
37005000600112	28	Y	Y	25%	0%	0%	0%	0%	25%	0%	0%	30%	0%	45%	0%	0%	100%	09/19/88	Mary Holland
37005000600112	29	Y	Y	20%	0%	0%	0%	0%	20%	0%	0%	25%	0%	45% O	10%	0%	100%	09/19/88	Mary Holland
= USA # 13 =																			
37005000600113	30	Y	Y	25%	0%	0%	0%	0%	25%	0%	0%	45%	0%	20% O	10%	0%	100%	09/19/88	Mary Holland
37005000600113	31	Y	Y	30%	0%	0%	0%	0%	30%	0%	0%	40%	0%	20% O	10%	0%	100%	09/19/88	Mary Holland
37005000600113	32	Y	Y	25%	0%	0%	0%	0%	25%	0%	0%	40%	0%	25% O	10%	0%	100%	09/19/88	Mary Holland
= USA # 14 =																			
37005000600114	33	N	Y	60%	0%	0%	0%	0%	60%	0%	30%	0%	0%	10%	0%	0%	100%	09/19/88	Mary Holland
= USA # 15 =																			
37005000600115	34	N	N	0%	0%	0%	0%	0%	0%	20%	50%	0%	20%	10%	0%	0%	100%	09/19/88	Mary Holland
= USA # 75 =																			
37005000600175	20	N	N	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	28% GM	14%	0%	100%	07/05/89	M. Jackson
37005000600175	21	N	N	0%	0%	0%	0%	0%	0%	0%	18%	0%	0%	19% CA	63%	0%	100%	07/05/89	M. Jackson
37005000600175	22	N	N	0%	0%	0%	0%	0%	0%	0%	58%	0%	0%	12% GM	30%	0%	100%	07/05/89	M. Jackson
37005000600175	23	N	N	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%	63% GM	14%	0%	100%	07/05/89	M. Jackson
37005000600175	24	N	N	0%	0%	0%	0%	0%	0%	0%	27%	0%	0%	64% GM	9%	0%	100%	07/05/89	M. Jackson
= USA # 99 =																			
37005000600199	51	N	Y	6%	0%	0%	0%	0%	6%	0%	0%	0%	0%	30% CA	64%	0%	100%	03/24/89	D. Shepard

10/87

DISTRICT COST SUMMARY

PROJECT NUMBER: 37-0050

DISTRICT NAME: West Linn S.D. 3JT

	REMOVAL COST	REINSULATION COST	COMBINED COST
CAMPUS: (006) Williamette			
BUILDING: (001) Williamette Main Bldg	\$376,182	\$176,628	\$552,810
CAMPUS TOTALS	\$376,182	\$176,628	\$552,810

NOTE: Please see the 'Cost Estimates' section of Part I for a full explanation of the cost estimates presented here

The following Microscopists performed the analysis for this project: *How*  
10/89

37-0050 West Linn S.D. 3JT

Signature

Susan Hoff

*Susan Hoff*

Mary Holland

*Mary Catherine Holland*

Elaine Cook

*Elaine Cook*

D. Sheperd

*Dennis Sheperd*

M. Jackson

*Thomas F. Bergin* LAG Supervisor  
For the Firm

Campus: 006 Williamette

02/16/90

ASHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 02 \*\*\*

SYSTEM: Low Pr. Steam

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY:

ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:

The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:

Slight

SAMPLE# %ASB

97 35  
98 5  
99 50

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
275 Ft. 4 In. O.D.	\$2,453	\$1,535	\$3,988
456 Ft. 6 In. O.D.	\$5,919	\$3,698	\$9,617
AREA TOTAL			\$13,605

MANAGEMENT PLAN RECOMMENDATION

RECOMMENDED RESPONSE ACTION:

O&M Maintain/Monitor

PRIORITY:

3

PREVENTIVE MEASURES:

See Part I and O&M Code: OMA

LEA RESPONSE:

ACTION ELECTION:

Same as recommended

RESPONSE ACTION SCHEDULE

COMMENTS:

Summer 1989

COMPLETION DATE

Ongoing

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 03 \*\*\*

SYSTEM: Low Pr. Steam

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY:

ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:

The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:

Slight

SAMPLE# %ASB

00 60  
01 65  
02 60

02/16/90

## AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
89 4 In. O. D.	\$2,500	\$1,389	\$3,889
85 6 In. O. D.	\$3,288	\$1,931	\$5,219
AREA TOTAL			\$9,108

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
 PRIORITY: 3  
 PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:  
 ACTION ELECTION:  
 Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\*\*\*\*\*  
\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 04 \* \* \*

SYSTEM: Dom. Hot Water

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY:  
ACBM with Potential for DamageREASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.POTENTIAL FOR DISTURBANCE:  
Slight

SAMPLE#	%ASB
03	14
04	12
05	13

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
225 Ft. 4 In. O.D.	\$2,007	\$1,256	\$3,263
AREA TOTAL			\$3,263

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
 PRIORITY: 3  
 PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:  
 ACTION ELECTION:  
 Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

**AHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
89 4 In. O. D.	\$2,500	\$1,389	\$3,889
85 6 In. O. D.	\$3,288	\$1,931	\$5,219
AREA TOTAL			\$9,108

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
O&M Maintain/Monitor 3 See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
Summer 1989	Ongoing

LEA COMMENTS:

\*\*\*\*\*

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 04 \* \* \*

SYSTEM: Dom. Hot Water LOCATION: All Floors in Building TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY: REASON for DAMAGE CATEGORY: POTENTIAL FOR DISTURBANCE: SAMPLE# TAB#  
ACRM with Potential for Damage The material is observed to be in Slight 03 14  
good condition. 04 12  
05 13

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
225 Ft. 4 In. O.D.	\$2,007	\$1,256	\$3,263
AREA TOTAL			\$3,263

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
O&M Maintain/Monitor 3 See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
Summer 1989	Ongoing

LEA COMMENTS:

\*\*\*\*\*



**AHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
75 Ft. 4 In. O.D.			
		AREA TOTAL	\$0

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: N/A  
PRIORITY: 0  
PREVENTIVE MEASURES: See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

**RESPONSE ACTION SCHEDULE**

START DATE	COMPLETION DATE
N/A	N/A

LEA COMMENTS:

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 07 \* \* \*

SYSTEM: Dom. Cold Water      LOCATION: All Floors in Building      TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY: ACBM with Potential for Damage      REASON for DAMAGE CATEGORY: The material is observed to be in good condition.      POTENTIAL FOR DISTURBANCE: Slight      SAMPLE# 12 13 14      %ASB 50 55 60

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
76 4 In. O. D.	\$2,135	\$1,186	\$3,321
		AREA TOTAL	\$3,321

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 3  
PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION: Same as recommended

**RESPONSE ACTION SCHEDULE**

START DATE	COMPLETION DATE
Summer 1989	Ongoing

LEA COMMENTS:

ASHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
17000 Square Feet			
AREA TOTAL			\$0

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: N/A  
PRIORITY: 0  
PREVENTIVE MEASURES:  
See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

LEA COMMENTS:

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 10 \* \* \*

SYSTEM: Surfacing Mat.

LOCATION:  
First Floor

TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASH
Significantly Damaged Friable	The material has been damaged by	High	17	15
Surfacing ACH. See floor plans	contact, age, and previous		18	10
for specific damaged areas.	renovations and/or repair work and		19	15
	is delaminating from the surface to		20	10
	which it was applied.		21	15

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
4960 Square Feet	\$85,610	\$13,243	\$98,853
AREA TOTAL			\$98,853

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: Gross Removal  
PRIORITY: 1  
PREVENTIVE MEASURES:  
See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Aug 12, 1988	Aug 25, 1988

LEA COMMENTS:  
Removed Aug. 12, 1988-Aug. 25, 1988.

**AHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
3300 Square Feet	\$56,958	\$8,811	\$65,769
		AREA TOTAL	\$65,769

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 2  
PREVENTIVE MEASURES: See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

LEA COMMENTS:

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 13 \* \* \*

SYSTEM: Surfacing Mat. LOCATION: Basement TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY: ACBM with Potential for Damage  
REASON for DAMAGE CATEGORY: The material is observed to be in good condition.  
POTENTIAL FOR DISTURBANCE: Slight  
SAMPLE# %ASB  
30 25  
31 30  
32 25

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
700 Square Feet	\$12,082	\$1,869	\$13,951
		AREA TOTAL	\$13,951

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 2  
PREVENTIVE MEASURES: See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

LEA COMMENTS:

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*

02/16/90

## AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
3300 Square Feet	\$56,958	\$8,811	\$65,769
AREA TOTAL			\$65,769

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
 O&M Maintain/Monitor 2 See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 13 \* \* \*

SYSTEM: Surfacing Mat.

LOCATION:  
Basement

TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY: REASON for DAMAGE CATEGORY: POTENTIAL FOR DISTURBANCE: SAMPLE# %ASB  
 ACM with Potential for Damage The material is observed to be in Slight 30 25  
 good condition. 31 30  
 32 25

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
700 Square Feet	\$12,082	\$1,869	\$13,951
AREA TOTAL			\$13,951

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
 O&M Maintain/Monitor 2 See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

**AHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
200 Square Feet			
AREA TOTAL			\$0

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: N/A  
PRIORITY: 0  
PREVENTIVE MEASURES: See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

LEA COMMENTS:

\*\*\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 99 \*\*\*\*\*

SYSTEM: Floor Matl. LOCATION: All Floors in Building TYPE OF MATERIAL: Vinyl Floor Tile

DAMAGE CATEGORY: ACBM with Potential for Damage REASON for DAMAGE CATEGORY: The material is observed to be in good condition. POTENTIAL FOR DISTURBANCE: Slight SAMPLE# 51 RASB 6

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
45000 Square Feet	\$151,650	\$115,200	\$266,850
AREA TOTAL			\$266,850

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 3  
PREVENTIVE MEASURES: See Part I and O&M Code: OMI, OMZ

LEA RESPONSE:  
ACTION ELECTION: Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

LEA COMMENTS:

02/16/90

## AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
200 Square Feet			
AREA TOTAL			\$0

## -----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
N/APRIORITY:  
0PREVENTIVE MEASURES:  
See Part I and O&M Code:LEA RESPONSE:  
ACTION ELECTION:

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

COMMENTS:

\*\*\*\*\*  
\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 75 \* \* \*

SYSTEM: Surfacing Mat.

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Hardwall/Ceiling Plaster

DAMAGE CATEGORY:  
N/AREASON for DAMAGE CATEGORY:  
N/APOTENTIAL FOR DISTURBANCE:  
N/A

SAMPLE#	%ASB
20	0
21	0
22	0
23	0
24	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
5000 Square Feet			
AREA TOTAL			\$0

## -----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
N/APRIORITY:  
0PREVENTIVE MEASURES:  
See Part I and O&M Code:LEA RESPONSE:  
ACTION ELECTION:

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

COMMENTS:

02/16/90

ASHERA COMPLIANCE PROGRAM  
\*\*\* BOILER ROOM SUMMARY \*\*\*  
West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
BOILER RM: 1

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:

BOILER

DAMAGE CATEGORY:  
ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SMP IASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
85	75% Mech. Insul.	SOUTH EAST CORNER	Boiler/Tank Insulation	350 Square Feet
86	80% Mech. Insul.	SOUTH EAST CORNER	Boiler/Tank Insulation	
87	80% Mech. Insul.	SOUTH EAST CORNER	Boiler/Tank Insulation	

RECOMMENDED RESPONSE ACTION:  
O&M Maintain/Monitor

PRIORITY:  
3

PREVENTIVE MEASURES:  
See Part I and O&M Code: OMB

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

COMMENT:

Summer 1989

Ongoing

JOINTS

DAMAGE CATEGORY:  
ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SMP IASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
92	70% Low Pr. Steam	WEST SIDE OF TANK	MJP on Pipe Covering	30 6 In. O. D.
92	70% Low Pr. Steam	WEST SIDE OF TANK	MJP on Pipe Covering	8 14 In. O.D.
94	70% Dom. Hot Water	NW CORNER OVER STAIRS	MJP on Wrapped Pipe Cover	45 4 In. O. D.

AHERA COMPLIANCE PROGRAM  
 \*\*\* BOILER ROOM SUMMARY \*\*\*  
 West Linn S.D. 3JT  
 37-0050

CAMPUS : 006 - Williamette  
 BUILDING : 001 - Williamette Main Bldg  
 BOILER RM: 1

Inspected By: Gary Adler  
 Certification #: HK80026 St: KS  
 State Cert #: St:

65% Dom. Cold Water	DHW TANK S SIDE	MJP on Wrapped Pipe Cover	35 4 In. O. D.
---------------------	-----------------	---------------------------	----------------

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
 PRIORITY: 3  
 PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:

ACTION ELECTION:

Same as recommended

LEA COMMENT:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*

PIPING

DAMAGE CATEGORY:  
 ACM with Potential for Damage

REASON for DAMAGE CATEGORY:  
 The material is observed to be in  
 good condition.

POTENTIAL FOR DISTURBANCE:  
 slight

SASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
60%	Low Pr. Steam	WEST SIDE OF TANK	Pipe Covering	250 Ft. 6 In. O.D.
60%	Low Pr. Steam	WEST SIDE OF TANK	Pipe Covering	35 Ft. 14 In. O.D.
4%	Dom. Hot Water	NW CORNER OVER STAIRS	Wrapped Paper Pipe Cover	200 Ft. 4 In. O.D.
22%	Dom. Cold Water	DHW TANK SW CORNER	Wrapped Paper Pipe Cover	200 Ft. 4 In. O.D.

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
 PRIORITY: 3  
 PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:

ACTION ELECTION:

Same as recommended

LEA COMMENT:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*



**ASHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 02 \* \* \*

SYSTEM: Low Pr. Steam      LOCATION: All Floors in Building      TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
ACBM with Potential for Damage	The material is observed to be in good condition.	Slight	97	35
			98	5
			99	50

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
275 Ft. 4 In. O.D.	\$2,453	\$1,535	\$3,988
456 Ft. 6 In. O.D.	\$5,919	\$3,698	\$9,617
		AREA TOTAL	\$13,605

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:	PRIORITY:	PREVENTIVE MEASURES:
O&M Maintain/Monitor	3	See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

LEA COMMENTS:

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 03 \* \* \*

SYSTEM: Low Pr. Steam      LOCATION: All Floors in Building      TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
ACBM with Potential for Damage	The material is observed to be in good condition.	Slight	00	60
			01	65
			02	60

**ASHERA COMPLIANCE PROGRAM**

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 04/24/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 02 \*\*\*

SYSTEM: Low Pr. Steam      LOCATION: All Floors in Building      TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
ACBM with Potential for Damage	The material is observed to be in good condition.	Slight	97	35
			98	5
			99	50

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
275 Ft. 4 In. O.D.	\$2,453	\$1,535	\$3,988
456 Ft. 6 In. O.D.	\$5,919	\$3,698	\$9,617
AREA TOTAL			\$13,605

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
O&M Maintain/Monitor

PRIORITY:  
3

PREVENTIVE MEASURES:  
See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

LEA COMMENTS:

START DATE  
Summer 1989

COMPLETION DATE  
Ongoing

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 03 \*\*\*

SYSTEM: Low Pr. Steam      LOCATION: All Floors in Building      TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
ACBM with Potential for Damage	The material is observed to be in good condition.	Slight	00	60
			01	65
			02	60

02/16/90

AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 05 \* \* \*

SYSTEM: Dom. Hot Water

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY:

ACRM with Potential for Damage

REASON for DAMAGE CATEGORY:

The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:

Slight

SAMPLE# %ASB

06 65  
07 60  
08 60

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
120 4 In. O. D.	\$3,371	\$1,873	\$5,244
AREA TOTAL			\$5,244

-MANAGEMENT PLAN RECOMMENDATION-

RECOMMENDED RESPONSE ACTION:

O&M Maintain/Monitor

PRIORITY:

3

PREVENTIVE MEASURES:

See Part I and O&M Code: OMA

LEA RESPONSE:

ACTION ELECTION:

Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 06 \* \* \*

SYSTEM: Dom. Cold Water

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Wrapped Paper Pipe Cover

DAMAGE CATEGORY:

N/A

REASON for DAMAGE CATEGORY:

N/A

POTENTIAL FOR DISTURBANCE:

N/A

SAMPLE# %ASB

09 0  
10 0  
11 0

02/16/90

## AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
75 Ft. 4 In. O.D.			
		AREA TOTAL	\$0

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
 N/A 0 See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

COMMENTS:

\*\*\*\*\*  
\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 07 \* \* \*

SYSTEM: Dom. Cold Water

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: MJP on Wrapped Pipe Cover

DAMAGE CATEGORY: REASON for DAMAGE CATEGORY: POTENTIAL FOR DISTURBANCE: SAMPLE# %ASB  
 ACM with Potential for Damage The material is observed to be in Slight 12 50  
 good condition. 13 55  
 14 60

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
76 4 In. O. D.	\$2,135	\$1,186	\$3,321
		AREA TOTAL	\$3,321

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: PRIORITY: PREVENTIVE MEASURES:  
 O&M Maintain/Monitor 3 See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

02/16/90

ASHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 08 \*\*\*

SYSTEM: Ceiling Matl.

LOCATION:  
Basement

TYPE OF MATERIAL: Acoustical Tile (ixl)

DAMAGE CATEGORY:  
N/A

REASON for DAMAGE CATEGORY:  
N/A

POTENTIAL FOR DISTURBANCE:  
N/A

SAMPLE# %ASB  
15 0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
6000 Square Feet			
AREA TOTAL			\$0

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
N/A

PRIORITY:  
0

PREVENTIVE MEASURES:  
See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

COMMENTS:

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 09 \*\*\*

SYSTEM: Ceiling Matl.

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Drop or Lay-in Panel

DAMAGE CATEGORY:  
N/A

REASON for DAMAGE CATEGORY:  
N/A

POTENTIAL FOR DISTURBANCE:  
N/A

SAMPLE# %ASB  
16 0

02/16/90

## ASHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
17000 Square Feet			
AREA TOTAL			\$0

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: N/A  
 PRIORITY: 0  
 PREVENTIVE MEASURES: See Part I and O&M Code:

LEA RESPONSE:  
ACTION ELECTION:

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

COMMENTS:

\*\*\*\*\*  
\* \* \* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 10 \* \* \*

SYSTEM: Surfacing Mat.

LOCATION:  
First Floor

TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY: Significantly Damaged Friable Surfacing ACM. See floor plans for specific damaged areas.  
 REASON for DAMAGE CATEGORY: The material has been damaged by contact, age, and previous renovations and/or repair work and is delaminating from the surface to which it was applied.  
 POTENTIAL FOR DISTURBANCE: High  
 SAMPLE# %ASB  
 17 15  
 18 10  
 19 15  
 20 10  
 21 15

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
4960 Square Feet	\$85,610	\$13,243	\$98,853
AREA TOTAL			\$98,853

-----MANAGEMENT PLAN RECOMMENDATION-----  
 RECOMMENDED RESPONSE ACTION: Gross Removal  
 PRIORITY: 1  
 PREVENTIVE MEASURES: See Part I and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

## RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Aug 12, 1988	Aug 25, 1988

COMMENTS:  
Removed Aug. 12, 1988-Aug. 25, 1988.

02/16/90

AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 11 \*\*\*

SYSTEM: Surfacing Mat.

LOCATION:  
First Floor

TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY:  
ACBM with Potential for  
Significant Damage.

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SAMPLE#	%ASB
22	10
23	15
24	15

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
900 Square Feet	\$15,534	\$2,403	\$17,937
AREA TOTAL			\$17,937

RECOMMENDED RESPONSE ACTION:  
O&M Maintain/Monitor

PRIORITY:  
1

PREVENTIVE MEASURES:  
See Part I. and O&M Code: OMD

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 12 \*\*\*

SYSTEM: Surfacing Mat.

LOCATION:  
Basement

TYPE OF MATERIAL: Acoustical/Thermal Plaster

DAMAGE CATEGORY:  
ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SAMPLE#	%ASB
25	20
26	20
27	15
28	25
29	20

02/16/90

AHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 14 \*\*\*

SYSTEM: Surfacing Mat.

LOCATION:  
First Floor

TYPE OF MATERIAL: Fireproofing

DAMAGE CATEGORY: ACBM with Potential for Damage  
REASON for DAMAGE CATEGORY: The material is observed to be in good condition.  
POTENTIAL FOR DISTURBANCE: Slight  
SAMPLE# 33 %ASB 60

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
250 Square Feet	\$3,225	\$758	\$3,983
AREA TOTAL			\$3,983

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
O&M Maintain/Monitor

PRIORITY:  
2

PREVENTIVE MEASURES:  
See Part I and O&M Code: OMC

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 15 \*\*\*

SYSTEM: Ceiling Matl.

LOCATION:  
Basement

TYPE OF MATERIAL: Drop or Lay-in Panel

DAMAGE CATEGORY: N/A  
REASON for DAMAGE CATEGORY: N/A  
POTENTIAL FOR DISTURBANCE: N/A  
SAMPLE# 34 %ASB 0



02/16/90

ASHERA COMPLIANCE PROGRAM

West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
Inspection Dates: 07/19/88 to 07/14/89

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:  
Gross Square Ft: 74,320

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 99 \*\*\*

SYSTEM: Floor Matl.

LOCATION:  
All Floors in Building

TYPE OF MATERIAL: Vinyl Floor Tile

DAMAGE CATEGORY:

ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:

The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:

Slight

SAMPLE# %ASB

51 6

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
45000 Square Feet	\$151,650	\$115,200	\$266,850
AREA TOTAL			\$266,850

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:

O&M Maintain/Monitor

PRIORITY:

3

PREVENTIVE MEASURES:

See Part I and O&M Code: OMI, OMZ

LEA RESPONSE:

ACTION ELECTION:

Same as recommended

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

COMMENTS:

\*\*\*\*\*

02/16/90

ASHERA COMPLIANCE PROGRAM  
\*\*\* BOILER ROOM SUMMARY \*\*\*  
West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
BOILER RM: 1

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:

96	65% Dom. Cold Water	DHW TANK S SIDE	MJP on Wrapped Pipe Cover	35 4 In. O. D.
----	---------------------	-----------------	---------------------------	----------------

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 3  
PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

COMMENT:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*

PIPING

DAMAGE CATEGORY:  
ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SMP #ASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
91	60% Low Pr. Steam	WEST SIDE OF TANK	Pipe Covering	250 Ft. 6 In. O.D.
91	60% Low Pr. Steam	WEST SIDE OF TANK	Pipe Covering	35 Ft. 14 In. O.D.
93	4% Dom. Hot Water	NW CORNER OVER STAIRS	Wrapped Paper Pipe Cover	200 Ft. 4 In. O.D.
95	22% Dom. Cold Water	DHW TANK SW CORNER	Wrapped Paper Pipe Cover	200 Ft. 4 In. O.D.

-----MANAGEMENT PLAN RECOMMENDATION-----  
RECOMMENDED RESPONSE ACTION: O&M Maintain/Monitor  
PRIORITY: 3  
PREVENTIVE MEASURES: See Part I and O&M Code: OMA

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

COMMENT:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

\*\*\*\*\*

02/16/90

AMERA COMPLIANCE PROGRAM  
\*\*\* BOILER ROOM SUMMARY \*\*\*  
West Linn S.D. 3JT  
37-0050

CAMPUS : 006 - Williamette  
BUILDING : 001 - Williamette Main Bldg  
BOILER RM: 1

Inspected By: Gary Adler  
Certification #: HK80026 St: KS  
State Cert #: St:

TANK

DAMAGE CATEGORY:  
ACBM with Potential for Damage

REASON for DAMAGE CATEGORY:  
The material is observed to be in  
good condition.

POTENTIAL FOR DISTURBANCE:  
Slight

SMP #ASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
88	75% Mech. Insul.	DHW TANK, SOUTH SIDE	Boiler/Tank Insulation	275 Square Feet
89	75% Mech. Insul.	DHW TANK, SOUTH SIDE	Boiler/Tank Insulation	
90	65% Mech. Insul.	DHW TANK, SOUTH SIDE	Boiler/Tank Insulation	

-----MANAGEMENT PLAN RECOMMENDATION-----

RECOMMENDED RESPONSE ACTION:  
O&M Maintain/Monitor

PRIORITY:  
3

PREVENTIVE MEASURES:  
See Part I and O&M Code: OMB

LEA RESPONSE:  
ACTION ELECTION:  
Same as recommended

RESPONSE ACTION SCHEDULE

COMMENT:

Summer 1989

Ongoing

\*\*\*\*\*

	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
BOILER ROOM ESTIMATED COSTS	\$29,451	\$21,476	\$50,927

# **ASBESTOS LOCATION DIAGRAMS**

## SAMPLE / MATERIAL LOCATION DIAGRAMS

As part of the AHERA Asbestos Inspection the locations of samples collected are recorded on building diagrams. In addition to the sample locations, specific damage areas are recorded where found. The following pages provide the sample location diagrams for the School District. These drawings are organized in the same manner as the inspection/management plan data, i.e. campus one building one is first.

The title block contains the specific state, district, campus, and building or code with a 12 digit number. Next is the District Name, the Campus Name, and finally the Building Name. The next block provides the date the drawing was made, the street number, and finally the H-K drawing number.

The drawing uses several symbols and cross-hatching patterns to illustrate the key elements of the survey information.

**SAMPLE LOCATION:** The specific locations of samples are found on a point on the drawing leading to a symbol indicating the sample number and the Bulk Sample (BS) Code, which represents the type of material sampled. The Bulk Sample Code descriptions used are as follows:

BS CODE	DESCRIPTION	BS CODE	DESCRIPTION
0	Unknown	26	Transite Pipe
1	Acoustical Plaster	27	Transite Hood
2	Acoustical/Thermal Insul	28	Asbestos Peds
3	Hardwall/Ceiling Plaster	29	Asbestos Glove
4	Vinyl Floor Tile	30	Asbestos Rope
5	Pipe Covering	31	Raw Asbestos
6	Corrugated Pipe Covering	32	Electrical Wiring
7	Wrapped Paper Pipe Cover	33	Fire Hose
8	Boiler/Tank Insulation	34	Fire Door
9	Breeching/Exhaust Packing	35	Fire Suit
10	Woven Paper/Tape	36	Fire Brick
11	Drop or Lay-in Panel	37	Lab Counter Top
12	Acoustical Tile (1x1)	38	Fiber Frack Kiln
13	Fire or Stage Curtain	39	Tongs
14	NJP on Non-Suspect Pipe	40	Poured in Insulation
15	NJP on Pipe Covering	41	Contaminated Soil
16	NJP on Corr. Pipe Cover	42	Tectum
17	NJP on Wrapped Pipe Cover	43	Floor Underlayment
18	Fireproofing	44	Hard Grout
19	Vibration Joint Cloth	45	Mortar
20	Interior Duct Insulation	46	Blown or Scratch Coat
21	Exterior Duct Insulation	47	Oven/Autoclave Lining
22	Blown-in Insulation	48	Brake Lining
23	Stored Insulation	49	Theatre Curtain
24	Debris	50	Transite Siding
25	Gasket	99	Other

**DAMAGE AREAS:** When the inspector encounters a section of material in a Unified Sampling Area (USA) which contains localized damage in worse condition than the remainder of the same material contained in this USA, a Damage Area indicator is placed on the drawing. This symbol contains specific information about the damaged area.

*Type of Material* - The BS Code of the material is indicated so that the type of material can be determined. See the previous section for the listing of the BS codes used.

*Quantity* - The quantity of material which was found to be damaged is also indicated.

**Location** - The location of the localized damage is indicated in the symbol. This provides assistance in identifying where the damage can be found.

**Response Action** - This is the code for the recommended AHERA response action. The following codes are used:

1. Isolate Area Immediately
2. Gross Removal
3. Glove Bag Removal
4. Encapsulation
5. Enclosure
6. Repair and O&M
7. O&M and Monitor

**CROSSHATCHING:** Crosshatching patterns are used to detail the location of ceiling and floor material suspected of containing asbestos. There are three patterns used:

**Floor Tile** - This pattern is used to indicate floor tile and sheet flooring material suspected of containing asbestos.

**Drop / Lay-in, Acoustical** - This pattern is used to indicate the locations of a variety of ceiling tiles including, but not limited, to 1' x 1' and 2' x 4' lay-in panels.

**Spray / Trowel Applied Materials** - This pattern is used to indicate the presence of spray and trowel applied materials such as fireproofing and acoustical plaster.

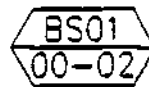
**LOCATION of CAUTION LABEL:** The AHERA regulations require the use of labels indicating the presence of Asbestos Containing Building Material (ACBM). The label is to be placed on or near ACBM in routine maintenance areas in all school buildings. When this label is applied in the field the inspector identifies its location on the sample location diagram. On the drawing, the label symbol contains information about its placement within the routine maintenance area so that it may be readily found by the LEA. The label states the following.

\*\*\*\*\*  
CAUTION  
ASBESTOS. HAZARDOUS.  
DO NOT DISTURB  
WITHOUT PROPER TRAINING  
AND EQUIPMENT  
\*\*\*\*\*

The presence of sample numbers, crosshatching, and damage areas does not mean that all of the areas indicated contain asbestos. These location diagrams are a record of the field inspection only and are meant to show where samples were taken and what areas may be affected if asbestos is present. To determine which areas are affected, a review of the Inspection / Management Plan Data and the Petrographic Results contained in Sections 4 and 5 should be made. If desired, the location diagrams can be highlighted by the school district's asbestos coordinator to indicate the presence of asbestos containing material.



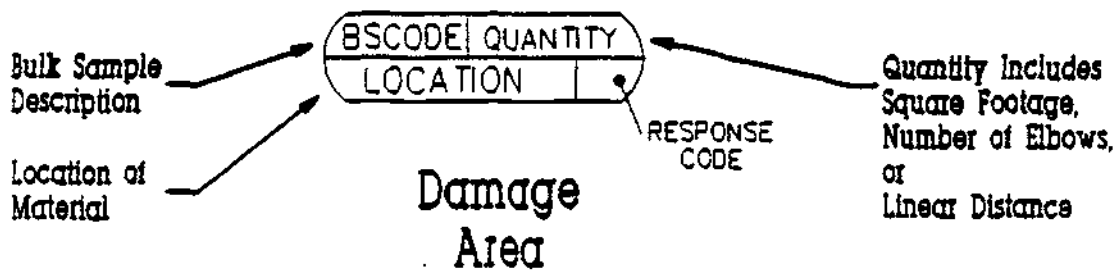
Location  
of Caution  
Label



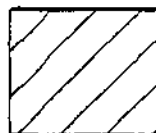
Sample  
Location

Bulk Sample  
Description

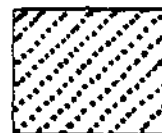
Sample  
or  
Sample Range



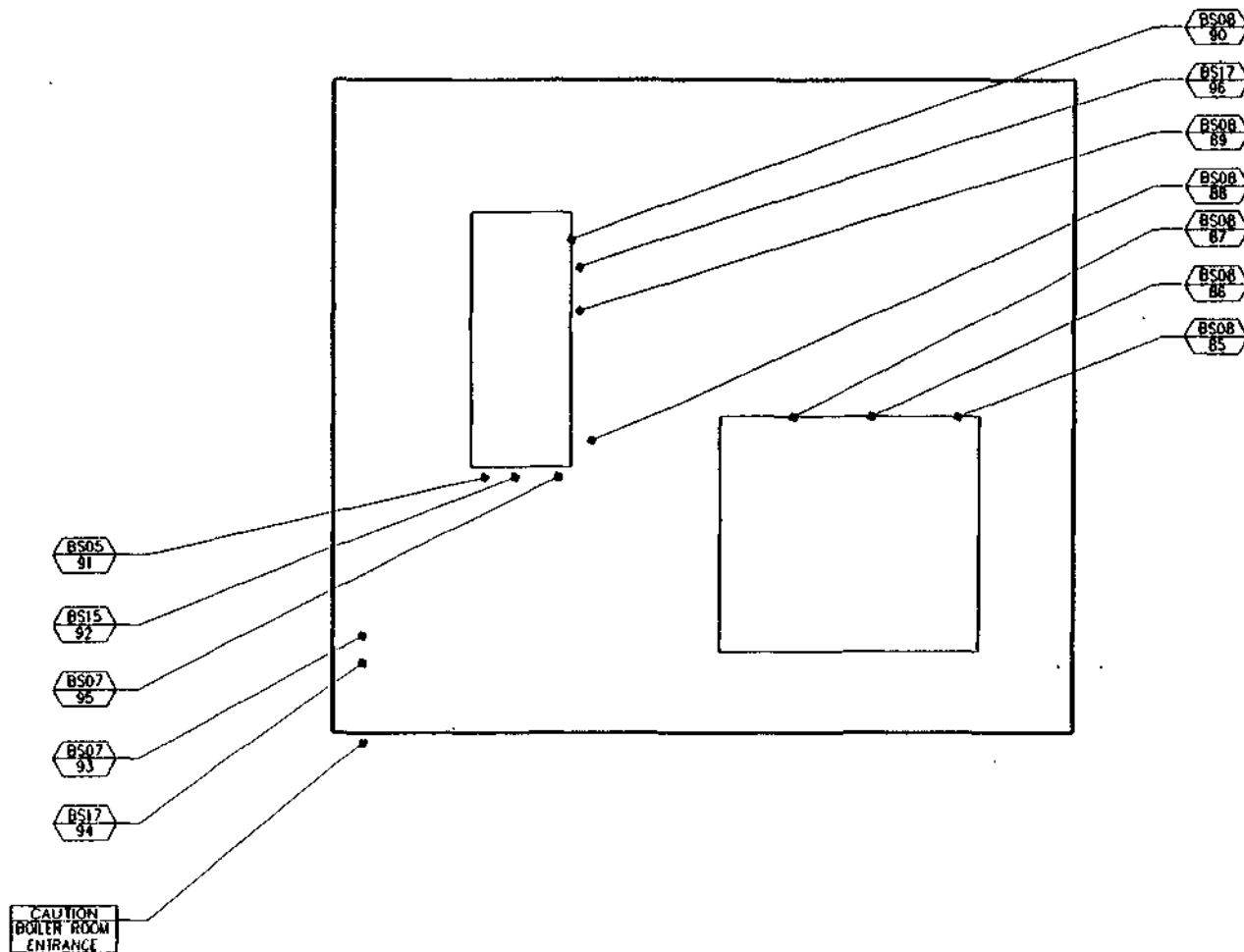
Vinyl  
Floor Tile




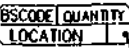


Drop,  
Lay In,  
Accoustical

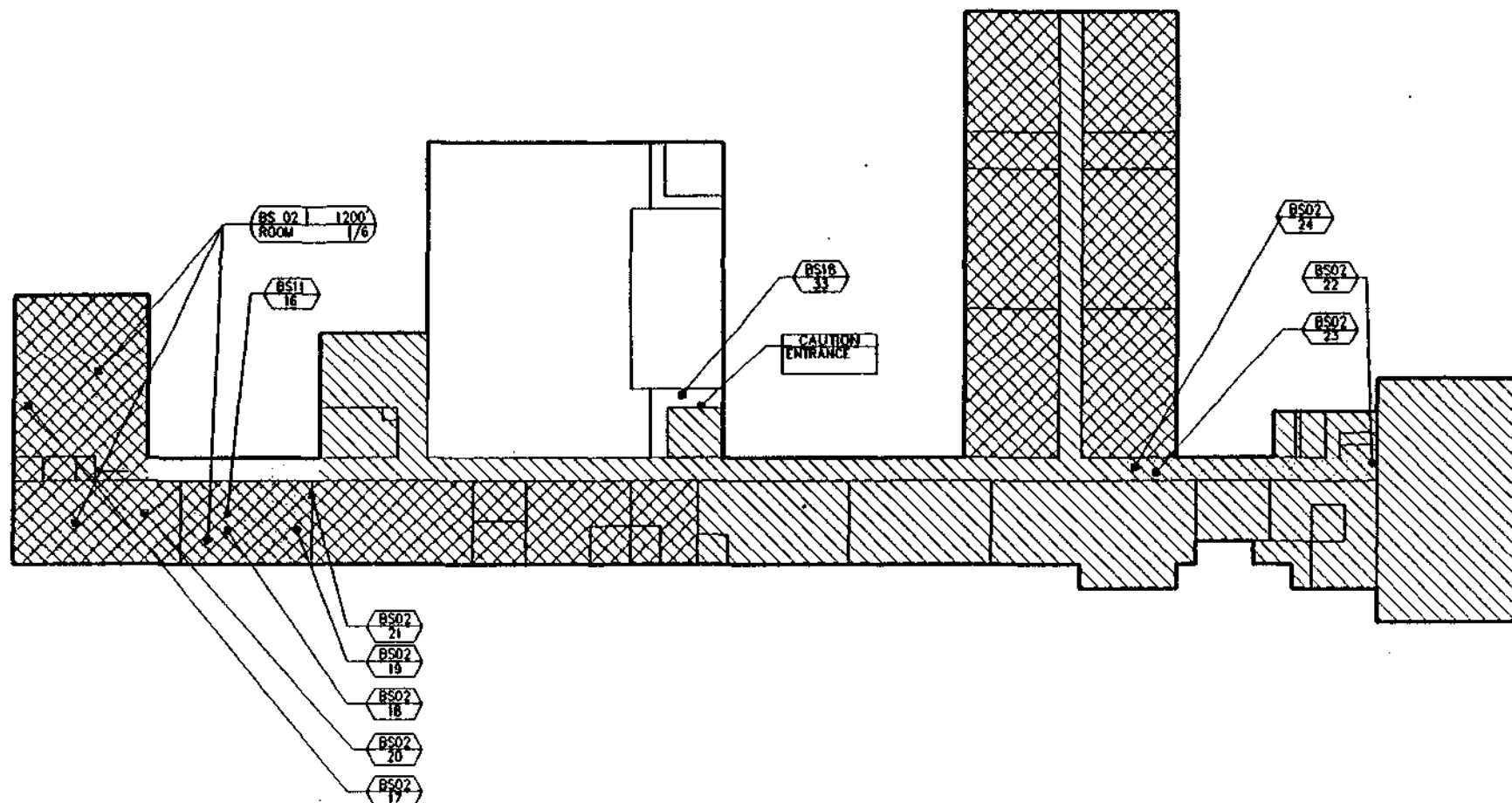


Spray  
Applied  
Material



<b>LEGEND:</b>  VINYL FLOOR TILE  DROP, LAY IN, ACCOUSTICAL  SPRAY/TROWEL APPLIED MATERIAL	 CAUTION BOILER ROOM ENTRANCE LOCATION OF CAUTION LABEL	 BS01 00-02 SAMPLE LOCATION	 BSCODE QUANTITY LOCATION DAMAGE AREA RESPONSE CODE	<b>RAIL-ROADRELL</b> ENVIRONMENTAL SERVICES 4840 WEST FIFTEENTH STREET LAWRENCE, KANSAS 66044 DATE 10/04/88 006001A	<b>AHERA COMPLIANCE PROGRAM</b> 37-0050-006-001 WEST LINN SCHOOL DISTRICT WILLAMETTE SCHOOL BOILER ROOM
--	---	--	--	--	---





**LEGEND:**



VINYL  
FLOOR  
TILE



DROP,  
LAY IN,  
ACCOUSTICAL



SPRAY/TROWEL  
APPLIED  
MATERIAL



CAUTION  
BOLDER ROOM  
ENTRANCE



SAMPLE  
LOCATION



DAMAGE  
AREA

RESPONSE  
CODE

**WILLAMETTE** WILLAMETTE DISTRICT

4840 WEST FIFTEENTH STREET  
LAWRENCE, KANSAS 66044

DATE  
10/01/88

006001C

**ASERA  
COMPLIANCE PROGRAM**

37-0050-006-001  
WEST LINN SCHOOL DISTRICT  
WILLAMETTE SCHOOL  
MAIN FLOOR PLAN





# **CONSULTANTS COST ESTIMATES FOR ASBESTOS REMOVAL**

# DISTRICT COST SUMMARY

PROJECT NUMBER: 37-0050

DISTRICT NAME: West Linn S.D. 3JT

	REMOVAL COST	REINSULATION COST	COMBINED COST
CAMPUS: (001) West Linn High School			
BUILDING: (001) West Linn High Main Bldg.	\$1,000,662	\$521,450	\$1,522,112
BUILDING: (002) Shop	\$37,142	\$28,211	\$65,353
BUILDING: (003) Music Bldg.	\$33,700	\$25,600	\$59,300
BUILDING: (004) Press Box	\$0	\$0	\$0
BUILDING: (005) Garage	\$0	\$0	\$0
BUILDING: (006) Concessions	\$0	\$0	\$0
CAMPUS TOTALS	\$1,071,504	\$575,261	\$1,646,765
CAMPUS: (002) Belton Middle School			
BUILDING: (001) Belton Middle School Main	\$210,024	\$155,749	\$365,773
BUILDING: (002) Play Shed	\$0	\$0	\$0
CAMPUS TOTALS	\$210,024	\$155,749	\$365,773
CAMPUS: (003) Cedaroak Park Drive			
BUILDING: (001) Cedaroak Park Main Bldg	\$136,022	\$94,263	\$230,285
BUILDING: (002) Cedaroak Park 4-9	\$261,423	\$66,275	\$327,698
BUILDING: (003) Cedaroak Park 1-3	\$174,282	\$44,183	\$218,465
BUILDING: (004) Cedaroak Park 12-16	\$30,209	\$22,948	\$53,157
BUILDING: (005) Cedaroak Park 17-22	\$29,872	\$22,692	\$52,564
CAMPUS TOTALS	\$631,808	\$250,361	\$882,169
CAMPUS: (004) Stafford Primary School			
BUILDING: (001) Stafford Primary Main Bldg	\$141,357	\$103,448	\$244,805
BUILDING: (002) Trailer 1	\$0	\$0	\$0
BUILDING: (003) Trailer 2	\$0	\$0	\$0
BUILDING: (004) Play Shed	\$0	\$0	\$0
BUILDING: (005) Maint Building	\$0	\$0	\$0
CAMPUS TOTALS	\$141,357	\$103,448	\$244,805
CAMPUS: (005) Sunset Primary School			
BUILDING: (001) Sunset Primary Main Bldg	\$365,187	\$198,836	\$564,023
CAMPUS TOTALS	\$365,187	\$198,836	\$564,023
CAMPUS: (006) Williamette			
BUILDING: (001) Williamette Main Bldg	\$376,182	\$176,628	\$552,810
CAMPUS TOTALS	\$376,182	\$176,628	\$552,810
CAMPUS: (007) Wilsonville Primary School			
BUILDING: (001) Wilsonville Primary Main B	\$16,507	\$11,747	\$28,254
BUILDING: (002) Modular #1	\$0	\$0	\$0
BUILDING: (003) Modular #2	\$137	\$256	\$593
BUILDING: (004) Maint Building	\$0	\$0	\$0
BUILDING: (005) Library	\$10,713	\$2,138	\$12,851
CAMPUS TOTALS	\$27,557	\$14,141	\$41,698
CAMPUS: (008) Inza R. Wood Middle School			
BUILDING: (001) Inza R. Wood Main Bldg	\$71,393	\$54,220	\$125,613
BUILDING: (002) Maint Building	\$0	\$0	\$0
CAMPUS TOTALS	\$71,393	\$54,220	\$125,613
CAMPUS: (009) Administration Building			
BUILDING: (001) Administration Building	\$2,962	\$2,274	\$5,236

NOTE: Please see the 'Cost Estimates' section of Part I for a full explanation of the cost estimates presented here

# DISTRICT COST SUMMARY

PROJECT NUMBER: 37-0050

DISTRICT NAME: West Linn S.D. 3JT

	REMOVAL COST	REINSULATION COST	COMBINED COST
CAMPUS TOTALS	\$2,962	\$2,274	\$5,236
DISTRICT TOTALS	\$2,897,974	\$1,530,918	\$4,428,892

NOTE: Please see the 'Cost Estimates' section of Part I for a full explanation of the cost estimates presented here

## **PLAN DISTRIBUTION/NOTIFICATION**

This section reflects requirements outlined in 40 CFR 763.84 & 763.93 (10)

The following subsections contain this required information:

- Annual (employee) notification records.
- Annual (parent/legal guardian/occupant/employee) notification records

**ACTION:** You must send an annual notification to parent, teacher, and employee organization.

Short-term workers must be informed as to the location of ASBM in the school building.

**FORMS:** N/A

## **PLAN DISTRIBUTION/NOTIFICATION**

AHERA requires that the LEA notify all building occupants, workers, contractors, and parents or legal guardians of school children. There are three key elements to the Notification program and they are Initial Notification, Annual Notification must include a discussion of:

- Inspections
- Re-inspections
- Surveillance
- Response actions
- Post-response action activity
- Availability of management plan

The LEA designate can realize benefits from the notification program because informed occupants are less likely to disturb the material and will report problem situations.

Contract workers (short-term) who will come in contact with ACBM during their work must be informed of the presence of ACBM. In addition, under various right-to-know laws, all workers must be informed of the potential for contact with hazardous materials such as asbestos.

There are three key areas of notification:

### **INITIAL NOTIFICATION OF THE MANAGEMENT PLAN AVAILABILITY**

At the implementation of the Management Plan, notification to parent, teacher and employee organization of the availability of the plan is to be enacted. Enclosed is a list of steps that are to be taken to provide adequate notifications.

### **ANNUAL NOTIFICATION**

On an annual basis, the parent, teacher and employee organization shall receive notification reiterating the availability of the plan and other asbestos activities that will occur or have occurred. The annual notification is included in the steps to be taken.

### **NOTIFICATION OF THE AVAILABILITY OF THE MANAGEMENT PLAN**

The Initial and Annual Notification should follow these procedural steps:

- Step 1: Notify in writing the president of the parent, teacher and employee organization about the availability of the management plan. This is to be done when the plan is submitted to Governor's designate (October 1988).
- Step 2: If in the event there are no organizations for either parent, teachers or employees, other logical information devices will be used. A newspaper notice is an acceptable media to comply to the AHERA rules.
- Step 3: The notification will explain the location and availability of the management plan, at no cost to review and how to receive a copy (i.e., \$.10 per page black & white or \$50 per copy). A summary of each school inspection report may be included in the letter initially and annually if desired.
- Step 4: The notification will include all response actions scheduled, all response actions previously undertaken in the past calendar year, notice of inspections, periodic surveillance and other pertinent asbestos management activities that are planned or in progress.
- Step 5: Recordkeeping: A dated copy of each notification is to be kept. In addition, a signed receipt from a certified letter should be kept (optional). Keep all records under TAB 13.

# **ANNUAL (EMPLOYEE) NOTIFICATION RECORDS**



## EMPLOYEE NOTIFICATION LETTER

Dear Employee:

An environmental health & safety consulting firm completed a study to determine the presence, location, and quantity of asbestos-containing materials at the West Linn-Wilsonville School District. The facilities were inspected in accordance with the Environmental Protection Agency guidelines for asbestos-containing materials (i.e., 40 CFR 763). This study is available for your review in the main office of each facility.

Asbestos poses a widespread concern for everyone since it was used extensively in buildings and homes constructed up to the late 1970's for insulation, acoustical purposes, and/or fire retardation. During that time, asbestos was a government-approved building material and considered almost a miracle substance because of its fire retardant and insulating properties. Airborne asbestos fibers are a health hazard and have been linked with different types of abdominal and lung cancers. We are, therefore, committed to taking corrective measures, when and where appropriate, and our asbestos control efforts will be based on the advice of experts knowledgeable in asbestos abatement techniques.

It is very important that all maintenance, custodial, and production employees read carefully the list of known and suspect asbestos-containing materials located in the main office. Please note the location of asbestos-containing material and avoid any unnecessary disturbance of the material. West Linn-Wilsonville School District has also designed an Operations & Maintenance Plan to ensure that the remaining asbestos-containing materials at our facility remain in good condition. The Asbestos Operations and Maintenance Plan includes specific requirements for the safe handling and removal of asbestos-containing material and should be consulted prior to beginning any work on or near asbestos-containing materials.

By signing this document, you are acknowledging only that you have been informed of the known asbestos-containing materials in the West Linn-Wilsonville School District, the Asbestos Operations & Maintenance Plan for safe handling of asbestos-containing materials, and that you are aware that asbestos may produce adverse health effects if proper control techniques are not used. Our goal is to provide everyone with training and knowledge so that exposure to our employees and contractors does not occur. Our policy of hiring licensed asbestos abatement contractor to perform all work involving asbestos-containing materials will continue.

Please sign and return a copy of this letter. If you have any questions or concerns, please contact me.

Sincerely,

Asbestos Program Manager

Signature \_\_\_\_\_  
Printed Name \_\_\_\_\_

Date \_\_\_\_\_  
Social Security No. \_\_\_\_\_



May 9, 1989

TO: Oregon Department of Education  
700 Pringle Parkway  
Salem, OR 97310-0290

SUBJECT: AHERA Management Plan

Buildings Included:

WEST LINN HIGH SCHOOL  
BOLTON MIDDLE SCHOOL  
CEDAR OAK PARK ELEMENTARY  
STAFFORD ELEMENTARY  
SUNSET ELEMENTARY  
WILLAMETTE MIDDLE SCHOOL  
WILSONVILLE ELEMENTARY  
INZA WOOD MIDDLE SCHOOL  
ADMINISTRATION BUILDING

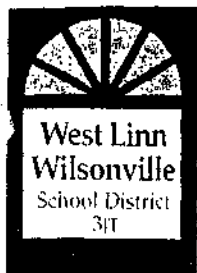
RECEIVED BY:

Kathy Leche

DATE:

5/9/89

**ANNUAL  
(PARENT/LEGAL  
GUARDIAN/OCCUPANT)  
NOTIFICATION  
RECORDS**



## West Linn-Wilsonville School District 3JT

### ADMINISTRATION BUILDING

P.O. Box 35 • West Linn, Oregon 97068 • (503) 638-9869 or Fax (503) 638-9878

January 4, 2000

Dear Parents and Students:


In our efforts to comply with Federal and State requirements regarding asbestos management; and to ensure a safe learning environment for the patrons of West Linn-Wilsonville Schools, please be advised that all district facilities except Boeckman Creek Primary, Athey Creek Middle, Wilsonville High and Rosemont Ridge Middle contain varying amounts of known asbestos-containing materials.

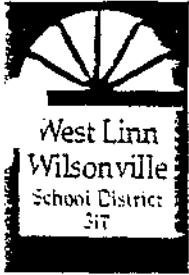
The District employs the services of a professional asbestos management firm who has completed a study to determine the presence, location and quantity of asbestos-containing materials in all district facilities. The facilities have been recently re-inspected in accordance with the Environmental Protection Agency guidelines for asbestos-containing materials and this study, as well as all historic data regarding asbestos, is available for your review in the main office of each facility.

West Linn-Wilsonville Schools is committed to providing safe schools for all students and employees in our district and we thank you for your attention to this important issue.

Sincerely,

DEPARTMENT OF OPERATIONS

  
Tim K. Woodley, Director  
Asbestos Program Manager



# West Linn-Wilsonville School District 3J

## ADMINISTRATION BUILDING

West Linn, Oregon 97068 (503) 638-4869 or FAX (503) 638-4878

September 8, 1992

### MEMO

TO: West Linn School District Parent Teacher Organization  
and Booster Club Chairpersons  
Bill Bailey, WLEA President  
Bob Lawer, OSEA President

FROM: Dealous L. Cox, *DL Cox* Superintendent

SUBJECT: Asbestos Inspection Report and Management Plan

This memorandum is intended to comply with the federal requirement to notify you annually that the district has an asbestos management plan which is available for inspection in each of the individual school offices and in the Administration Building. If you or members of your group wish to review the plan, please contact the appropriate school principal or me.



## West Linn School District 3J7

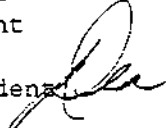
ADMINISTRATION BUILDING

P.O. Box 100 West Linn, Oregon 97068-0100  
(503) 638-9869 Fax (503) 638-9878

September 24, 1991

### MEMO

TO: West Linn School District Parent Teacher Organization  
and Booster club Chairpersons  
Bill Bailey, WLEA President  
Doris Dorsey, OSEA President

FROM: Dealous L. Cox, Superintendent 

RE: Asbestos Inspection Report and Management Plan

The purpose of this memorandum is to provide annual notification, as required by federal AHERA regulations, that the district's asbestos management plan is available for public review in the principal's office in each school and the district's maintenance office at the Administration Building. Each plan contains, among other things, the results of the six-month inspections completed in each building and notes the effects of any asbestos removal projects or other response actions undertaken in the last 12 months.

If you have any questions regarding this letter or the district's management plan, please contact me at 638-9869 or the individual building principals.

September 6, 1990

MEMO

TO: West Linn School District Parent Teacher Organization  
and Booster Club Chairpersons  
Bill Bailey, WLEA President  
Doris Dorsey, OSEA President

FROM: Dealous L. Cox, Superintendent

SUBJECT: Asbestos Inspection Report and Management Plan

This memorandum is intended to comply with the federal requirement to notify you annually that the district has an asbestos management plan which is available for inspection in each of the individual school offices and in the Administration Building. If you or members of your group wish to review the plan, please contact the appropriate school principal or me.




DATE: May 12, 1989  
TO: All Principals  
FROM: John Allen, Safety Officer  
SUBJECT: Asbestos Management Plan

This is to confirm that each school shall uniformly conform to the month of January to meet annual inspection and notification requirements as set forth by the State of Oregon.

Please place this letter in your suspense file for January (of each year) and reaffirm to your staff and other associated Parent-Teacher, Booster, or other groups of the availability of this plan for their respective review.

A copy of all correspondence per this plan must be submitted to the District Safety Officer for filing in the District's master file.

Your cooperation is essential and appreciated.



John Allen,  
Safety Officer

JA/pr

cc: Dea Cox  
Sam Nutt



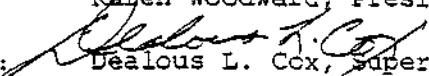
# West Linn School District No. 3J

ADMINISTRATION BUILDING  
P.O. Box 100  
West Linn, Oregon 97068-0100  
(503) 638-9868

MEMO

May 9, 1989

TO: West Linn School District Parent Teacher Organization  
and Booster Club Chairpersons  
Bill Bailey, President, WLEA  
Karen Woodward, President, CSEA

FROM:  Dealous L. Cox, Superintendent

SUBJECT: Asbestos Inspection Report and Management Plan

In September, I indicated to you that Hall-Kimbrell Environmental Services, the firm with which the district has contracted to complete the asbestos inspection and management plan for the district, had completed the inspection; however, the management plan had not been completed.

Hall-Kimbrell has now completed the asbestos management plan, and it is available in each of the individual school offices and at the district administration building. If you or members of your group would like to review the plan, please contact the building principal or me.



DATE: May 9, 1989  
TO: All Principals  
SUBJECT: AHERA Management Plan

I have received my building's copy of the Facilities Asbestos File.

WEST LINN HIGH SCHOOL	<u>Clark F. Jamin</u> Principal	<u>5-11-89</u> Date
BOLTON MIDDLE SCHOOL	<u>Martyn Seger</u> Principal	<u>11-May-89</u> Date
CEDAROAK PARK ELEMENTARY	<u>Kenneth V. White</u> Principal	<u>5-11-89</u> Date
STAFFORD ELEMENTARY	<u>Susan Scott-Miller</u> Principal	<u>5-12-89</u> Date
SUNSET ELEMENTARY	<u>Nancy Hays</u> Principal	<u>5-11-89</u> Date
WILLAMETTE MIDDLE SCHOOL	<u>Wendy E. Hall</u> Principal	<u>5-11-89</u> Date
WILSONVILLE ELEMENTARY	<u>Glen T. Martin</u> Principal	<u>5-11-89</u> Date
INZA WOOD MIDDLE SCHOOL	<u>B. Kleen</u> Principal	<u>5-11-89</u> Date
ADMINISTRATION BUILDING	<u>John Allen</u> Supervisor	<u>5-11-89</u> Date



May 9, 1989

TO: Principals  
FR: Sam Nutt *[Signature]*  
SUBJECT: Asbestos Management Plan

Attached is the asbestos management plan for your school. This is an extremely important document which will receive increasing attention in the coming months.

The following are some steps relative to this document that you should take immediately:

1. Become familiar with the contents of the document and identify a location in your files where the plan will be maintained. (You should not allow the plan to be taken outside of the building; and you or your secretary should know where it is at all times.)
2. Insure that key employees (engineer, custodians, other administration, school secretary, etc.) in your building are familiar with the contents and know where the plan is located and can find it when required.
3. Inform staff now and annually that the plan is available and tell them how to access it.
4. Send the attached memo from Dea to your parent organization informing them about the plan. Annual written notification to parent organizations is required and should be document in the appendix of the plan.

Please contact me if you need help in understanding the document. It is not well organized or easy to read and understand; however, it does meet the requirements of our contract with Hall-Kimbrell. Unfortunately, we are stuck with this plan format for now. The most important things you and your key staff need to know immediately for the plan are: (1) the locations of friable (i.e. material which will crumble with hand pressure) asbestos in your building, and (2) the steps you should take if you have an asbestos fiber release incident (or suspected incident) in your building.

## **NOTIFICATION & TRAINING OF EMPLOYEES, CONTRACTORS/SHORT-TERM WORKERS**

This section reflects requirements outlined in 40 CFR 763.92 (a)(I), (2)(iv) & 763.84 (b)

The following subsections contain this required information:

- Contractor/Employee Notification Letter
- Contractor Notification/Acknowledgement
- Contractor Asbestos Awareness Training Records

### **Notification and Labeling**

Once the presence of ACM has been established in a facility a notification and warning program should be initiated. The notification and warning program serves two purposes

- It alerts affected parties to a potential hazard in the building
- It provides basic information on avoiding the hazard

Building occupants, employees and others who are aware of the presence of ACM are less likely to disturb the material and cause fiber release. Note, however, that the AHERA Rule requirements for notification are limited to sending written notices to employees, parent and teachers (or organizations representing these groups if such organization exist.) The notices must announce the existence and location of the management plan.

### **Notification**

Notification of building occupants and other affected individuals can be accomplished several ways. Two common techniques are

- Distributing notices
- Holding awareness or informational seminars

The distribution of notices is an effective means of altering building occupants about the presence of asbestos. Memos or letters can be tailored to specific parties, and verification that notification was received is easily accomplished. For example, in a large multi-tenant facility, the building owner can send detailed reports to the management of individual companies, while distributing similar informational memos to building occupants.

Awareness or informational seminars can be designed to follow written notification. They serve to expand on relevant information while allowing those attending to raise questions. These seminars can be developed at the same time as other training programs, and typically last no more than several hours.

Regardless of notification format chose, building occupants could be provided with the following information:

- What asbestos is and how it is typically used
- Health effects of associated exposure
- What type(s) of ACM are present in the facility
- The exact location(s) of these materials
- How individuals can avoid disturbing ACM
- How to recognize and report damage

### **SHORT-TERM WORKER NOTIFICATION**

Information regarding the location of ACBM must be provided for all short term workers who come into the building according to the AHERA Final Rules. To comply with this requirement, LEA should inform all short-term workers that the management plan must be reviewed prior to working in the building.

This can be accomplished by the following:

- All workers are to report to the school administrative office prior to starting any activities, review the plan, and sign a statement that they have done so.

# **CONTRACTOR NOTIFICATION LETTER**

## CONTRACTOR NOTIFICATION LETTER

West Linn-Wilsonville School District hired an environmental health & safety consulting firm to complete a study to determine the presence, location, and quantity of asbestos-containing materials at the West Linn-Wilsonville School District. Our schools were inspected in accordance with Environmental Protection Agency guidelines for asbestos-containing materials (i.e., 40 CFR Part 763). This study is available for your review in the Central Records Library.

The purpose of this letter is to advise you as to where the known asbestos-containing materials are located at the West Linn-Wilsonville School District, and to refer you to the Asbestos Survey for identification of the presence, location, and quantity of asbestos-containing materials throughout our facility. The survey is located in the Main Office and it is essential that you familiarize yourself in the contents of the survey and the asbestos described in the Operations & Maintenance Plan prior to beginning any work in this facility.

The West Linn-Wilsonville School District has an Operations and Maintenance Plan which provides our employees and contractors with the proper knowledge to institute safe practices for the elimination of potential airborne fibers. One key element of this program includes periodic air testing to ensure that asbestos fiber concentrations are maintained well below the EPA indoor air quality level. Whenever known or suspected asbestos-containing materials are impacted, air quality testing will be conducted.

By way of background, the term "asbestos" describes a group of minerals, including actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite that are related to each other as fibrous inorganic hydrated mineral silicates. These minerals have been valued as a natural resource with hundreds of applications in manufacturing, construction and consumer products. Their fibrous forms allow them to be made of cloth, felt, gaskets, rope or to be used for reinforcement in cements, asphalt, and plastic. They are nonflammable, withstand high temperature and have a high-tensile strength. Three forms of asbestos products are typically found in buildings 1) surfacing materials; 2) thermal materials; and 3) miscellaneous materials such as ceiling tiles, floor tiles and shingles.

Asbestos poses a widespread concern for everyone since it was used extensively in buildings and homes constructed with insulation, acoustical treatments and/or fire protection. Asbestos was installed as a government-approved building material and was considered almost a miracle substance because of its many physical properties. However, airborne asbestos fibers are a health hazard and have been linked with different types of abdominal and lung cancers. We are therefore committed to taking corrective measures wherever appropriate, and our asbestos control efforts will be based on the advice of experts knowledgeable in asbestos abatement techniques.

Asbestos fibers tend to be retained by the lungs and can cause a variety of diseases, some of which are not evident for 20 years or more after initial exposure.

If you have any questions or concerns, please contact the APM, Tim Woodlev, at (503) 673-7041.

Thank you in advance for your cooperation.

Sincerely,

Asbestos Program Manager

**CONTRACTOR /  
NOTIFICATION /  
ACKNOWLEDGMENT**



## Contractor Notification / Acknowledgement

The West Linn-Wilsonville School District facilities have been determined to contain asbestos. Your work may bring you into close proximity to known or suspected asbestos-containing materials. Please refer to the Asbestos Building Survey and List of Routine Maintenance Areas for descriptions of asbestos-containing material in the specific areas you will be working in.

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH VARIOUS TYPES OF CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS, THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NON-SMOKING PUBLIC.

Disturbance of the asbestos-containing materials may cause release of asbestos fibers into the air. The work you are about to perform should not disturb and/or damage these materials. Any such activity is prohibited without the use of engineered control procedures and employees trained in their use (DEQ certified asbestos abatement workers and/or supervisors). An asbestos work order must be granted by the LEA before performing any task that might result in the disturbance of asbestos-containing materials. The only contractors that are permitted to intentionally disturb asbestos containing material are those that have received an Oregon Asbestos Abatement Contractor license.

By signing this document you are acknowledging that you have been informed of the known locations and health hazards associated with asbestos-containing materials in the West Linn-Wilsonville School District. You are also acknowledging that you understand that only licensed asbestos abatement contractors and certified asbestos abatement employees may intentionally disturb asbestos-containing material. If you encounter damaged materials that you believe might contain asbestos, you are responsible for notifying the APM prior to any activities that might results in the release of asbestos fibers.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ SS#: \_\_\_\_\_

COMPANY: \_\_\_\_\_

**CONTRACTOR  
ASBESTOS AWARENESS  
TRAINING RECORDS**

## **TRAINING**

This section reflects requirements outlined in 40 CFR 763.84 (2), 763.92 (a) (v), (2)

The following subsections contain this required information:

- LEA Designate/Asbestos Awareness Training Records
- Maintenance/Custodial Staff
- Personnel Medical Records (if applicable)

**ACTION:** You must train your custodian and maintenance employees. Prior to the start of the O & M Plan, there is a 2 hour awareness training and 14 additional hours of training for workers who may come in contact with asbestos.

**FORM:** N/A

## **EMPLOYEE AND WORKER TRAINING**

Training workers to use special procedures and work practices is a key to a successful asbestos management program. The training requirements differ between OSHA and AHERA, primarily in that OSHA has no specific number of training hours. There is also a difference in various state training programs.

All LEA maintenance and custodial staff, as well as contract workers, who work in a building containing ACBM are required to receive at a minimum a two-hour awareness training seminar. Any of these workers who will disturb ACBM must receive an additional 14 hours of training. Workers engaged in large-scale, long-duration ACBM activities in K-12 schools must receive 24 hours of training and become "Accredited Asbestos Workers". They must also receive an annual 8-hour refresher course. In Washington State the training program is 36 hours for "Accredited Workers".

The time intervals for the awareness education and 14 hours additional training of the employees are not specified by EPA regulations. However, it is highly recommended that both the two-hour awareness seminar and the additional 14 hours of training be given annually. All employees must receive the two-hour awareness training within 60 days of beginning work or, if they will come into contact with ACBM, before they begin their activities. Intervals should be checked for compliance with state and local rules and regulations. Many private companies and LEAs have all workers who contact ACBM attend the 24-hour training to provide the highest level of worker training. A sample employee training records form is included in this section.

## **LEA DESIGNATE**

The local Education Agency designated person (asbestos program manager) is the responsible person on behalf of the school district to ensure that the management plan and the AHERA rules are followed and, even more importantly, to protect the health of the building occupants and the environment.

Every LEA must designate a person and train them with the basic knowledge of the following:

- Health effects of asbestos
- Detection, identification and assessment of asbestos containing materials
- Options for controlling asbestos containing building materials
- Asbestos management programs
- State and Federal regulations

There is no approved course or length of training set by the EPA. Some people are of the opinion that the LEA designate should take a 5 day Accredited Inspector/Management Planner course. This

## **TRAINING**

is the highest level of accredited training for non-workers. Because the LEA designate is the most responsible party in the asbestos management process, taking this course when available makes sense. There are 3 day courses to train LEA designates and even 1 day courses.

## **TWO-HOUR AWARENESS TRAINING**

The required LEA two-hour awareness training program should include the information given to the occupants for the general information sessions and mailings and should include:

- Uses and forms of ACBM
- Health effects of asbestos
- Location of ACBM in building
- Recognition of problems such as damage, deterioration, or delamination of ACM
- Name and telephone number of the APM
- General understanding of the asbestos management program
- Overview of work practices and procedures to be followed by personnel who will
- Contact ACBM

## **WORKERS WHO CONTACT ACBM**

All employees and contract personnel who contact ACBM through cleaning maintenance or emergencies must have at least an additional 14 hours of training (16 hours total). Three types of training for workers who contact ACBM can be identified:

- Training for custodians involved in cleaning and simple maintenance tasks
- Training for maintenance workers involved in general maintenance and more complex repair tasks
- Training for workers who may conduct limited asbestos abatement (removal, enclosure, and encapsulation) or whose work involves direct (intentional) contact with ACBM

All three types of training should include general discussions of the uses and health effects of asbestos, the location of ACBM in the building, the overall asbestos control program, and the asbestos management program.

The additional 14-hour training program should also include:

- Physical characteristics of asbestos
- Methods and procedures for handling and disposing ACBM
- Medical monitoring and surveillance requirements
- Personal protection, including respiratory protection and protective clothing
- Working knowledge of the asbestos management program, including safety, access, and reinspection
- Equipment availability and uses including wet cleaning, HEPA vacuuming, steam cleaning, etc.
- Hands-on training in use of respirators, personal protection, work practices, and fiber control

## **TRAINING**

- Importance of record-keeping and employee record generation requirements
- Requirements for clearing work-order through the APM for of all renovation and ACBM disturbance activities
- Nonasbestos safety considerations
- Training and licensing requirements by state and local agencies

## **ACCREDITED ASBESTOS WORKER TRAINING**

The training requirement for an accredited asbestos worker includes a 24-hour, or three-day course. The course should include lectures, demonstrations, at least six hours of hands-on training, individual respirator fit-testing, course review, and an examination. EPA recommends the use of audio-visual materials to complement lectures where appropriate.

The training course should adequately address the following:

- Physical characteristics of asbestos
- Potential health effects related to asbestos exposure
- Employee personal protective equipment
- State-of-the-art work practices
- Personal hygiene
- Additional safety hazards
- Medical monitoring
- Air monitoring
- Relevant federal, state, and local regulatory requirement, procedures, and standards.
- Establishment of respiratory protection programs
- Course review

The worker must receive a passing grade of 70% on an examination with 50 multiple-choice questions.

## **TEACHING QUALIFICATIONS**

The 2 and 14-hour training programs can be conducted by any qualified person trained in asbestos control and management. The EPA stresses the use of the most qualified people available. The 24-hour training program for workers must be an EPA-accredited training course. A sample form for recording individual worker training is included in this section.

## **CONTRACT SERVICES**

Where custodial and maintenance services are performed under contract with a service company, the building owner must ensure that the service company's staff has been properly trained for working with ACBM. Training will include successful completion of courses on asbestos control and special programs that meet the requirements for the LEA staff discussed above. The company's respirator and medical surveillance programs should be reviewed. In addition, the company performance should be verified with other customers, particularly owners of buildings containing ACBM.

If the service company meets the training and performance requirements, an initial session should be held with the company's supervisors and workers to inform them of the location of ACBM in the building and of all building-specific operating procedures. The APM assumes responsibility for ensuring that the service company adheres to all aspects of the asbestos management program.

**LEA  
DESIGNATE/ASBESTOS  
AWARENESS TRAINING  
RECORDS**

## LEA DESIGNATE DOCUMENTATION

The school district must designate and train a person to ensure compliance with the requirements of Section 763.84 of the Final Rules. The responsibilities of the LEA Designate's signature and statement of acceptance appears in the last TAB of the Management Plan. If the school board or superintendent has formally assigned the LEA Designate with a letter, memorandum, or similar conveyance, a copy should be filed under this Tab.

The West Linn-Wilsonville School District's Superintendent Roger L. Woehl acknowledges the undersigned person to act as the LEA Designate throughout the West Linn-Wilsonville School District.

Signature: Roger L. Woehl

Date: 11/1/99

## LEA DESIGNATE

Tim Woodley  
West Linn-Wilsonville School District 3Jt  
22210 S.W. Stafford Road  
Tualatin, OR 97062  
(503) 638-9869

## LEA DESIGNATE TRAINING

Course Name: AHERA DP  
TRAINING

Training Date: 10-14-99

Total hours: \_\_\_\_\_

Description: \_\_\_\_\_

\_\_\_\_\_

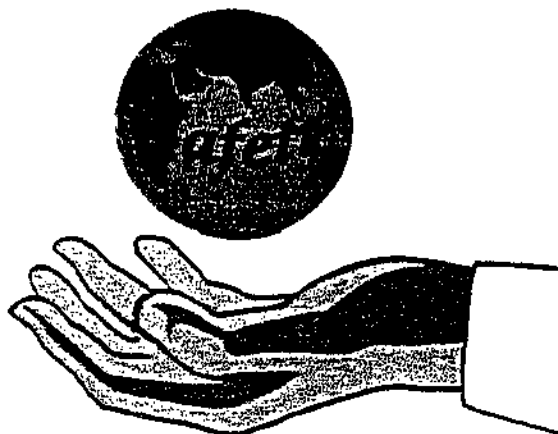
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## LEA DESIGNATE RESPONSIBILITIES

Responsibilities are listed in the federal register included in this section.

Course Title: AMERA DP TRAINING  
 Date(s): 10-14-99  
 Location: WEST LINN - WILSONVILLE  
SCHOOL DISTRICT  
ADMINISTRATION BLDG,

**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143



## Attendance Roster

*PLEASE PRINT your name clearly, as you want it to appear on your certificate.*

Name	Company	Phone Number
1. Jeri Nelson	WL - WV School Dist.	673-7013
2. Tim Woxley	School District	673-7041
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*"Safety for a Worldwide Workplace"*



# *Certificate of Completion*

*Presented by*  
**Three Rivers Environmental, Inc.**

**Jeri Nelson**

*has successfully completed a*  
*Designated Person*  
*Training course in accordance with*  
**EPA AHERA 90 CFR Part 763, Subpart E.**

*October 14, 1999*  
*West Linn - Wilsonville School District*  
*22210 SW Stafford Road*  
*West Linn, Oregon 97068*

*Harvey McNeil*

**Instructor**

**Three Rivers Environmental, Inc. 545 W. Arlington Gladstone, Oregon 97027 (503) 557-2396**

# Certificate of Completion

Presented by  
**Three Rivers Environmental, Inc.**

**Tim Woodley**

has successfully completed a  
Designated Person  
training course in accordance with  
EPA AHERA 40 CFR, Part 763, Subpart E.

October 14, 1999  
West Linn - Wilsonville School District  
22210 SW Stafford Road  
West Linn, Oregon 97068

*Harvey McGill*  
Instructor

Three Rivers Environmental, Inc. 545 W. Arlington Gladstone, Oregon 97027 (503)-557-2396

# **MAINTENANCE / CUSTODIAL STAFF**

Course Title: ASBESTOS AWARENESS  
 Date(s): 02-16-01  
 Location: WEST LINN - WILSONVILLE S.D.  
WEST LINN, OR



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <i>[Signature]</i>	<del>503-666-6693</del> GARY CROMWELL	650-2636
2. <i>[Signature]</i>	Darryl Cromwell	603-65-2636
3. <i>[Signature]</i>	Nancy Behnke	655-7152
4. <i>[Signature]</i>	BILL RAY	650-3842
5. <i>[Signature]</i>	MARK L. RAINEY	673-7013
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"Safety for a Worldwide Workplace"

Course Title: ASBESTOS AWARENESS  
 Date(s): 02-16-01  
 Location: WEST LINN-WILSONVILLE S.D.  
WEST LINN, OR



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <u>ROBERT STEWARD</u>	<u>Robert Steward</u>	<u>N/A</u>
2. <u>Robin K McIntosh</u>	<u>Robin K McIntosh</u>	<u>503-722-9775</u>
3. <u>Frank E Ransom</u>	<u>Frank E Ransom</u>	<u>760-7086</u>
4. <u>Harold &amp; Pauley</u>	<u>HAROLD PAULEY</u>	<u>503-725-7166</u>
5. <u>BLAINE CHRISTOPHER</u>	<u>BLAINE CHRISTOPHER</u>	<u>503-721-8127</u>
6. <u>PEDRO TORRESS</u>	<u>PEDRO TORRESS</u>	<u>503-691-8429</u>
7. <u>Terry Casey</u>	<u>Terry Casey</u>	<u>673-7436</u>
8. <u>Kim Vachler</u>	<u>Kim Vachler</u>	<u>673-7013</u>
9. <u>Linda Varsondar</u>	<u>Linda Varsondar</u>	<u>666-1975</u>
10. <u>JESUS LUNA</u>	<u>JESUS LUNA</u>	<u>803-7060</u>
11. <u>JOSE LUNA</u>	<u>JOSE LUNA</u>	<u>998-7252</u>
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"Safety for a Worldwide Workplace"

Course Title: ASBESTOS AWARENESS  
 Date(s): 02-16-01  
 Location: WEST LINN-WILSONVILLE S.D.  
WEST LINN, OR



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3145

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <i>Vicki Yeomans</i>	VICKI YEOMANS	673-7023
2. <i>Steve Lewallen</i>	Steve Lewallen	" "
3. <i>John W. Hartley Jr</i>	John W. Hartley Jr	673-7100
4. <i>Reverio Luna</i>	Reverio Luna	774-6428
5. <i>Larry Johnson</i>	LARRY JOHNSON	625-4541
6. <i>Larry Fodge</i>	LARRY FODGE	673-1494
7. <i>Kevin Washington</i>	Kevin Washington	794-9452
8. <i>Ron D. Moser</i>	Ron D Moser	653-1832
9. <i>Bert Rigg</i>	Bert Rigg	570-0466
10. <i>Doug Nimrod</i>	DOUG NIMROD	998-7252
11. <i>Rocky Bounds</i>	Rocky Bounds	831-1027
12. <i>Mickey Mouse</i>	Mickey Mouse	824-3105
13. <i>Allan Perrine</i>	Allan Perrine	656-6635
14. <i>Gary H. S.</i>	GARY H.S.	557-8506
15. <i>Tom Nixon</i>	TOM NIXON	682-8434
16. <i>Lester B. B.</i>	Lester B. B.	665-1906
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"Safety for a Worldwide Workplace"



Course Title: ASBESTOS AWARENESS  
 Date(s): 03-26-01  
 Location: WEST LINN-WILSONVILLE S.D.



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <i>David Jolliffe</i>	David Jolliffe	539 5826
2. <i>Terry L. Sturman</i>	Terry L. Sturman	630-3675
3. <i>Robin Nolan</i>	Robin Nolan	631-4832
4. <i>Reynaldo R. Espino</i>	REYNALDO R. Espino	675-8260
5. <i>Vicki Holtcamp</i>	Vicki Holtcamp	638-4460
6. <i>Claude Koch</i>	Claude Koch	653-9482
7. <i>Colin Wall</i>	Colin Wall	723-1453
8. <i>Tina Lacey</i>	Tina Lacey	722-7105
9. <i>Linda Jacobs</i>	Linda Jacobs	636-2698
10. <i>Leo Moser</i>	Leo Moser	435-2979
11. <i>Cheryl Somner</i>	Cheryl Somner	635 9277
12. <i>Gwyned A. Nolan</i>	Gwyned A. Nolan	673-7265
13. <i>Carol Zuecher</i>	CAROL Zuecher	673-7013
14. <i>Jeri Nelson</i>	Jeri Nelson	673-7013
15. <i>John Erickson</i>	John Erickson	673-7013
16. <i>SERGIO BARRERO</i>	<i>SERGIO</i>	632-4421
17. <i>ETOLIA VARROQUIN</i>	<i>ETOLIA</i>	723-0614
18. <i>Aly Castro</i>	Aldagunda Castro	
19. <i>José Angel Rosas</i>	José A. Rosas	430-17-81
20. <i>José A. Rosas</i>	José A. Rosas	691-89-39

"Safety for a Worldwide Workplace"

**ASBESTOS AWARENESS TRAINING  
FEBRUARY 21, 2000**

Smith, Jason  
Moser, Leo  
Simmons, Phil  
Riggan, Butch  
Pauley, Harold  
Deatherage, Ryan  
Wart, James  
Herring, William  
Hartley, John  
Johnson, Larry  
Wall, Colin  
Griffin, James  
Luna, Jose  
Bounds, Rocky  
Luna, Jesus  
Luna, Refugio  
Washington, Kevin  
Somner, Cheryl  
Koch, Claude  
Baer, David  
Rainey, Mark  
Olson, Terry  
Garza, Pam  
Yeomans, Vicki  
Nolan, Robin  
Hines, Gary  
Lewallen, Steve  
Ray, Bill  
Peter, Jim  
Cromwell, Darryl  
Nixon, Tom  
Daley, John  
Jacobs, Linda  
Vachter, Kim  
Sturman, Terry  
Simmons, Joe  
Thomas, David  
Christopher, Blaine  
Howard, Jerry  
Whitney, Clair



Course Title: ASBESTOS AWARENESS  
 Date(s): 02-21-99  
 Location: WEST LINN/WILSONVILLE  
SCHOOL DIST. ADMIN. BLDG.  
WEST LINN, OR



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <u>Jason D Smith</u>	Jason D Smith	503-682-7521
2. <u>Leo Moser</u>	Leo Moser	435-2979
3. <u>Phil Simmons</u>	Phil Simmons	570-9753
4. <u>Butch Ribbar</u>	Butch Ribbar	570-0466
5. <u>Harold R Pauley</u>	HAROLD R PAULEY	775-7166
6. <u>Ryan Deatherage</u>	RYAN DEATHERAGE	557-7347
7. <u>James H. Want</u>	James H. Want	632-6092
8. <u>William Herring</u>	WILLIAM HERRING	632-4582
9. <u>John W. Hartley Jr</u>	John W. HARTLEY Jr	698-4231
10. <u>Larry Johnson</u>	LARRY JOHNSON	625-4541
11. <u>Colin Wall</u>	COLIN WALL	232-2157
12. <u>James A. Griffin</u>	JAMES A. GRIFFIN	656-4688
13. <u>Jose F. Luna</u>	JOSE F. LUNA	259-9483
14. <u>Ricky Bounds</u>	Ricky Bounds	582-8506
15. <u>Jesus Jung</u>	Jesus Jung	259-9483
16. <u>Pedro Lugo</u>	Pedro Lugo	848-9292
17. <u>Kevin Washington</u>	Kevin Washington	794-9752
18. <u>Cheryl Somner</u>	Cheryl Somner	250-7009
19. <u>Charles Koch</u>	Charles Koch	655-9482
20. <u>David J. Rose</u>	David J. Rose	622-3208

"Safety for a Worldwide Workplace"

Course Title: ASBESTOS AWARENESS  
 Date(s): 02/21/00  
 Location: WEST LINN/WILSONVILLE  
SCHOOL DIST. ADMIN. BLDG.  
WEST LINN, OR



**PAC PRO Safety & Health Services**  
 660 N.W. Bella Vista Drive ♦ Gresham, Oregon 97030  
 Phone: 503-666-6693 ♦ Fax: 503-665-3143

## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <i>Mark L. Rainey</i>	MARK L. RAINEY	673-7013
2. <i>Terry Olson</i>	Terry Olson	
3. <i>Pam Garza</i>	Pam Garza	
4. <i>Vicki Yeomans</i>	VICKI YEOMANS	
5. <i>Robin Nolan</i>	Robin Nolan	
6. <i>Gary Hines</i>	GARY HINES	
7. <i>Steve Lewallen</i>	Steve Lewallen	673-7909
8. <i>Bill Ray</i>	BILL RAY	673-7845
9. <i>Jim Peter</i>	Jim Peter	656-6665
10. <i>Darryl Cramwell</i>	Darryl Cramwell	660-2636
11. <i>Thomas Nixon</i>	THOMAS NIXON	682-8434
12. <i>John L. Daley</i>	John L. Daley	631-8603
13. <i>Linda Sebois</i>	Linda Sebois	636-2698
14. <i>Kim Vaehler</i>	Kim Vaehler	656-5409
15. <i>Terry L. Sturman</i>	Terry L. Sturman	630-3675
16. <i>Joe Simmons</i>	Joe Simmons	673-7016
17. <i>David Thomas</i>	DAVID THOMAS	673-7013
18. <i>Blaine Christopher</i>	BLAINE CHRISTOPHER	771-8127
19. <i>Jerry Herman</i>	Jerry Herman	673-7500
20. <i>Clair Whitney</i>	CLAIR WHITNEY	722-1249

"Safety for a Worldwide Workplace"

**ASBESTOS AWARENESS**  
**MARCH 20, 2000**

Gaffney, Les  
Sherman, Walt  
Chavarin, Freddy  
Steward, Robert  
Cromwell, Gary  
Zuercher, Carol  
Dvorak, Mark  
Rose, Thelma  
Lasit, Sharon  
Espino, Reynaldo  
Nolin, Gwynn  
Nimrod, Doug  
Varsandar, Linda  
Holtcamp, Vicki  
Bettineski, Nancy  
Moser, Ronald  
Boyle, Lester  
Casey, Terry  
Perrine, Allan  
Torres, Pedro  
Nelson, Jeri  
Joliffe, Dave

Course Title: ASBESTOS AWARENESSDate(s): 3/20/00Location: WEST LINN SCHOOL DIST.  
ADMINISTRATION BLDG.  
WEST LINN, OR

PAC PRO Safety & Health Services  
660 N.W. Bella Vista Drive • Gresham, Oregon 97030  
Phone: 503-666-6693 • Fax: 503-665-3143

## Attendance Roster

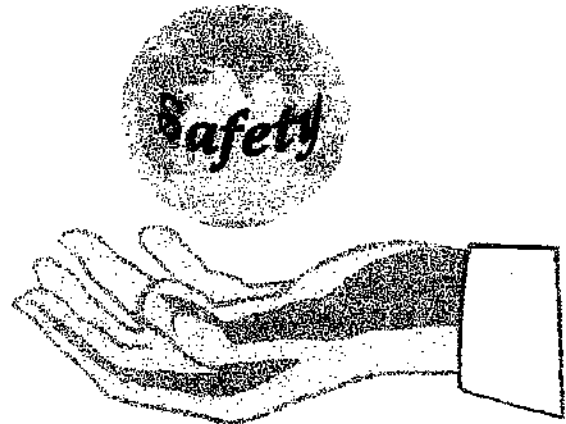
PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. Les O. Gaffney	LES O. GAFFNEY	503-762-4036
2. Wade Simon	WADE SIMON	503-552-2677
3. Gary L. Simon	GARY L. SIMON	
4. Robert Stewart	ROBERT STEWARD	11/4
5. Gary L. Simon	GARY L. SIMON	650 4136
6. Carol L. Simon	CAROL L. SIMON	650 7372
7. Mark Worak	MARK WORAK	657-7430
8. Thelma Rose	THELMA ROSE	654-3094
9. Sharon L. Rose	SHARON L. ROSE	673 7155
10. Raymond R. Spino	RAYMOND R. SPINO	675-8260
11. Gerald L. Spino	GERALD L. SPINO	455-1009
12. David L. Spino	DAVID L. SPINO	824-3105
13. Linda Versondar	LINDA VERSONDAR	666-1975
14. Vicki Holtkamp	VICKI HOLTkamp	638-4460
15. Nancy Behrman	NANCY BEHRMAN	655-4879
16. Ronald D. Moser	RONALD D. MOSER	663-1532
17. Terry Lacey	TERRY LACEY	663-1532
18. Terry Lacey	TERRY LACEY	824-9409
19. Allan Perrine	ALLAN PERRINE	656-6685
20. DEPRO 40210's S		

"Safety for a Worldwide Workplace"

Course Title: ASBESTOS AWARENESS  
 Date(s): 3/20/00  
 Location: WEST LINN SCHOOL DIST  
ADMINISTRATION BLDG.  
WEST LINN, OR

**PACTRO Safety & Health Services**  
 660 N.W. Bella Vista Drive • Gresham, Oregon 97030  
 Phone: 503-666-6693 • Fax: 503-666-3143



## Attendance Roster

PLEASE PRINT your name clearly, as you want it to appear on your certificate.

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. <u>[Signature]</u>	<u>Dave Joliffe</u>	
2. <u>[Signature]</u>	<u>Jer Nelson</u>	<u>673-7018</u>
3.		
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# **PERSONNEL MEDICAL RECORDS (if applicable)**

## MEDICAL MONITORING

OR-OSHA Division 3 – 1926.1101 (m); (n)(3)

A medical surveillance program must be made available to workers employed in the construction industry who are:

- exposed to asbestos at or above the PEL (0.1 f/cc – 8TWA) or Excursion Limit (1.0 f/cc – 30 min.) for 30 or more days per year;  
or
- engaged in Class I, II, and/or III asbestos work for 30 or more days per year;  
or
- required by the rules to wear a negative-pressure respirator.

All other employees who are or will be exposed to asbestos at or above the action level must be covered by a medical surveillance program.

Medical examinations must be given on the following schedule:

- **prior to assignment** to an area where negative-pressure respirators are worn; or
- within 10 working days following the thirtieth day of exposure **annually thereafter**.
- if an examining physician determines that any test(s) should be more often than the annual schedule.

Examinations must include:

- medical and work history;
- standardized questionnaire; abbreviated questionnaire;
- physical examination;
- chest X-ray (this is based on the doctor's discretion and analyzed by a specialist);
- pulmonary function test; and,
- any other examination deemed necessary.

The employer must maintain an accurate record for each employee, including:

- name and social security number;
- copy of medical examination;
- physician's written opinions;
- any medical complaints related to asbestos;
- maintain the record for 30 years beyond termination

**Employee access to information:** the employer shall provide a copy of the physician's written opinion to the employee within 30 days from its receipt.

**Physicians written opinion:** Employers must instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational asbestos exposure.

## **RESPIRATORY PROTECTION**

**OR-OSHA Division 3 – 1926.1101 (h)**

**Respirators must be worn under the following conditions:**

- during the time necessary to install or implement engineering controls and work practices to bring exposures to below the PEL and/or excursion limit
- in operations where controls are not feasible i.e. maintenance and repair activities
- where controls have not reduced exposure levels below the PEL and/or excursion limit
- in emergencies
- in all regulated areas, and
- whenever employee exposure exceeds PEL and/or excursion limit.
- Whenever employer cannot do an appropriate negative exposure assessment of an asbestos abatement project.



## **ASBESTOS CONTAINING BUILDING MATERIALS (ACBM) IN THIS FACILITY**

### **ADDITIONAL ASBESTOS SAMPLE/ASSESSMENT DATA**

This section reflects requirements outlined in 40 CFR 763.93 (3) (I v)

The following subsections contain this required information:

- Asbestos Sample/Material Location Diagram
- Asbestos Sample Analysis Data

As part of the AHERA Asbestos Inspection, the location of samples collected are recorded on building diagrams. In addition to the sample locations, specific damage areas are recorded where found. The following pages provide the sample location diagrams for the School District. These drawings are organized in the same manner as the inspection/management plan data, i.e. campus one building one is first.

The title block contains the specific state, district, campus and building or code with a 12 digit number. Next is the District Name, the Campus Name and finally the Building Name. The next block provides the date the drawing was made, the street number and finally the drawing number.

### **SAMPLING INFORMATION/MATERIAL LOCATION DIAGRAMS (ADDITIONAL ASBESTOS MATERIAL ASSESSMENT REPORT)**

A blueprint, diagram or written description of each school building that identifies clearly each location and approximate square or linear footage of homogeneous areas where material was sample for ACM.

The exact location where each bulk sample was collected.

The date of collection of each bulk sample.

The homogeneous areas where friable suspected ACBM is assumed to be ACBM.

The homogeneous areas where nonfriable suspected ACBM is assumed to be ACBM.

A description of how sampling locations were determined.

The name and signature of each accredited inspector who collected the samples.

State, accreditation number and name of training provider of each accredited inspector who collected the samples (copy of accreditation certificate is ideal)

## **ANALYSIS OF SUMMARY**

A copy of the analyses of any bulk samples collected and analyzed.

The name and address of any laboratory that analyzed bulk samples.

A statement that any laboratory used meets the accreditation requirements of 753.87 (a) (copy of the accreditation is ideal).

The dates of any analyses performed.

The name and signature of the person performing each analysis.

A description of the assessment required by 753.88 of all friable ACBM and suspected ACBM assumed to be ACBM.

The name and signature of each accredited person making the assessment.

The State, accreditation number and name of training provider for each person making the assessments (copy of certificate is ideal)

### Periodic Surveillance Report

Campus: 006-WILLAMETTE Building: MAIN BLDG.  
Address: 1403 S.E. 12TH ST., WEST LINN Date of surveillance: 8/26/92

Person conducting surveillance: JEFF SMITH

Material description: WRAPPED PAPER PIPE COVER  
Homogeneous area(s): USA #02, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: DAMAGED  
Change in material condition: ☒ YES ☐ NO IN TUNNEL

Material description: MJP ON WRAPPED PIPE COVER  
Homogeneous area(s): USA #03, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: DAMAGED  
Change in material condition: ☒ YES ☐ NO IN TUNNEL

Material description: WRAPPED PAPER PIPE COVER  
Homogeneous area(s): USA #04, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO


Material description: MJP ON WRAPPED PIPE COVER  
Homogeneous area(s): USA #05, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO SOME ABATEMENT

Material description: WRAPPED PAPER PIPE COVER  
Homogeneous area(s): USA #06, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO SAMPLES TESTED NEGATIVE

Material description: MJP ON WRAPPED PIPE COVER  
Homogeneous area(s): USA #07, ALL FLOORS IN BUILDING  
Last material condition: NONE New material description: GOOD CONDITION  
Change in material condition: ☐ YES ☒ NO SOME ABATEMENT


Material description: ACOUSTICAL TILE (1X1)  
Homogeneous area(s): USA #8, BASEMENT  
Last material condition: NONE New material description: GOOD CONDITION  
Change in material condition: ☐ YES ☒ NO SAMPLE TESTED NEGATIVE

Comments: BASEMENT: N.W. DIRT CRAWL SPACE: ACM DEBRIS THROUGHOUT.  
N.W. CUSTODIAN RM: ENCAPSULATION COMING OFF NW END OF OVERHEAD PIPE, AT WALL.  
W. CUSTODIAN CLOSET'S DIRT CRAWL SPACE: ACM DEBRIS IN DIRT.  
ROOM 16 TUNNEL ACCESS: ACM INSULATION DAMAGED, DEBRIS ON FLOOR OF TUNNEL.

Signature: 

JEFFERY SMITH

Date: 8/26/92

**Periodic Surveillance Report**Campus: 006-WILLAMETTE Building: MAIN BLDG.  
Address: 1403 S.E. 12TH ST., WEST LINN Date of surveillance: 8/26/92Person conducting surveillance: JEFF SMITHMaterial description: DROP OR LAY-IN PANEL  
Homogeneous area(s): USA #09, ALL FLOOR IN BUILDING  
Last material condition: NONE New material description: GOOD CONDITION  
Change in material condition: ☐ YES ☒ NO SAMPLE TESTED NEGATIVEMaterial description: ACOUSTICAL/THERMAL PLASTER  
Homogeneous area(s): USA #10, FIRST FLOOR  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: ACOUSTICAL/THERMAL PLASTER  
Homogeneous area(s): USA #11, FIRST FLOOR  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: ACOUSTICAL/THERMAL PLASTER  
Homogeneous area(s): USA #12, BASEMENT  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: ACOUSTICAL/THERMAL PLASTER  
Homogeneous area(s): USA #13, BASEMENT  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: FIREPROOFING  
Homogeneous area(s): USA #14, FIRST FLOOR  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: DROP OR LAY-IN PANEL  
Homogeneous area(s): USA #15, BASEMENT  
Last material condition: NONE New material description: GOOD CONDITION  
Change in material condition: ☐ YES ☒ NO SAMPLE TESTED NEGATIVEComments: ROOM #15; TUNNEL ACCESS (TWO OF THEM): ACM ON PIPING DAMAGED  
AND DEBRIS THROUGHOUT TUNNEL.  
MAIN FLOOR: W. FRONT ENTRANCE CLOSET NEXT TO WATER FOUNTAIN: ONE DAMAGED  
ELBOW S. OF DOOR, IN CLOSET, AT FLOOR LEVEL.Signature: 

JEFFERY SMITH

Date: 8/26/92

**Periodic Surveillance Report**Campus: 006-WILLAMETTE Building: MAIN BLDG.  
Address: 1403 S.E. 12TH ST., WEST LINN Date of surveillance: 8/26/92Person conducting surveillance: JEFF SMITHMaterial description: VINYL FLOOR TILE  
Homogeneous area(s): USA #99, ALL FLOORS IN BUILDING  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NOMaterial description: BOILER  
Homogeneous area(s): USA #1, BOILER ROOM  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: JOINTS  
Homogeneous area(s): USA #1, BOILER ROOM  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: PIPING  
Homogeneous area(s): USA #1, BOILER ROOM  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: TANK  
Homogeneous area(s): USA #1, BOILER ROOM  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NO ABATEDMaterial description: WRAPPED PIPE COVER  
Homogeneous area(s): USA #50, TEACHER WORK AREA & ROOM #19  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NOMaterial description: MJP ON WRAPPED PIPE COVER  
Homogeneous area(s): USA #51, TEACHER WORK AREA & ROOM #19  
Last material condition: GOOD New material description: SAME  
Change in material condition: ☐ YES ☒ NOComments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Signature: 

JEFFERY SMITH

Date: 8/26/92

# **ASBESTOS SAMPLE / MATERIAL LOCATION DIAGRAM**

# **ASBESTOS SAMPLE ANALYSIS DATA**



Office 503-650-8370 - Fax 503-650-8371 - P.O. Box 519 - Gladstone, OR 97027

*Environmental Safety & Health Services*

**COMPANY:** WEST LINN WILSONVILLE SCHOOL DISTRICT  
**FACILITY:** WILLAMETTE PRIMARY  
**INSPECTION DATES:** 8/14/01

**ASBESTOS SURVEY**  
**REPORT DATE:** August, 2001  
**INSPECTOR:** Darren Lee  
**CERT. NUMBER:** OR-00-6082  
**NVLLAP CERT:** 101882-0

## **ASBESTOS INVESTIGATIVE REPORT**

<b>Sample #:</b>	<b>Material Description:</b>	<b>Sample Location:</b>	<b>HSA#</b>	<b>Total Asbestos:</b>
WP-01	Ceiling Tile (1x1) white	Classroom # 20	01	0%
WP-02	Ceiling Tile (1x1) white	Classroom # 20	01	0%
WP-03	Ceiling Tile (1x1) white	Classroom # 20	01	0%
WP-04	Ceiling Plaster, above Ceiling Tile (1x1) white	Classroom # 20	02	0%
WP-05	Ceiling Plaster, above Ceiling Tile (1x1) white	Classroom # 20	02	0%
WP-06	Ceiling Plaster, above Ceiling Tile (1x1) white	Classroom # 20	02	0%

**ANALYTICAL METHOD:** Polarized Light Microscopy, EPA Method 600/M4-82-020

**STANDARDS:** OSHA / EPA, one percent (1%) asbestos by weight is considered asbestos containing.

**NOTE:** HSA numbers represent homogeneous materials or materials which appear similar in construction and matrix.

Page: 1



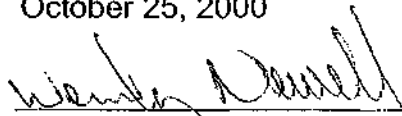


# Certificate of Completion

This is to certify that  
**Darren D. Lee**  
has satisfactorily completed  
4 hours of refresher training as a  
**Building Inspector**

in compliance with TSCA Title II  
AHERA Accredited

October 25, 2000

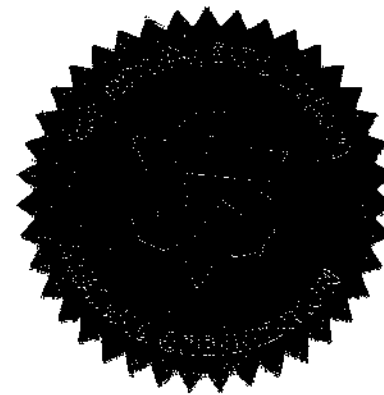
  
Training Coordinator

Date Expires Oct 25, 2001



**Prezant**

Prezant Associates, Inc. • 330 Sixth Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-8858



Cert. # 00-6082

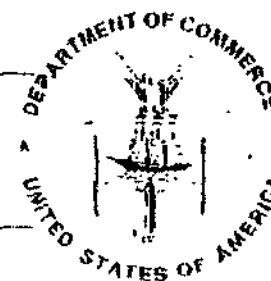
Conducted at:  
Pac Pro Safety & Health Services

United States Department of Commerce  
National Institute of Standards and Technology



ISO/IEC GUIDE 25:1990  
ISO 9002:1987

Certificate of Accreditation



ENVIRONMENTAL HAZARDS SERVICES, L.L.C.  
RICHMOND, VA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 205 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation form.

BULK ASBESTOS FIBER ANALYSIS

December 31, 2001

*I for two through*

*David F. Alderman*

For the National Institute of Standards and Technology

NVLAP Lab Code: 101882-0

National Institute  
of Standards and Technology



National Voluntary  
Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990  
ISO 9002:1987

## Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101882-0

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 White Pine Road

Richmond, VA 23237

Ms. Irma Faszewski

Phone: 804-275-4788 Fax: 804-275-4907

E-Mail: managerqaqc@leadlab.com

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk  
Insulation Samples

December 31, 2001

Effective through

*David F. Alderman*

For the National Institute of Standards and Technology

## **PERIODIC SURVEILLANCE**

This section reflects requirements outlined in 40 CFR 763.92 (3) (b) (2) (i-iii)

**ACTION:** Check the condition of the asbestos-containing materials (ACM) at least every 6 months.

**TRAINING:** None required; O & M or Inspector suggested.

**FORM:** Use the form included in this Section.

A well-run asbestos management program must include periodic surveillance of the ACBM. Periodic surveillance is the scheduled observation of asbestos materials to determine if any damage or deterioration occurred since the previous observation. Because much of the ACBM is observed daily by the school staff during normal work and also because many areas are not accessible, slight changes in the condition of the ACBM occurring over time may not be readily apparent.

Some building owners conduct monthly surveillance. AHERA requires surveillance in K-12 schools at no greater than six month intervals, and this is a prudent minimal frequency for any Owner. This periodic surveillance can save the building owner considerable time money, and embarrassment in the event of ACBM deterioration or damage. Moreover, properly conducted surveillance provides a great deal of comfort to building workers and occupants.

### **SURVEILLANCE PERSONNEL:**

AHERA establishes no training requirements for the persons conducting the periodic surveillance. Any employee or contractor selected by the Asbestos Program Coordinator is allowed to conduct the surveillance. Three Rivers Environmental Inc. recommends that the observer either take a 16-hour Operations and Maintenance course or a 3-day inspector course. The individual should be knowledgeable of the building's construction, previous inspections and surveillances, generation of records, conditions to be observed, and personal protections. It is the Owner's responsibility to ensure that the surveillance does not cause an exposure of safety problem for the person conducting this activity.

### **DATA REQUIREMENTS:**

All areas with ACBM or suspected ACBM must be visually examined in each periodic surveillance. A record of the surveillance date and the person conducting the surveillance, as well as any changes in ACBM conditions, must be recorded. This requires the person to be knowledgeable of earlier ACBM conditions. The records generated by this periodic inspection must be filed in the Management Plan at the Owner's administrative office. It is recommended that the reports to be filed in the administrative office be submitted to the Asbestos Program Coordinator for review.

### **SURVEILLANCE CONCERNS:**

The person conducting the periodic surveillance must observe the same major factors that were observed in the original inspection and that were used to assess the material's conditions. The six items to be evaluated are:

- Deterioration or delamination of the materials.
- Physical damage to the material or adjacent areas.
- Water damage of any material in the area.
- Air-stream effects
- Exposure, accessibility and activity changes.
- Changes in building use.

## **PERIODIC SURVEILLANCE**

### **RECORDKEEPING:**

File Periodic Surveillance Reports under TAB 8 and utilize the appropriate form.

### **COMMUNICATIONS:**

Any changes in conditions or notable circumstance should be communicated to the Asbestos Program Coordinator. The updated information is to be included in the Management Plan and in the annual notification letters.

# AHERA

*for*  
9.14.00

## Six Month Periodic Surveillance

### WEST LINN SCHOOL DISTRICT #3Jt

OF

Willamette Primary School  
1403 S.E. 12th Street  
West Linn, OR 97068

Project No. 1020-109

ROBERT C. MONTGOMERY  
AHERA Inspector

Robert C. Montgomery 5-17-00  
Signature & Date

#98-09212, OR  
Certification # & State

ROBERT C. MONTGOMERY  
Management Planner

Robert C. Montgomery  
Signature & Date 5-17-00

MP-00-8795, OR  
Certification # & State

Prepared by:



P.O. Box 216 Gladstone, OR 97027 Phone (503) 557-2396 Fax (503) 557-3025

## PERIODIC SURVEILLANCE REPORT

Page #: 1 of 3

TRE Job#: 1020-109

Client: West Linn School District

Campus: Willamette Primary

Building: Main

Address: 1403 SE 12th Street

Date of Surveillance: May 2000

Person Conducting Surveillance: Robert Montgomery

Material Description: Boiler/Tank Insulation/Mechanical Insulation

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Boiler/Tank Insulation/Mechanical Insulation

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Low Pressure Steam/MJP on Pipe Covering

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Cold Water/Wrapped Paper Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition: No



## PERIODIC SURVEILLANCE REPORT

Page #: 2 of 3  
TRE Job#: 1020-109

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: May 2000

Person Conducting Surveillance: Robert Montgomery

Material Description: Low Pressure Steam/Pipe Covering

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Low Pressure Steam/Wrapped Paper Pipe Cover

Homogeneous area(s): HK USA #02

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Low Pressure Steam/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #03

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #05

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #10

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #07

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

## PERIODIC SURVEILLANCE REPORT

Page #: 3 of 3

TRE Job#: 1020-109

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: May 2000

Person Conducting Surveillance: Robert Montgomery

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #12

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #13

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Fireproofing

Homogeneous area(s): HK USA #14

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Vinyl Floor Tile

Homogeneous area(s): HK USA #99

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: TSI Hard Fittings

Homogeneous area(s): 1 sq. ft., 1 damaged hard fitting, wall intrusion, cracks at hanger loctn.

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No



June 2, 2000

West Linn-Wilsonville School District  
Attention: Tim Woodley  
P.O. Box 35  
West Linn, OR 97068

Dear Mr. Woodley,

Three Rivers Environmental, Inc. appreciates the opportunity that we had to conduct your AHERA Re-inspection of asbestos containing building materials. This reinspection consisted of the review and updating of all AHERA records under current regulatory guidelines and the inspection and assessment of all asbestos containing materials in eight schools with addition of the Administration Building within West Linn-Wilsonville School District. The review of all AHERA records and the assessments of all asbestos containing building materials were performed by an accredited AHERA Building Inspector and Management Planner.

The following are the "Areas of Concern" for each individual school and the materials that were located that are in need of immediate attention.

**West Linn High School-**

**Material:** TSI hard fittings, mag lines over corrugated pipe covering  
**Assessment noted:** 50 hard fittings, 40 in. ft. under S. wing of high school  
**Recommended Response Action:** Immediately isolate, restrict access, clean-up debris and maintain in an intact and undamaged condition.

**Material:** MLP on pipe covering (12" O.D.)  
**Assessment noted:** 1 sq. ft. TSI damaged exposed in gym (E. side above landing)  
**Recommended Response Action:** Repair and maintain in an intact and undamaged condition.

**West Linn High School cont.**

**Material:** Sheet vinyl  
**Assessment noted:** 290 sq. ft. torn sheet vinyl between cafeteria & stairs to commons area  
**Recommended Response Action:** Abate, repair flooring and replace

**Willamette Primary-**

**Material:** TSI hard fittings  
**Assessment noted:** 1 sq. ft., 1 damaged hard fitting, wall intrusion, cracks at hanger location.  
**Recommended Response Action:** Repair and maintain in an intact and undamaged condition.

**< Wilsonville Primary-**

**Material:** Floor tile, 12x12  
**Assessment noted:** 7 in. or sq. ft. of tile cracked severely at stress line.  
**Recommended Response Action:** Remove and repair damaged tiles and maintain in an intact and undamaged condition.

**Inza R. Wood Primary-**

**Material:** Hard fitting, mag  
**Assessment noted:** 1 hard fitting slightly damaged in mechanical room  
**Recommended Response Action:** Repair and maintain in an intact and undamaged condition.

**West Linn High School (Bolton Campus)-**

**Material:** Corrugated pipe covering  
**Assessment noted:** 1 sq. ft. exposed TSI pipe covering in basement storage room  
**Recommended Response Action:** Repair and maintain in an intact and undamaged condition.

**Cedar Oak Park Primary-**

**Material:** Vibration joint cloth

**Assessment noted:** 2 sq. ft. damaged corners in fan room (West)

**Recommended Response Action:** Remove or repair and maintain in an intact and undamaged condition.

**Material:** TSI air cell piping

**Assessment noted:** 1 sq. ft. damaged TSI in boiler room, S. wall

**Recommended Response Action:** Remove or repair and maintain in an intact and undamaged condition.

**Administration Building-**

**Material:** Woven paper tape

**Assessment noted:** 8 sq. ft. of damaged paper tape on walls in boiler room

**Recommended Response Action:** Repair or replace and maintain in an intact or undamaged condition.

# AHERA

## Periodic Surveillance Report

for

### WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT

#### WILLAMETTE PRIMARY

1403 SE 12th Street  
West Linn, OR

Project No. 1020-40

April 1999

Prepared by



P.O. Box 216 Arlington Gladstone, Oregon 97027 (503) 557-2396

## PERIODIC SURVEILLANCE REPORT

Page #: 1 of 3

TRE Job#: 1020-40

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: April 1999

Person Conducting Surveillance: Matthew Johnson

Material Description: Boiler/Tank Insulation/Mechanical Insulation

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Boiler/Tank Insulation/Mechanical Insulation

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Low Pressure Steam/MJP on Pipe Covering

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Domestic Cold Water/Wrapped Paper Pipe Cover

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same  
Change in material condition: No

## PERIODIC SURVEILLANCE REPORT

Page #: 2 of 3

TRE Job#: 1020-40

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: April 1999

Person Conducting Surveillance: Matthew Johnson

Material Description: Low Pressure Steam/Pipe Covering

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Low Pressure Steam/Wrapped Paper Pipe Cover

Homogeneous area(s): HK USA #02

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Low Pressure Steam/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #03

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #05

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #10

Last Material Condition: Good      New Material Description: Same

Change in material condition: No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #07

Last Material Condition: Good      New Material Description: Same

Change in material condition: No



## PERIODIC SURVEILLANCE REPORT

Page #: 3 of 3

TRE Job#: 1020-40

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: April 1999

Person Conducting Surveillance: Matthew Johnson

**Material Description:** Acoustical Thermal Plaster

**Homogeneous area(s):** HK USA #12

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Acoustical Thermal Plaster

**Homogeneous area(s):** HK USA #13

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Fireproofing

**Homogeneous area(s):** HK USA #14

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Vinyl Floor Tile

**Homogeneous area(s):** HK USA #99

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

Signature \_\_\_\_\_

# ASBESTOS ABATEMENT SUMMARY

Work Order No.: 1020-47

Job Location: Willamette Primary School Floor: Ground/Basement

Project: Lower Level Girls Rest Room / Lower Level MECHANICAL Rm.  
Tunnel Accesses IN Rm 15 & 16 + Rm #19 SPEECH Rm + Storage Rm.

For pipe provide: Total linear feet 230 and pipe size 4" - 2"

For other materials provide: Total square feet: \_\_\_\_\_

Type of ACM: TSI - 40 H.F.

Start Date: June 21 1999 Completion Date: July 2 1999

Methods to Control Emissions: ISOLATION, WET METHODS, Full Containment

Give name of Contractor or Subcontractor:

Name: INSULATION REMOVAL SPECIALIST

Address: 755 SW DENNIS Ave.

City: Hillsboro State: OR Zip: 97123

Phone: 503) 693-6388 Contact person: BRUCE Korum

Name of Monitoring Lab: THREE RIVERS ENVIRONMENTAL

Anticipated Disposal Site: Hillsboro LAND FILL

Supervisor in charge of job: RON CHAVEZ

Project Manager: MATT JOHNSON

Name: MATT JOHNSON Date: 6-21-99 thru 07-2-99 Phone: 557-2396

Asbestos Program Manager: JOE SIMMONS

Name: JOE SIMMONS Date: \_\_\_\_\_ Phone: 503) 638-6869

Attach pre-abatement and post-abatement air sample results

November 30, 1998

Joe Simmons  
West Linn-Wilsonville School District  
Administration Building  
P.O. Box 35  
West Linn, OR 97068

Subject: AHERA 6 Month Reinspection Areas of Concern::

Dear Mr. Simmons:

Three Rivers Environmental has completed the AHERA 3 Year Reinspection. The list below are areas that need to be addressed in the Operation and Maintenance Plan and scheduled for repair or removal:

**Bolton Middle School:**

Boiler Room:	3 sq. ft. previous encapsulation delaminating needs bridging.
Custodial Office:	1 sq. ft. exposed piping. 1 sq. ft. exposed seam.
Hall way/Storage (N. of boiler room)	2 sq. ft. previous encapsulation delaminating needs bridging.
Weight Room:	1 sq. ft. damaged Hard Fitting. 1 sq. ft. exposed seam.

**West Linn High School:**

Boiler Room:	3 sq. ft. exposed boiler insulation with debris. 2 sq. ft. exposed cold water piping.
--------------	--

**Willamette Primary:**

Elect. Room Below Cafe:	1 sq. ft. exposed Hard Fitting.
-------------------------	---------------------------------

**Inza R. Wood:**

Kitchen Supply Closet:	2 sq. ft. damaged Hard Fittings.
------------------------	----------------------------------

Should you have questions or comments, please contact me at your convenience.

Respectfully submitted,

Jeff Smith  
Three Rivers Environmental

# **AHERA**

## **Periodic Surveillance Report**

**for**

### **WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT**

#### **WILLAMETTE PRIMARY**

1403 SE 12th Street  
West Linn, OR

Project No. 1020-12

August 1997

Prepared by



P.O. Box 216 Gladstone, Oregon 97027 (503) 557-2396

## PERIODIC SURVEILLANCE REPORT

Page #: 1 of 3  
TRE Job#: 1020-12

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: August 1997

Person Conducting Surveillance: Glenn Bryant

Material Description: Boiler/Tank Insulation/Mechanical Insulation  
Homogeneous area(s): HK USA #01  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Boiler/Tank Insulation/Mechanical Insulation  
Homogeneous area(s): HK USA #01  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Low Pressure Steam/MJP on Pipe Covering  
Homogeneous area(s):  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover  
Homogeneous area(s): HK USA #01  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover  
Homogeneous area(s): HK USA #01  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Domestic Cold Water/Wrapped Paper Pipe Cover  
Homogeneous area(s): HK USA #01  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover  
Homogeneous area(s):  
Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

## PERIODIC SURVEILLANCE REPORT

Page #: 2 of 3  
TRE Job#: 1020-12

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: August 1997

Person Conducting Surveillance: Glenn Bryant

Material Description: Low Pressure Steam/Pipe Covering

Homogeneous area(s): HK USA #01

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Low Pressure Steam/Wrapped Paper Pipe Cover

Homogeneous area(s): HK USA #02

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Low Pressure Steam/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #03

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Hot Water/Wrapped Paper Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Hot Water/MJP on Wrapped Pipe Cover

Homogeneous area(s): HK USA #05

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Domestic Cold Water/MJP on Wrapped Pipe Cover

Homogeneous area(s):

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #10

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical/Thermal Plaster

Homogeneous area(s): HK USA #07

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

## PERIODIC SURVEILLANCE REPORT

Page #: 3 of 3  
TRE Job#: 1020-12

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: August 1997

Person Conducting Surveillance: Glenn Bryant

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #12

Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #13

Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Fireproofing

Homogeneous area(s): HK USA #14

Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Material Description: Vinyl Floor Tile

Homogeneous area(s): HK USA #99

Last Material Condition: Good      New Material Description: Same  
Change in material condition:      No

Signature GB.

# AHERA

## Periodic Surveillance Report

for

### WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT

#### WILLAMETTE PRIMARY

1403 SE 12th Street  
West Linn, OR

Project No. 1020-10

February 1997

Prepared by



P.O. Box 216 Gladstone, Oregon 97027 (503) 557-2396



## PERIODIC SURVEILLANCE REPORT

Page #: 1 of 3

TRE Job#: 1020-10

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: Feb. 1997

Person Conducting Surveillance: Jeff Smith

**Material Description:** Boiler/Tank Insulation/Mechanical Insulation

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Boiler/Tank Insulation/Mechanical Insulation

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Low Pressure Steam/MJP on Pipe Covering

**Homogeneous area(s):**

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Hot Water/MJP on Wrapped Pipe Cover

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Cold Water/MJP on Wrapped Pipe Cover

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Cold Water/Wrapped Paper Pipe Cover

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Homogeneous area(s):**

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

## PERIODIC SURVEILLANCE REPORT

Page #: 2 of 3

TRE Job#: 1020-10

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: Feb. 1997

Person Conducting Surveillance: Jeff Smith

**Material Description:** Low Pressure Steam/Pipe Covering

**Homogeneous area(s):** HK USA #01

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Low Pressure Steam/Wrapped Paper Pipe Cover

**Homogeneous area(s):** HK USA #02

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Low Pressure Steam/MJP on Wrapped Pipe Cover

**Homogeneous area(s):** HK USA #03

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Homogeneous area(s):**

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Hot Water/MJP on Wrapped Pipe Cover

**Homogeneous area(s):** HK USA #05

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Domestic Cold Water/MJP on Wrapped Pipe Cover

**Homogeneous area(s):**

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Acoustical/Thermal Plaster

**Homogeneous area(s):** HK USA #10

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

**Material Description:** Acoustical/Thermal Plaster

**Homogeneous area(s):** HK USA #07

**Last Material Condition:** Good      **New Material Description:** Same

**Change in material condition:** No

## PERIODIC SURVEILLANCE REPORT

Page #: 3 of 3

TRE Job#: 1020-10

Client: West Linn School District

Campus: Willamette Primary  
Address: 1403 SE 12th Street

Building: Main  
Date of Surveillance: Feb. 1997

Person Conducting Surveillance: Jeff Smith

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #12

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Acoustical Thermal Plaster

Homogeneous area(s): HK USA #13

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Material Description: Fireproofing

Homogeneous area(s): HK USA #14

Last Material Condition: Good      New Material Description: Same

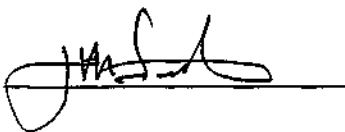
Change in material condition:      No

Material Description: Vinyl Floor Tile

Homogeneous area(s): HK USA #99

Last Material Condition: Good      New Material Description: Same

Change in material condition:      No

Signature 

# **AHERA**

## **Three Year Asbestos Reinspection**

**for**

### **WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT**

#### **WILLAMETTE PRIMARY**

1403 SE 12th Street  
West Linn, OR

Project No. 1020-15

September 1998

Prepared by



P.O. Box 216, Gladstone, Oregon 97207 (503) 557-2396 Fax (503) 557-3025

## **REINSPECTIONS**

This section reflects requirements outlined in 40 CFR 763.85 (b) (1) through (c)

**ACTION:** Reinspection is recommended every 3 years.

**TRAINING:** Accredited Inspector/Management Planner.  
Decide if you will train in-house people or not.

**FORM:** Update management plan using Inspector's report format.

At least once every three years, after the Management Plan is in effect, all buildings should be reinspected by an accredited Inspector. This differs from the periodic surveillance and is more comprehensive because the material is actually touched to determine friability or change in friability, along with noting assessment criteria such as condition. The reinspection may also include additional samples of suspect material, accessing previously inaccessible areas, and other activities. The person performing these tasks should, at least, be an accredited Inspector. An accredited Management Planner may be necessary to recommend additional response actions.

The decisions an LEA must make prior to this reinspection is to either train their in-house staff to perform the reinspection or utilize an outside consultant.

The AHERA-accredited Inspector training course is three days long, with a 50-question exam that must be passed. An AHERA Management Planner training course is an additional two days with another 50-question exam. If a person is presently an accredited Inspector or Management Planner, they must have an annual refresher course to keep their accreditation current.

## **RECORDKEEPING:**

Keep the reinspection records in this TAB section, along with any new data. New sample locations should be noted on copies of the drawings in TAB 7, and then filed in this section.

# AHERA

**Three Year Asbestos Reinspection**

**WEST LINN  
SCHOOL DISTRICT #3Jt  
OF**

**Willamette Primary School  
1403 S.E. 12th Street  
West Linn, OR 97068**

Project No. 1020-68

Prepared by:



P.O. Box 216 Gladstone, OR 97027 Phone (503) 557-2396 Fax (503) 557-3025

### **AHERA Re-inspection**

**Material:** Boiler/tank insulation/mechanical insulation, USA 01

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Tank; DHW tank W. side

**Quantity:** Approximately 275 sq. ft. mechanical insulation

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Boiler/tank insulation/mechanical insulation, USA 01

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Boiler, S.E. corner

**Quantity:** Approximately 350 sq. ft.

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**



### **AHERA Re-inspection**

**Material:** Low pressure steam/MJP on pipe covering

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Joints; W. side of tank

**Quantity:** Approximately 8 ln. ft.-14 in. O.D. low pressure steam  
30 ln. ft.-6 in. O.D. low pressure steam

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic hot water/MJP on wrapped paper pipe cover USA 01

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Joints; N.W. corner over stairs

**Quantity:** Approximately 45 ln. ft.-4 in. O.D. domestic hot water

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic cold water/MJP on wrap paper pipe cover USA 01

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Joints; DHW tank S. side

**Quantity:** Approximately 35 ln. ft.-4 in. O.D. domestic cold water

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic cold water/wrapped paper pipe cover, USA 01

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Piping; DHW tank S.W. corner

**Quantity:** Approximately 200 ln. ft.-4 in. O.D. domestic cold water

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic hot water/wrapped paper pipe cover

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Piping, N.W. corner over stairs

**Quantity:** Approximately 200 ln. ft.-4 in. O.D. domestic hot water

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Low pressure steam/wrapped paper pipe cover, USA 02

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Piping, W. side of tank

**Quantity:** Approximately 35 ln. ft.-14 in. O.D. low pressure steam  
250 ln. ft.-6 in. O.D. low pressure steam

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Low pressure steam/wrapped paper pipe cover, USA 02

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** All floors in building

**Quantity:** Approximately 50 ln. ft.-4 in. O.D.  
100 ln. ft.-6 in. O.D.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 199

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Low pressure steam/wrapped paper pipe cover, USA 02

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** All floors in building

**Quantity:** Approximately 30 ln. ft.-4 in. O.D.  
20 ln. ft.-6 in. O.D.

**Potential for disturbance:**

**Potential for contact:** low  
**Effect of vibration:** low  
**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** yes  
**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**



### **AHERA Re-inspection**

**Material:** Domestic hot water/wrapper paper pipe cover

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** All floors in building

**Quantity:** Approximately 225 ln. ft-4 in. O.D.

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic hot water/MJP on wrapped pipe cover, USA 05

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** All floors in building

**Quantity:** Approximately 120 ln. ft.-4 in. O.D.

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Domestic cold water/MJP on wrapped pipe cover

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** All floors in building

**Quantity:** Approximately 76 ln. ft.-4 in. O.D.

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Acoustical/thermal plaster, USA 10

**Description:** Surfacing

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** First floor

**Quantity:** Approximately 4,960 sq. ft.-some removed

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** Any remaining friable ACBM or friable surfacing ACBM

**Recommended response action:** Reassess quantity and location, maintain in an intact and undamaged condition.

### **AHERA Re-inspection**

**Material:** Acoustical/thermal plaster, USA 11

**Description:** Surfacing

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** First floor

**Quantity:** Approximately 900 sq. ft.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** Any remaining friable ACBM or friable surfacing ACBM

**Recommended response action:** Reassess quantity and location, maintain in an intact and undamaged condition.

### **AHERA Re-inspection**

**Material:** Acoustical/thermal plaster

**Description:** Surfacing

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Basement

**Quantity:** Approximately 3,300 sq. ft.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** Any remaining friable ACBM or friable surfacing ACBM

**Recommended response action:** Reassess quantity and location, maintain in an intact and undamaged condition

### **AHERA Re-inspection**

**Material:** Acoustical/thermal plaster, USA 13

**Description:** Surfacing

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Basement

**Quantity:** Approximately 700 sq. ft.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** Any remaining friable ACBM or surfacing material

**Recommended response action:** Reassess quantity and location, maintain in an undamaged and intact condition.

### **AHERA Re-inspection**

**Material:** Fireproofing, USA 14

**Description:** Surfacing

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** First floor

**Quantity:** Approximately 250 sq. ft.

**Potential for disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall condition:**

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for significant damage

**New AHERA category:**

**Recommended response action:**



### **AHERA Re-inspection**

**Material:** HHWS/wrapped pipe cover, USA 50

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Teacher work area & rm. 19

**Quantity:** Approximately 85 ln. ft.-6 in. O.D.  
25 ln. ft.-4 in. O.D.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** HHWS/MJP on wrapped pipe cover, USA 51

**Description:** TSI

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Friable

**Locations:** Teacher work area & rm. 19

**Quantity:** Approximately 12 ln. ft.-6 in. O.D.  
12 ln. ft.-4 in. O.D.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** yes

**Assessment noted:** Abated Summer 1999

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:**

**Recommended response action:**

### **AHERA Re-inspection**

**Material:** Vinyl floor tile, USA 99

**Description:** Miscellaneous

**Sampled or Assumed:** Sampled

**Friable or Non-Friable:** Non-friable

**Locations:** All floors in building

**Quantity:** Approximately 45,000 sq. ft.

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Reassess quantity and location, maintain in an intact and undamaged condition.

### **AHERA Re-inspection**

**Material:** Drywall taping compound

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Friable

**Locations:** Throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Sheet vinyl mastic

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** Under sheet vinyl, various locations throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Sheet vinyl

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** Various locations throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Window putty

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** Throughout school (on exterior windows)

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Fire doors

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** Throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle



### **AHERA Re-inspection**

**Material:** Cove base mastic

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** Throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Chalkboards

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Non-friable

**Locations:** In classrooms throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** ACBM with potential for damage

**New AHERA category:** ACBM with potential for damage

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Paint, interior

**Description:** Surfacing

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Friable

**Locations:** Various locations throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** high

**Effect of vibration:** low

**Potential for air erosion:** moderate

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**New AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Electrical wire casing

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Friable

**Locations:** Stage lights

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**New AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

### **AHERA Re-inspection**

**Material:** Drop-in ceiling tile

**Description:** Miscellaneous

**Sampled or Assumed:** Assumed

**Friable or Non-Friable:** Friable

**Locations:** Various locations throughout school

**Quantity:** Not quantified

**Potential for disturbance:**

**Potential for contact:** moderate

**Effect of vibration:** low

**Potential for air erosion:** moderate

**Overall condition:** good

**Change in condition from last inspection:** no

**Assessment noted:**

**Previous AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**New AHERA category:** Any remaining friable ACBM or friable suspect ACBM

**Recommended response action:** Maintain in an intact and undamaged condition,  
conduct six-month inspection cycle

## **AHERA Re-inspection**

**Material:** Boiler/Tank Insulation/Mechanical Insulation, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Tank;DHW Tank South Side

**Quantity:** Approximately 275 sq. ft. Mechanical Insulation-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Boiler/Tank Insulation/Mechanical Insulation, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Boiler; South East Corner

**Quantity:** Approximately 350 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/MJP on Pipe Covering

**Description:** TSI, Sampled, Friable

**Locations:** Joints; West Side of Tank

**Quantity:** Approximately: 8-14 in. O.D. Low Pressure Steam-Removed  
30-6 in. O.D. Low Pressure Steam-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**



## **AHERA Re-inspection**

**Material:** Domestic Hot Water/MJP on Wrapped Pipe Cover, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Joints; NW Corner Over Stairs

**Quantity:** Approximately 45-4 in. O.D. Domestic Hot Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/MJP on Wrapped Pipe Cover, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Joints; DHW Tank S. Side

**Quantity:** Approximately 35-4 in. O.D. Domestic Cold Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/Wrapped Paper Pipe Cover, USA 01

**Description:** TSI, Sampled, friable

**Locations:** Piping; DHW Tank SW Corner

**Quantity:** Approximately 200-4 in. O.D. Domestic Cold Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Description:** TSI, Sample, Friable

**Locations:** Piping; NW Corner Over Stairs

**Quantity:** Approximately 200-4 in. O.D. Domestic Hot Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/Pipe Covering, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Piping; West Side of Tank

**Quantity:** Approximately: 35-14 in. O.D. Low Pressure Steam-Removed  
250-6 in. O.D. Low Pressure Steam-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/Wrapped Paper Pipe Cover, USA 02

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately: 50-4 in. O.D.  
100-6 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/MJP on Wrapped Pipe Cover, USA 03

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately: 30-4 in. O.D.  
20-6 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 225 -4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**



## **AHERA Re-inspection**

**Material:** Domestic Hot Water/MJP on Wrapped Pipe Cover, USA 05

**Description:** TSl, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 120-4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/MJP on Wrapped Pipe Cover

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 76-4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster, USA 10

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 4,960 sq. ft.- Some Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster, USA 11

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 900 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster

**Description:** Surfacing, Sampled, Friable

**Locations:** Basement

**Quantity:** Approximately 3,300 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster, USA 13

**Description:** Surfacing, Sampled, Friable

**Locations:** Basement

**Quantity:** Approximately 700 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Fireproofing, USA 14

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 250 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** HHWS/Wrapped Pipe Cover, USA 50

**Description:** TSI, Sampled, Friable

**Locations:** Teacher Work Area & Room 19

**Quantity:** Approximately: 85-6 in. O.D.  
25-4 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance



## **AHERA Re-inspection**

**Material:** HHWS/MJP on Wrapped Pipe Cover, USA 51

**Description:** TSI, Sampled, Friable

**Locations:** Teacher Work Area & Room 19

**Quantity:** Approximately: 12-6 in. O.D.  
12-4 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Vinyl Floor Tile, USA 99

**Description:** Miscellaneous, Sampled, Non Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 45,000 sq. ft.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

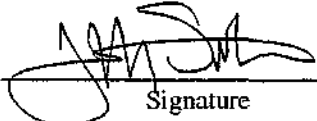

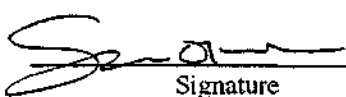
**Recommendations:** 6 Month Periodic Surveillance



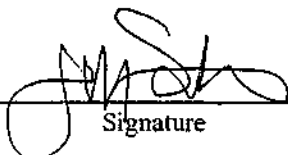
## AHERA Reinspection Signature Page

Three Rivers Environmental, Inc. utilized only inspectors accredited as per the EPA Model Accreditation Plan, 40 CFR 763, Subpart E, Appendix C at a minimum. In addition, all inspectors utilized on projects in states which require additional training, qualifications and licensing, met these qualifications and were so licensed in that state. In addition to the EPA required training, Three Rivers Environmental, Inc. inspectors receive extensive field training and further examination prior to project assignment.

The inspection was conducted by the following Three Rivers Environmental, Inc. personnel:

<u>JEFF SMITH</u> Name	<u>98-08185</u> Accreditation	<u></u> Signature
<u>MATT JOHNSON</u> Name	<u>98-08182</u> Accreditation	<u></u> Signature
<u>SHAWN OLSON</u> Name	<u>98-08184</u> Accreditation	<u></u> Signature

The Management Plan recommendation was developed by the following Three Rivers Environmental, Inc. personnel:

<u>JEFF SMITH</u> Name	<u>98-08179</u> Accreditation	<u></u> Signature
 Name	 Accreditation	 Signature
 Name	 Accreditation	 Signature

# **AHERA**

## **Three Year Asbestos Reinspection**

**for**

### **WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT**

#### **WILLAMETTE PRIMARY**

1403 SE 12th Street  
West Linn, OR

Project No. 1020-07

May/June 1995

Prepared by




170 E Arlington Gladstone, Oregon 97027 (503) 656-4601




## AHERA Re-inspection Signature page

Three Rivers Environmental utilized only inspectors accredited as per the EPA Model Accreditation Plan, 40 CFR 763, Subpart E, Appendix C at a minimum. In addition, all inspectors utilized on projects in states which require additional training, qualifications and licensing, met these qualifications and were so licensed in that state. In addition to the EPA required training, Three Rivers Environmental inspectors receive extensive field training and further examination prior to project assignment.

The inspection was conducted by the following Three Rivers Environmental personnel:

<u>JEFF SHIMM</u> Name	<u>PDR-95-7811</u> Accreditation #	<u></u> Signature
<u>                    </u> Name	<u>                    </u> Accreditation #	<u>                    </u> Signature
<u>                    </u> Name	<u>                    </u> Accreditation #	<u>                    </u> Signature

The Management Plan recommendation was developed by the following Three Rivers Environmental personnel:

<u>JEFF SHIMM</u> Name	<u>PDR-95-7811</u> Accreditation #	<u></u> Signature
<u>                    </u> Name	<u>                    </u> Accreditation #	<u>                    </u> Signature
<u>                    </u> Name	<u>                    </u> Accreditation #	<u>                    </u> Signature

## **AHERA Re-inspection**

**Material:** Boiler/Tank Insulation/Mechanical Insulation, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Tank;DHW Tank South Side

**Quantity:** Approximately 275 sq. ft. Mechanical Insulation-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Boiler/Tank Insulation/Mechanical Insulation, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Boiler; South East Corner

**Quantity:** Approximately 350 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/MJP on Pipe Covering

**Description:** TSI, Sampled, Friable

**Locations:** Joints; West Side of Tank

**Quantity:** Approximately: 8-14 in. O.D. Low Pressure Steam-Removed  
30-6 in. O.D. Low Pressure Steam-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**



## **AHERA Re-inspection**

**Material:** Domestic Hot Water/MJP on Wrapped Pipe Cover, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Joints; NW Corner Over Stairs

**Quantity:** Approximately 45-4 in. O.D. Domestic Hot Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/MJP on Wrapped Pipe Cover, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Joints; DHW Tank S. Side

**Quantity:** Approximately 35-4 in. O.D. Domestic Cold Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/Wrapped Paper Pipe Cover, USA 01

**Description:** TSI, Sampled, friable

**Locations:** Piping; DHW Tank SW Corner

**Quantity:** Approximately 200-4 in. O.D. Domestic Cold Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Description:** TSI, Sample, Friable

**Locations:** Piping; NW Corner Over Stairs

**Quantity:** Approximately 200-4 in. O.D. Domestic Hot Water-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/Pipe Covering, USA 01

**Description:** TSI, Sampled, Friable

**Locations:** Piping; West Side of Tank

**Quantity:** Approximately: 35-14 in. O.D. Low Pressure Steam-Removed  
250-6 in. O.D. Low Pressure Steam-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/Wrapped Paper Pipe Cover, USA 02

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately: 50-4 in. O.D.  
100-6 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Low Pressure Steam/MJP on Wrapped Pipe Cover, USA 03

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately: 30-4 in. O.D.  
20-6 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Domestic Hot Water/Wrapped Paper Pipe Cover

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 225 -4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**



## **AHERA Re-inspection**

**Material:** Domestic Hot Water/MJP on Wrapped Pipe Cover, USA 05

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 120-4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Domestic Cold Water/MJP on Wrapped Pipe Cover

**Description:** TSI, Sampled, Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 76-4 in. O.D.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster, USA 10

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 4,960 sq. ft.- Some Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster, USA 11

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 900 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Acoustical/Thermal Plaster

**Description:** Surfacing, Sampled, Friable

**Locations:** Basement

**Quantity:** Approximately 3,300 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Aconstical/Thermal Plaster, USA 13

**Description:** Surfacing, Sampled, Friable

**Locations:** Basement

**Quantity:** Approximately 700 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Fireproofing, USA 14

**Description:** Surfacing, Sampled, Friable

**Locations:** First Floor

**Quantity:** Approximately 250 sq. ft.-Removed

**Potential For Disturbance:**

**Potential for contact:**

**Effect of vibration:**

**Potential for air erosion:**

**Overall Condition:**

**Previous AHERA Category:** Removed

**New AHERA Category:**

**Recommendations:**

## **AHERA Re-inspection**

**Material:** HHWS/Wrapped Pipe Cover, USA 50

**Description:** TSI, Sampled, Friable

**Locations:** Teacher Work Area & Room 19

**Quantity:** Approximately: 85-6 in. O.D.  
25-4 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance



## **AHERA Re-inspection**

**Material:** HHWS/MJP on Wrapped Pipe Cover, USA 51

**Description:** TSI, Sampled, Friable

**Locations:** Teacher Work Area & Room 19

**Quantity:** Approximately: 12-6 in. O.D.  
12-4 in. O.D.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **AHERA Re-inspection**

**Material:** Vinyl Floor Tile, USA 99

**Description:** Miscellaneous, Sampled, Non Friable

**Locations:** All Floors in Building

**Quantity:** Approximately 45,000 sq. ft.

**Potential For Disturbance:**

**Potential for contact:** low

**Effect of vibration:** low

**Potential for air erosion:** low

**Overall Condition:** good

**Previous AHERA Category:** ACBM With Potential for Damage

**New AHERA Category:** Unchanged

**Recommendations:** 6 Month Periodic Surveillance

## **RECORDKEEPING (Asbestos Removal Activity/Response Action Recordkeeping)**

This section reflects requirements outlined in 40 CFR 763.91 & 763.94 (d) (e) (f) (g) (h)

The following subsections contain this required information

- Flow charts to determine adequate response actions
- Operations & Maintenance (<3 sq. ft. or <3 ln. ft.)
- Small scale/short duration (>3 sq. ft. or 3 ln. ft.) or (>40 ln. ft. or 80 sq. ft.)

**ACTION:** All asbestos-related activities must be recorded.

**TRAINING:** LEA Designate must ensure that program is enacted and maintained.

**FORMS:** Understand how to use all the recordkeeping forms.

The purpose of the record-keeping system is three-fold:

- To ensure maximum protection of all persons in the building.
- To provide detailed, retrievable records of all events.
- To provide the needed records in event of a law suit.

In essence, the AHERA regulations required that everything done with regards to asbestos in a facility must be documented by the facility's owner so that the training and exposure of all persons involved in the work can be documented and the fate of all ACBM can be determined.

The recordkeeping requirements described in 40 CFR 763.94 are quite explicit in regards to the LEA's recordkeeping responsibilities. Although some records are required to be kept up to six years, they may be required beyond six years (as long as 20 to 40 years) in the event of a law suit. Thus, all records should be maintained in a retrievable state for up to 40 years (or let's just say don't ever throw them away).

**Location:** Records must be kept in the administrative offices of both the actual building and the LEA. If these are in the same building, it is advisable that a duplicate set of records should be established in a different location in the event of fire or other damage.

The following activities or occurrences require detailed documentation. A brief description is given here. Refer to the appropriate TAB number in the management Plan for exact AHERA requirements and sample forms for compiling information. Narratives of pertinent record keeping data and tab locations.

**Tab 10**      **Response Actions Selected:** records of all preventative measures, major abatement activities.

**Tab 8**      **Periodic Surveillance:** conducted at a minimum of six-month intervals to determine any damage or deterioration of ACBM.

**Tab 9**      **Reinspection:** conducted every three years by an accredited inspector.

**Tab 11**      **Operations and Maintenance:** initial, periodic and emergency cleanings; minor and major fiber release episodes; maintenance procedures for ACBM.

**RECORDKEEPING (Asbestos Removal Activity/Response Action Recordkeeping)**

**Tab 5            Medical Surveillance:** annual examination of any person who will contact ACBM in their work. Keep copies of examination forms.

**Tab 5            Training:** 2-hour awareness training for all custodial staff, 14 hours additional for those who will disturb ACBM; recommended annually.

**MEMO FOR THE RECORD**

Under CFR 40 763.94 and 763.85 (b) (1)

Records of abatement, surveys, inspections and reinspection may be archived and maintained in a centralized location in the administrative office.

All inspection activities and/or asbestos abatement records prior to the May/June 1995 3-year inspection are stored in a large box in the Asbestos Program Manager's office or some other designated location.

**OPERATIONS &  
MAINTENANCE  
( $\leq$  3 Sq. feet or 3 ln. feet)**

**SMALL SCALE**  
**(>3 sq. feet or 3 ln. feet)**  
**(<40 ln. feet or 80 sq. feet)**

AHERA 003  
005  
020  
file

## 1.1 DESCRIPTION OF WORK:

This project involves bids for the removal and disposal of approximately 1,000 sq. ft. of asbestos containing thermal system boiler and tank insulation, approximately 1,910 ln. ft. of asbestos containing thermal system pipe insulation, approximately 13,330 sq. ft. of asbestos containing floor tile and mastic, and approximately 2,584 sq. ft. of asbestos containing windows. The work is located at CedarOak Park Primary; 4515 S. CedarOak Park Dr. West Linn, OR 97068, Sunset Primary; 2351 Oxford St. West Linn, OR 97068 and Willamette Primary; 1403 SE 12th St. West Linn, OR 97068. This abatement will be performed using full negative pressure enclosures.

### BID No. 1: CedarOak Park Primary

Main Office and Hallway/Corridor;

Remove and dispose of approximately 3,400 sq. ft. of asbestos containing floor tile and mastic with approximately 1,800 sq. ft. mastic covered by carpet. Abatement shall be conducted from June 21 through June 25, 1999.

Teachers Rm., Cafeteria, Chair Storage Rm. and Computer Rm.;

Remove and dispose of approximately 5,400 sq. ft. of asbestos containing floor tile and mastic. Abatement shall be conducted between June 28 and July 16, 1999.

Room No. 1 and 2;

Remove and dispose of approximately 2,400 sq. ft. of asbestos containing floor tile and mastic covered by floor tile and carpet. Abatement shall be conducted between June 28 and July 16, 1999.

Boiler Rm. and Tunnels;

Remove and dispose of approximately 150 sq. ft. of asbestos thermal system insulation from the hot water tank. Abatement shall be conducted between March 29 and April 2, 1999.

Remove and dispose of approximately 170 ln. ft. of asbestos containing thermal system insulation from the heat exchanger piping and assorted locations in the tunnel. Abatement shall be conducted between March 29 and April 2, 1999.

### BID No. 2: Sunset Primary

Lower Level Condensate Return Unit;

Remove and dispose of approximately 150 sq. ft. of asbestos thermal system insulation from hot water tank. Abatement shall be conducted between April 5 and April 9, 1999.

Remove and dispose of approximately 150 ln. ft. of asbestos containing thermal system pipe insulation. Abatement shall be conducted between April 5 and April 9, 1999.

Attic;

Remove and dispose of approximately 90 ln. ft. of asbestos containing thermal system pipe insulation. Abatement shall be conducted between April 5 and April 9, 1999.

Boiler Rm. and Tunnel;

Remove and dispose of approximately 700 sq. ft. of asbestos containing thermal system insulation from the boilers and tank. Abatement shall be conducted between April 12 and April 16, 1999.

Remove and dispose of approximately 1,000 ln. ft. of thermal system pipe insulation. Abatement shall be conducted between April 12 and April 16, 1999.

Lower Level Cafeteria and Class Rm.s;

Remove and dispose of approximately 500 ln. ft. of asbestos containing thermal system pipe insulation. Abatement shall be conducted between June 28 and July 16, 1999.

Rm.s 9 & 10 and Stage Area;

Remove and dispose of approximately 2,130 sq. ft. of asbestos containing floor tile and mastic with approximately 1,845 sq. ft. covered with carpet. Abatement shall be conducted between June 28 and July 16, 1999.

Old Building, Main Level and Lower Level;

Remove and dispose of approximately 9; 20'x8', 7; 20'x4', 1; 13'x8', 1; 16'x6', 1; 8'x8' and 1; 8'x4' asbestos containing windows. The asbestos is in the glazing and the abatement includes the window casings. (approximately 2,584 sq. ft.). Abatement shall be conducted between June 28 and July 30, 1999.

**BID No. 3: Willamette Primary**

Lower Level, Mechanical Rm.;

Remove and dispose of approximately 40 thermal system insulation hard fittings from the fiberglass insulated pipes. Abatement shall be conducted between June 21 and June 25, 1999

Lower Level, Girls Restroom, Rm. #19, Speech Rm. and Storage Rm.;

Remove and dispose of approximately 180 ln. ft of asbestos containing thermal system pipe insulation. Abatement shall be conducted between June 28 and July 2, 1999.

Tunnel accesses in Rm.s 15 & 16;

Remove and dispose of approximately 50 ln. ft. of asbestos containing thermal system pipe insulation and debris. Abatement shall be conducted between June 28 and July 2, 1999.



### **ADDITIVE ALTERNATE BID NO. 1:**

Per-Unit Cost for the removal and disposal of Thermal System Insulation: cost/sq. ft.

Per-Unit Cost for the removal and disposal of Thermal System Insulation: cost/l.n. ft.

Per-Unit Cost for the removal and disposal of additional Floor Tile and Mastic: cost/sq. ft.

#### **1.2 WORK SEQUENCE:**

Activities shall be coordinated with the Owner's Representative.

#### **2.1 GENERAL REQUIREMENTS**

1. The Contractor shall provide personnel air monitoring for OSHA compliance. The Owner shall provide air monitoring for "Areas During", and Clearance testing as required. The Contractor shall notify the Owner 24 hours in advance of the time that test services are needed to allow adequate scheduling of equipment and personnel.
2. If the Contractor fails to meet final clearance standards specified, the Contractor shall reclean the work area to meet such standards. Costs incurred by the Owner for retesting of final clearances shall be deducted from the sums originally due the Contractor.
3. Contractors shall verify to their satisfaction the quantities of material cited and nature of the work described in these specifications. Contractors shall not rely upon the contract documents for any quantities.
4. The intent of the Owner is to have the Contractor remove all asbestos-containing materials as described above.
5. The decon and loadout facilities shall be constructed inside the building. So the doors to the abatement area can be closed and locked. All exposed areas of the containment shall be hard side to prevent tampering with a minimum of 1/2" plywood.
6. The Contractor will file all notifications with DEQ.
7. The Contractor shall be responsible for the demolition to access materials to be abated such as removing carpets, soft wall and ceilings.

**END OF SECTION**

**FULL SCALE**  
**(>40 ln. feet or 80 sq. feet)**

# ASBESTOS ABATEMENT SUMMARY

Project #: 1020-24

Job Location: WILHAMETTE PRIMARY Floor: WA

Project: 1403 SE 12TH ST WEST LINN OR

For pipe provide: Total linear feet \_\_\_\_\_ and pipe size \_\_\_\_\_

For other materials provide: Total square feet: — floor tile

Type of ACM: Cyisotiles

Start Date: 8/18/98 Completion Date: 8/24/98

Methods to Control Emissions: WET METHODS, WORKPRACTICES / Engineering controls

Give name of Contractor or Subcontractor:

Name: KEYSTONE CONTRACTING

Address: 417 NW 209TH RIDGEFIELD WA.

City: RIDGEFIELD State: WA Zip: 98432

Phone: 360-887-0868 Contact person: John VANUZZO

Name of Monitoring Lab: THREE RIVERS ENVIRONMENTAL / E.M.S.H.

Anticipated Disposal Site: Hillsboro LAND FILL — OR

Supervisor in charge of job: DALE DEAN

Project Manager: MATT JOHNSON TRE.

Cert. #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Phone: \_\_\_\_\_

Asbestos Program Manager: LEA SOB SIMMONS

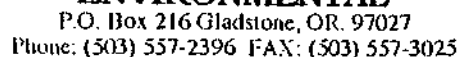
Training date: \_\_\_\_\_ Exp. date: \_\_\_\_\_ Phone: \_\_\_\_\_

☐ O&M (less than 3 in. 3 sq. ft.)

☐ Small scale

☒ Large scale

Attach pre-abatement and post-abatement air sample results



CA 9866

Page 1 of 1

Attention: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
PHE( ) \_\_\_\_\_ FAX( ) \_\_\_\_\_

SAMPLE TYPE	SAMPLE TURNAROUND
<u>ASBESTOS</u> <input type="checkbox"/> PLM (Bulk) <input type="checkbox"/> PCM (Air) <input checked="" type="checkbox"/> TEM (Air)	<input type="checkbox"/> Standard (5 day) <input type="checkbox"/> Priority (3 day) <input type="checkbox"/> Rush (24 hour)
<u>LEAD</u> <input type="checkbox"/> AA Flame (air) <input type="checkbox"/> AA Flame (Paint Wipe) <input type="checkbox"/> TCLP <input type="checkbox"/> EPA 200/500 Series (Drinking Water)	<input type="checkbox"/> Other (specify) _____ <div style="text-align: center;"> <b>6 HR</b>  <b>TURNAROUND</b> </div>

TRE Client Number: 1020  
P.O. Number: \_\_\_\_\_  
Project Number: 1020-24  
Date Sampled: 8/21/96  
Date Submitted: 8/21/96  
Special Instructions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[illegible]

Sampled By: (Sign) <i>Matthew John</i>	Relinquished By: (Sign) <i>Matthew John</i>	Date 8/21/96	Time	Received By: (Sign) <i>R. M. Kelly</i>	Date AUG 24 1996	Time 10:00
				LAB:		

# EMSL Analytical, Inc.

1720 S. Amphlett Blvd., Suite 130

San Mateo, CA 94402

Phone: (650) 570-5401 Fax: (650) 570-5402



Attn.:

Three Rivers Environmental

P.O. Box 216

Gladstone, OR 97027

Monday, August 24, 1998

Ref Number: CA985668

## Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule. (AHERA)

Project: 1020-24

SAMPLE ID	VOLUME (liters)	ASBESTOS TYPE(S)	# STRUCTURES			AREA ANALYZED (mm <sup>2</sup> )	CONCENTRATION OF ASBESTOS STRUCTURES		ANALYTICAL SENSITIVITY (AS/cc)
			< 5μ	≥ 5μ	NONASB		AS/mm <sup>2</sup>	AS/cc	
(1) MJ9880546	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(2) MJ980547	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(3) MJ980548	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(4) MJ980549	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(5) MJ980550	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044

Comments: For "None Detected" samples, the number under AS/cc is equal to the analytical sensitivity.

Robert Newman

Analyst

Approved  
Signatory

Disclaimers: The laboratory is not responsible for fibers counted in fibers/mm<sup>2</sup> or fibers/cc, which are dependent on volume collected by non-laboratory personnel. This report may not be duplicated in part without written permission by EMSL Analytical, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the samples reported above.

Accredited for NVLAP PLM/TEM #101048-3, E-Lap #1620

# EMSL Analytical, Inc.

1720 S. Amphlett Blvd., Suite 130

San Mateo, CA 94402

Phone: (650) 570-5401 Fax: (650) 570-5402



Attn.:

Three Rivers Environmental

P.O. Box 216

Gladstone, OR 97027

Monday, August 24, 1998

Ref Number: CA985668

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Project: 1020-24

SAMPLE ID	VOLUME (liters)	ASBESTOS TYPE(S)	# STRUCTURES			AREA ANALYZED (mm <sup>2</sup> )	CONCENTRATION OF ASBESTOS STRUCTURES		ANALYTICAL SENSITIVITY (AS/cc)
			< 5 $\mu$	$\geq$ 5 $\mu$	NONASB		AS/mm <sup>2</sup>	AS/cc	
(1) MJ9880546	1350.00	None Detected		0		0.0645	<15.5039	<0.0044	0.0044
(2) MJ980547	1350.00	None Detected		0		0.0645	<15.5039	<0.0044	0.0044
(3) MJ980548	1350.00	None Detected		0		0.0645	<15.5039	<0.0044	0.0044
(4) MJ980549	1350.00	None Detected		0		0.0645	<15.5039	<0.0044	0.0044
(5) MJ980550	1350.00	None Detected		0		0.0645	<15.5039	<0.0044	0.0044

Comments: For "None Detected" samples, the number under AS/cc is equal to the analytical sensitivity.

Robert Newman

Analyst

  
Approved  
Signatory

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Monday, August 24, 1998

Ref Number: CA985668

## Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule. (AHERA)


Project: 1020-24

SAMPLE ID	VOLUME (liters)	ASBESTOS TYPE(S)	# STRUCTURES			AREA ANALYZED (mm <sup>2</sup> )	CONCENTRATION OF ASBESTOS STRUCTURES		ANALYTICAL SENSITIVITY (AS/cc)
			< 5 $\mu$	$\geq$ 5 $\mu$	NONASB		AS/mm <sup>2</sup>	AS/cc	
(1) MJ980546	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(2) MJ980547	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(3) MJ980548	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(4) MJ980549	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044
(5) MJ980550	1350.00	None Detected			0	0.0645	<15.5039	<0.0044	0.0044

Comments: For "None Detected" samples, the number under AS/cc is equal to the analytical sensitivity.

Robert Newman

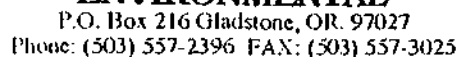
Analyst

  
Approved  
Signatory

Disclaimers: The laboratory is not responsible for fibers counted in fibers/mm<sup>2</sup> or fibers/cc, which are dependent on volume collected by non-laboratory personnel. This report may not be duplicated in part without written permission by EMSL Analytical, Inc. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the samples reported above.

Accredited for NVLAP PLM/TEM #101048-3, E-Lap #1620

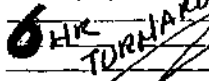




CA 986-1

Page 1 of 1

Attention: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
TEL( ) \_\_\_\_\_ FAX( ) \_\_\_\_\_

SAMPLE TYPE	SAMPLE TURNAROUND
<u>ASBESTOS</u> <input type="checkbox"/> PLM (Bulk) <input type="checkbox"/> PLM AIR/ERA <input type="checkbox"/> PCM (Air)      Sample Group Positive stop <input checked="" type="checkbox"/> TEM (Air)	<input type="checkbox"/> Standard (5 day) <input type="checkbox"/> Priority (3 day) <input type="checkbox"/> Rush (24 hour)
<u>LEAD</u> <input type="checkbox"/> AA Flame (air) <input type="checkbox"/> AA Flame (Paint, Wipe) <input type="checkbox"/> TCLP <input type="checkbox"/> EPA 200/500 Series (Drinking Water)	<input type="checkbox"/> Other (specify) _____ <div style="text-align: center;">  </div>

TRE Client Number: 1020  
P.O. Number: \_\_\_\_\_  
Project Number: 1020 - 24  
Date Sampled: 8/21/96  
Date Submitted: 8/21/96  
Special Instructions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[illegible]

Sampled By: (Sign) <i>Matthew Johnson</i>	Relinquished By: (Sign) <i>Matthew Johnson</i>	Date 8/21/90	Time	Received By: (Sign) <i>R. M. [unclear]</i>	Date AUG 24 1990	Time 10:20
				LAB:		



# ASBESTOS ABATEMENT SUMMARY

Project #: 1020-25

Job Location: WILLAMETTE PRIMARY Floor: \_\_\_\_\_

Project: 1403 SE 12<sup>TH</sup> STREET WEST LINN OR 97068

For pipe provide: Total linear feet \_\_\_\_\_ and pipe size \_\_\_\_\_

For other materials provide: Total square feet: \_\_\_\_\_

Type of ACM: CARPET REMOVAL / tile

Start Date: 8-19-98 Completion Date: 8-21-98

Methods to Control Emissions: WET METHODS, WORK PRACTICES / ENGINEERING CONTROLS

Give name of Contractor or Subcontractor:

Name: KEYSTONE CONTRACTING INC

Address: 417 NW 209<sup>TH</sup> RIDGEFIELD

City: RIDGEFIELD State: WA Zip: 98432

Phone: 360-887-0868 Contact person: John VANDESSUM

Name of Monitoring Lab: THREE RIVERS ENVIRONMENTAL / EMSL

Anticipated Disposal Site: HILLBORO LAND FILL - OR

Supervisor in charge of job: ?

Project Manager: MATT JOHNSON - TRE

Cert. #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Phone: 557-2396

Asbestos Program Manager: - SOS SIMMONS

Training date: \_\_\_\_\_ Exp. date: \_\_\_\_\_ Phone: \_\_\_\_\_

- ☐ O&M (less than 3 ln. 3 sq. ft.)
- ☐ Small scale
- ☒ Large scale

Attach pre-abatement and post-abatement air sample results

# TEM Air Sample Analysis Report



**THREE RIVERS  
ENVIRONMENTAL, Inc.**

CLIENT: West Linn School District

TRE JOB NO: 1020-25

ATTN: Joe Simmons

PURCHASE ORDER NO: Verbal

CONTRACTOR: Keystone Contracting, Inc

REPORT NO: 1

PROJECT: Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068

PAGE NO: 1 OF 2

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: 3	SampleIDNo: 4
LaboratoryNo: MJ98-0546	LaboratoryNo: MJ98-0547	LaboratoryNo: MJ98-0548	LaboratoryNo: MJ98-0549
SampleLocation: N. end of ground floor N/S hallway C	SampleLocation: S. end of ground floor N/S hallway C	SampleLocation: W. end of ground floor E/W hallway C	SampleLocation: E. end of ground floor E/W hallway C
WorkPerformed: N/A	WorkPerformed: N/A	WorkPerformed: N/A	WorkPerformed: N/A
DateSampled: 08-21-98	DateSampled: 08-21-98	DateSampled: 08-21-98	DateSampled: 08-21-98
Sampledby: MDJ	Sampledby: MDJ	Sampledby: MDJ	Sampledby: MDJ
PumpNo: HV-57	PumpNo: HV-05	PumpNo: HV-02	PumpNo: HV-04
StartTime: 10:00	StartTime: 10:00	StartTime: 10:00	StartTime: 10:00
StopTime: 12:15	StopTime: 12:15	StopTime: 12:15	StopTime: 12:15
MinutesSampled: 135	MinutesSampled: 135	MinutesSampled: 135	MinutesSampled: 135
StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM
StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM
AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM
Volume: 1350 L	Volume: 1350 L	Volume: 1350 L	Volume: 1350 L
DateAnalyzed: 08-24-98	DateAnalyzed: 08-24-98	DateAnalyzed: 08-24-98	DateAnalyzed: 08-24-98
TypeofAsbestos: NSD	TypeofAsbestos: NSD	TypeofAsbestos: NSD	TypeofAsbestos: NSD
StructuresDensity: (structures/mm): <15.5039	StructuresDensity: (structures/mm): <15.5039	StructuresDensity: (structures/mm): <15.5039	StructuresDensity: (structures/mm): <15.5039
StructureCon: (structures/cm): <0.0044	StructureCon: (structures/cm): <0.0044	StructureCon: (structures/cm): <0.0044	StructureCon: (structures/cm): <0.0044
AsbestosStructures: 0	AsbestosStructures: 0	AsbestosStructures: 0	AsbestosStructures: 0

## Abbreviations:

TEM-Transmission Electron Microscopy, AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanance,  
P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background,  
LOQ-Limit of Quantification, LOD-Limit of Detection, NSD-No Asbestos Detected

## Comments:

Analyzedby:

EMSL



**THREE RIVERS  
ENVIRONMENTAL, Inc.**

# TEM Air Sample Analysis Report

CLIENT: West Linn School District

TRE JOB NO: 1020-25

ATTN: Joe Simmons

PURCHASE ORDER NO: Verbal

CONTRACTOR: Keystone Contracting, Inc

REPORT NO: 1

PROJECT: Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068

PAGE NO: 2 OF 2

SampleIDNo: 5	SampleIDNo:	SampleIDNo:	SampleIDNo:
LaboratoryNo: MJ98-0550	LaboratoryNo:	LaboratoryNo:	LaboratoryNo:
SampleLocation: Center of staff breakroom C	SampleLocation:	SampleLocation:	SampleLocation:
WorkPerformed: N/A	WorkPerformed:	WorkPerformed:	WorkPerformed:
DateSampled: 08-21-98	DateSampled:	DateSampled:	DateSampled:
Sampledby: MDJ	Sampledby:	Sampledby:	Sampledby:
PumpNo: HV-07	PumpNo:	PumpNo:	PumpNo:
StartTime: 10:00	StartTime:	StartTime:	StartTime:
StopTime: 12:15	StopTime:	StopTime:	StopTime:
MinutesSampled: 135	MinutesSampled:	MinutesSampled:	MinutesSampled:
StartFlowRate: 10.0LPM	StartFlowRate: LPM	StartFlowRate: LPM	StartFlowRate: LPM
StopFlowRate: 10.0LPM	StopFlowRate: LPM	StopFlowRate: LPM	StopFlowRate: LPM
AverageFlowRate: 10.0LPM	AverageFlowRate: LPM	AverageFlowRate: LPM	AverageFlowRate: LPM
Volume: 1350 L	Volume: L	Volume: L	Volume: L
DateAnalyzed: 08-24-98	DateAnalyzed:	DateAnalyzed:	DateAnalyzed:
TypeofAsbestos: NSD	TypeofAsbestos:	TypeofAsbestos:	TypeofAsbestos:
StructuresDensity: (structures/m <sup>3</sup> ) <15.5039	StructuresDensity: (structures/m <sup>3</sup> )	StructuresDensity: (structures/m <sup>3</sup> )	StructuresDensity: (structures/m <sup>3</sup> )
StructureCon: (structures/cm <sup>3</sup> ) <0.0044	StructureCon: (structures/cm <sup>3</sup> )	StructureCon: (structures/cm <sup>3</sup> )	StructureCon: (structures/cm <sup>3</sup> )
AsbestosStructures: 0	AsbestosStructures:	AsbestosStructures:	AsbestosStructures:

## Abbreviations:

TEM-Transmission Electron Microscopy, AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance,  
P-Personal sample from breathing zone, EL-Eviction limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background,  
LOQ-Limit of Quantification, LOD-Limit of Detection, NSD-No Asbestos Detected

## Comments:

Analyzed by: EMSL

# ASBESTOS ABATEMENT SUMMARY

Project #: 020-33

Job Location: WILLAMETTE PRIMARY Floor: Basement

Project: 1403 SE 12TH STREET WEST LINN

OR 97068 - DIRT CRAWLSPACE clean up

For pipe provide: Total linear feet \_\_\_\_\_ and pipe size \_\_\_\_\_

For other materials provide: Total square feet: - DIRT CRAWLSPACE clean up

Type of ACM: \_\_\_\_\_

Start Date: 11-30-98 Completion Date: 12-11-98

Methods to Control Emissions: WET METHODS, WORK PRACTICES / ENGINEERING Controls

Give name of Contractor or Subcontractor:

Name: KEYSTONE CONTRACTING INC

Address: 417 NW 209TH RIDGEFIELD

City: RIDGEFIELD State: WA Zip: 98432

Phone: 360-887-0868 Contact person: John VAN DER BEEK

Name of Monitoring Lab: THREE RIVERS ENVIRONMENTAL

Anticipated Disposal Site: HILLSBORO LAND FILL OR

Supervisor in charge of job: PAUL DEW

Project Manager: S OLSEN

Cert. #: 960340N Exp. Date: NA Phone: 557-2396

Asbestos Program Manager: JOE SIMMONS

Training date: \_\_\_\_\_ Exp. date: \_\_\_\_\_ Phone: \_\_\_\_\_

- ☐ O&M (less than 3 in. 3 sq. ft.)
- ☐ Small scale
- ☒ Large scale

Attach pre-abatement and post-abatement air sample results



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-33  
 ATTN: Joe Simmons P.O. NO: Verbal  
 CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 1  
 PROJECT: Willamette Primary Dirt Crawlspace PAGE NO: 1 OF 3

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 100 fibers Specification Range: 100 < f/mm2 < 1300

Sample ID No: 1	Sample ID No: 2	Sample ID No: 3	Sample ID No: 4
Laboratory No: SO98-1378	Laboratory No: SO98-1379	Laboratory No: SO98-1380	Laboratory No: SO98-1381
Sample Location: 15' S. of room #19, basement floor AP	Sample Location: 25' from basement, men's restroom AP	Sample Location: 30' from main office, south of door AP	Sample Location: Middle of Mr. Silverman's room AP
Work Performed: N/A	Work Performed: N/A	Work Performed: N/A	Work Performed: N/A
Date Sampled: 11/30/98	Date Sampled: 11/30/98	Date Sampled: 11/30/98	Date Sampled: 11/30/98
Sampled by: S. Olson	Sampled by: S. Olson	Sampled by: S. Olson	Sampled by: S. Olson
Pump No: HV-03	Pump No: HV-05	Pump No: HV-06	Pump No: HV-03
Start Time: 15:15	Start Time: 15:20	Start Time: 15:25	Start Time: 17:30
Stop Time: 17:15	Stop Time: 17:20	Stop Time: 17:25	Stop Time: 19:30
Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10
Volume: 1200 L	Volume: 1200 L	Volume: 1200 L	Volume: 1200 L
Date Analyzed: 11/30/98	Date Analyzed: 11/30/98	Date Analyzed: 11/30/98	Date Analyzed: 11/30/98
Grafcule Field Area: 0.00817	Grafcule Field Area: 0.00817	Grafcule Field Area: 0.00817	Grafcule Field Area: 0.00817
Total Fibers: 4.5/100	Total Fibers: 5.5/100	Total Fibers: 6/100	Total Fibers: 3/100
Coefficient of Variation: LOD	Coefficient of Variation: LOQ	Coefficient of Variation: LOQ	Coefficient of Variation: LOD
Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAI-Negative air exhausted, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification

Analyzed by: Shawn Olson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-33  
 ATTN: Joe Simmons P.O. NO: Verbal  
 CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 1  
 PROJECT: Willamette Primary Dirt Crawlspace PAGE NO: 2 OF 3

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 fibers Limit of Quantification: 10.0 fibers Specification Range: 100<f/mm2<1300

Sample ID No: 5	Sample ID No: 6	Sample ID No: 7	Sample ID No: 8
Laboratory No: SO98-1382	Laboratory No: SO98-1383	Laboratory No: SO98-1384	Laboratory No: SO98-1385
Sample Location: Middle of main office	Sample Location: 15' S. of rm. #6	Sample Location: Carlos Mendoza 610-28-9238	Sample Location: Carlos Mendoza 610-28-9238
AP	AP	EL	P
Work Performed: N/A	Work Performed: N/A	Work Performed: Dirt crawlspace 1/2 face	Work Performed: Dirt crawlspace 1/2 face
Date Sampled: 11/30/98	Date Sampled: 11/30/98	Date Sampled: 11/30/98	Date Sampled: 11/30/98
Sampled by: S. Olson	Sampled by: S. Olson	Sampled by: S. Olson	Sampled by: S. Olson
Pump No: HV-06	Pump No: HV-05	Pump No: LV-01	Pump No: LV-01
Start Time: 17:50	Start Time: 17:55	Start Time: 22:30	Start Time: 23:05
Stop Time: 20:50	Stop Time: 20:55	Stop Time: 23:00	Stop Time: 24:30
Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 30	Minutes Sampled: 35
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): 2
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): 2
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): 2
Volume: 1200 L	Volume: 1200 L	Volume: 60 L	Volume: 70 L
Date Analyzed: 11/30/98	Date Analyzed: 11/30/98	Date Analyzed: 11/30/98	Date Analyzed: 11/30/98
Gritule Field Area: 0.00817	Gritule Field Area: 0.00817	Gritule Field Area: 0.00817	Gritule Field Area: 0.00817
Total Fibers: 4/100	Total Fibers: 4/100	Total Fibers: 9/100	Total Fibers: 19/100
Coefficient of Variation: LOD	Coefficient of Variation: LOD	Coefficient of Variation: LOQ	Coefficient of Variation: 0.49
Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: 0.071 f/cc	Fibers/cc: 0.13 f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification

Analyzed by: Shawn Olson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# TEM Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-33

THREE RIVERS  
ENVIRONMENTAL, Inc.

ATTN: Joe Simmons

PURCHASE ORDER NO: Verbal

CONTRACTOR: Keystone Contracting, Inc REPORT NO: 1

PROJECT: Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068

PAGE NO: 1 OF 2

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: 3	SampleIDNo: 4
LaboratoryNo: SO98-1524	LaboratoryNo: SO98-1525	LaboratoryNo: SO98-1526	LaboratoryNo: SO98-1527
SampleLocation: N.W. corner of dirt crawlspce C	SampleLocation: S.W. corner of dirt crawlspce C	SampleLocation: N.E. corner of dirt crawlspce C	SampleLocation: S.E. corner of dirt crawlspce C
WorkPerformed: N/A	WorkPerformed: N/A	WorkPerformed: N/A	WorkPerformed: N/A
DateSampled: 12-11-98	DateSampled: 12-11-98	DateSampled: 12-11-98	DateSampled: 12-11-98
Sampledby: S. Olson	Sampledby: S. Olson	Sampledby: S. Olson	Sampledby: S. Olson
PumpNo: HV-95	PumpNo: HV-98	PumpNo: HV-01	PumpNo: HV-06
StartTime: 11:40	StartTime: 11:40	StartTime: 11:40	StartTime: 11:40
StopTime: 13:40	StopTime: 13:40	StopTime: 13:40	StopTime: 13:40
MinutesSampled: 120	MinutesSampled: 120	MinutesSampled: 120	MinutesSampled: 120
StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM	StartFlowRate: 10.0LPM
StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM	StopFlowRate: 10.0LPM
AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM	AverageFlowRate: 10.0LPM
Volume: 1200 L	Volume: 1200 L	Volume: 1200 L	Volume: 1200 L
DateAnalyzed: 12-12-98	DateAnalyzed: 12-12-98	DateAnalyzed: 12-12-98	DateAnalyzed: 12-12-98
TypeofAsbestos: NSD	TypeofAsbestos: NSD	TypeofAsbestos: NSD	TypeofAsbestos: NSD
StructuresDensity: (stuc/sq.m) <15.5039	StructuresDensity: (stuc/sq.m) <15.5039	StructuresDensity: (stuc/sq.m) <15.5039	StructuresDensity: (stuc/sq.m) <15.5039
StructureCon: (stuc/ccm) <0.0050	StructureCon: (stuc/ccm) <0.0050	StructureCon: (stuc/ccm) <0.0050	StructureCon: (stuc/ccm) <0.0050
AsbestosStructures: 0	AsbestosStructures: 0	AsbestosStructures: 0	AsbestosStructures: 0

## Abbreviations:

TEM-Transmission Electron Microscopy, AP-Areasample prior to abatement, AD-Areasampleduring abatement, C-Clearance,  
P-Personal sample from breathing zone, EL-Eviction limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background,  
LOQ-Limit of Quantification, LOD-Limit of Detection, NSD-No Asbestos Detected

## Comments:

Analyzed by: EMSL



**THREE RIVERS  
ENVIRONMENTAL, Inc.**

# TEM Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-33

ATTN: Joe Simmons

PURCHASE ORDER NO: Verbal

CONTRACTOR: Keystone Contracting, Inc REPORT NO: 1

PROJECT: Willamette Primary  
1403 S.E. 12th Street  
West Linn, OR 97068

PAGE NO: 1 OF 2

SampleIDNo: 5	SampleIDNo:	SampleIDNo:	SampleIDNo:
LaboratoryNo: SO98-1528	LaboratoryNo:	LaboratoryNo:	LaboratoryNo:
SampleLocation: Middle of dirt crawl space C	SampleLocation:	SampleLocation:	SampleLocation:
WorkPerformed: N/A	WorkPerformed:	WorkPerformed:	WorkPerformed:
DateSampled: 12-11-98	DateSampled:	DateSampled:	DateSampled:
Sampled by: S. Olson	Sampled by:	Sampled by:	Sampled by:
PumpNo: HV-95	PumpNo:	PumpNo:	PumpNo:
StartTime: 11:40	StartTime:	StartTime:	StartTime:
StopTime: 13:40	StopTime:	StopTime:	StopTime:
MinutesSampled: 120	MinutesSampled:	MinutesSampled:	MinutesSampled:
StartFlowRate: 10.0LPM	StartFlowRate: LPM	StartFlowRate: LPM	StartFlowRate: LPM
StopFlowRate: 10.0LPM	StopFlowRate: LPM	StopFlowRate: LPM	StopFlowRate: LPM
AverageFlowRate: 10.0LPM	AverageFlowRate: LPM	AverageFlowRate: LPM	AverageFlowRate: LPM
Volume: 1200 L	Volume: L	Volume: L	Volume: L
DateAnalyzed: 12-12-98	DateAnalyzed:	DateAnalyzed:	DateAnalyzed:
Type of Asbestos: NSD	Type of Asbestos:	Type of Asbestos:	Type of Asbestos:
Structures Density: (struc/sq.mmm) <15.5039	Structures Density: (struc/sq.mmm)	Structures Density: (struc/sq.mmm)	Structures Density: (struc/sq.mmm)
Structure Con: (struc/ccair) <0.0050	Structure Con: (struc/ccair)	Structure Con: (struc/ccair)	Structure Con: (struc/ccair)
Asbestos Structures: 0	Asbestos Structures:	Asbestos Structures:	Asbestos Structures:

## Abbreviations:

TEM-Transmission Electron Microscopy, AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanance,  
P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background,  
LOQ-Limit of Quantification, LOD-Limit of Detection, NSD-No Asbestos Detected

## Comments:

Analyzed by: EMSL

# ASBESTOS ABATEMENT SUMMARY

Project #: 1020-35

Job Location: Willamette Primary Floor: Boiler Room

Project: 1403 SE 12<sup>th</sup> Street West King  
OR 97068 - Patch & Repair

For pipe provide: Total linear feet \_\_\_\_\_ and pipe size \_\_\_\_\_

For other materials provide: Total square feet: Patch & Repair

Type of ACM: \_\_\_\_\_

Start Date: 12-28-96 Completion Date: 12-28-98

Methods to Control Emissions: Wet Methods, Low Disturbance work practices

Give name of Contractor or Subcontractor:

Name: KeyStone Contracting

Address: 417 NW 209<sup>th</sup>

City: Ridgefield State: WA Zip: 98432

Phone: 360-867-0606 Contact person: \_\_\_\_\_

Name of Monitoring Lab: Three Rivers Environmental

Anticipated Disposal Site: Hillsharo Landfill

Supervisor in charge of job: ?

Project Manager: Robert Montgomery

Cert. #: Wioah. Exp. Date: \_\_\_\_\_ Phone: 557-23-96

Asbestos Program Manager: Joe Simmons #CX-820756-01-0

Training date: 5/30/96 Exp. date: \_\_\_\_\_ Phone: 503-638-9869

- ☐ O&M (less than 3 ln. 3 sq. ft.)
- ☐ Small scale
- ☒ Large scale

Attach pre-abatement and post-abatement air sample results



# Air Sample Analysis Report

020

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 1

PROJECT: Willamette Primary  
Patch & Repair

PAGE NO: 1 OF 1

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers Limit of Quantification: 100fibers Specification Range: 100<f/mm2<1300

SampleIDNo: 1	SampleIDNo: B1	SampleIDNo: B2	SampleIDNo:
LaboratoryNo: MJ98-0872	LaboratoryNo: MJ98-0873	LaboratoryNo: MJ98-0874	LaboratoryNo:
Sample Location: Rob Walkenhauer 535-86-2210 1/2 face P	Sample Location: Blank	Sample Location: Blank	Sample Location:
Work Performed: Floor tile/removal	Work Performed: N/A	Work Performed: N/A	Work Performed:
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled:
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by:
Pump No: LV-53	Pump No: N/A	Pump No: N/A	Pump No:
Start Time: 08:20	Start Time: N/A	Start Time: N/A	Start Time:
Stop Time: 09:15	Stop Time: N/A	Stop Time: N/A	Stop Time:
Minutes Sampled: 55	Minutes Sampled: N/A	Minutes Sampled: N/A	Minutes Sampled:
Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):
Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):
Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):
Volume: 110 L	Volume: N/A L	Volume: N/A L	Volume: L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed:
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area:
Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100	Total Fibers:
Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A	Coefficient of Variation:
Fibers/cc: 0.0085 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc	Fibers/cc: f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 2

PROJECT: West Linn High School  
Patch & Repair

PAGE NO: 1 OF 1

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers, Limit of Quantification: 100fibers, Specification Range: 100<f/mm2<1300

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: B1	SampleIDNo: B2
LaboratoryNo: MJ98-0875	LaboratoryNo: MJ98-0876	LaboratoryNo: MJ98-0877	LaboratoryNo: MJ98-0878
Sample Location: Bottom of stairs, boiler room AD	Sample Location: Rob Walkenhauer 535-86-2210 1/2 face P	Sample Location: Blank	Sample Location: Blank
Work Performed: Patch & Repair	Work Performed: Patch & Repair	Work Performed: N/A	Work Performed: N/A
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery
PumpNo: HV-04	PumpNo: LV-53	PumpNo: N/A	PumpNo: N/A
Start Time: 10:00	Start Time: 10:00	Start Time: N/A	Start Time: N/A
Stop Time: 11:10	Stop Time: 11:10	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 70	Minutes Sampled: 70	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 700 L	Volume: 140 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98
Gasticle Field Area: 0.00817	Gasticle Field Area: 0.00817	Gasticle Field Area: 0.00817	Gasticle Field Area: 0.00817
Total Fibers: 4/100	Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: LOD	Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: <0.0067 f/cc	Fibers/cc: 0.0067 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, FL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 3

PROJECT: Bolton Primary  
Patch & Repair

PAGE NO: 1 OF 2

Method of analysis: NIOSH17400 Limit of Detection: 5.5Fibers Limit of Quantification: 10.0fibers Specification Range: 100<f/mm2<1300

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: B1	SampleIDNo: B2
LaboratoryNo: MJ98-0879	LaboratoryNo: MJ98-0880	LaboratoryNo: MJ98-0877	LaboratoryNo: MJ98-0878
Sample Location: E. wall boiler room, below Hankison oiler AD	Sample Location: Bob Craft 568-15-4649 1/2 face P	Sample Location: Blank	Sample Location: Blank
Work Performed: Patch & Repair	Work Performed: Patch & Repair	Work Performed: N/A	Work Performed: N/A
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery
PumpNo: HV-04	PumpNo: LV-53	PumpNo: N/A	PumpNo: N/A
Start Time: 11:50	Start Time: 11:50	Start Time: N/A	Start Time: N/A
Stop Time: 13:40	Stop Time: 14:00	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 110	Minutes Sampled: 130	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 1100 L	Volume: 260 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 10/100	Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: 0.63	Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: 0.0042 f/cc	Fibers/cc: 0.020 f/cc	Fibers/cc: 0.0054 f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 3

PROJECT: Bolton Primary  
Patch & Repair

PAGE NO: 2 OF 2

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers; Limit of Quantification: 10.0 fibers; Specification Range: 100<f/mm2<1300

Sample ID No: B2	Sample ID No:	Sample ID No:	Sample ID No:
Laboratory No: MJ98-0883	Laboratory No:	Laboratory No:	Laboratory No:
Sample Location: Blank	Sample Location:	Sample Location:	Sample Location:
Work Performed: N/A	Work Performed:	Work Performed:	Work Performed:
Date Sampled: 12/28/98	Date Sampled:	Date Sampled:	Date Sampled:
Sampled by: R. Montgomery	Sampled by:	Sampled by:	Sampled by:
Pump No: N/A	Pump No:	Pump No:	Pump No:
Start Time: N/A	Start Time:	Start Time:	Start Time:
Stop Time: N/A	Stop Time:	Stop Time:	Stop Time:
Minutes Sampled: N/A	Minutes Sampled:	Minutes Sampled:	Minutes Sampled:
Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):	Start Flow Rate (LPM):	Start Flow Rate (LPM):
Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):
Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):	Average Flow Rate (LPM):	Average Flow Rate (LPM):
Volume: N/A L	Volume: L	Volume: L	Volume: L
Date Analyzed: 12/31/98	Date Analyzed:	Date Analyzed:	Date Analyzed:
Graticule Field Area: 0.00817	Graticule Field Area:	Graticule Field Area:	Graticule Field Area:
Total Fibers: 0/100	Total Fibers:	Total Fibers:	Total Fibers:
Coefficient of Variation: N/A	Coefficient of Variation:	Coefficient of Variation:	Coefficient of Variation:
Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 2

PROJECT: West Linn High School  
Patch & Repair

PAGE NO: 1 OF 1

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers; Limit of Quantification: 10.0 fibers; Specification Range: 100 < f/mm2 < 1300

Sample ID No: 1	Sample ID No: 2	Sample ID No: B1	Sample ID No: B2
Laboratory No: MJ98-0875	Laboratory No: MJ98-0876	Laboratory No: MJ98-0877	Laboratory No: MJ98-0878
Sample Location: Bottom of stairs, boiler room AD	Sample Location: Rob Walkenhauer 535-86-2210 1/2 face P	Sample Location: Blank	Sample Location: Blank
Work Performed: Patch & Repair	Work Performed: Patch & Repair	Work Performed: N/A	Work Performed: N/A
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery
Pump No: HV-04	Pump No: LV-53	Pump No: N/A	Pump No: N/A
Start Time: 10:00	Start Time: 10:00	Start Time: N/A	Start Time: N/A
Stop Time: 11:10	Stop Time: 11:10	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 70	Minutes Sampled: 70	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 700 L	Volume: 140 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 4/100	Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: LOD	Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: <0.0067 f/cc	Fibers/cc: 0.0067 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025





# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 3

PROJECT: Bolton Primary  
Patch & Repair

PAGE NO: 2 OF 2

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers; Limit of Quantification: 10.0fibers; Specification Range: 100-<f/mm2<1300

SampleIDNo: B2	SampleIDNo:	SampleIDNo:	SampleIDNo:
LaboratoryNo: MJ98-0883	LaboratoryNo:	LaboratoryNo:	LaboratoryNo:
Sample Location: Blank	Sample Location:	Sample Location:	Sample Location:
Work Performed: N/A	Work Performed:	Work Performed:	Work Performed:
Date Sampled: 12/28/98	Date Sampled:	Date Sampled:	Date Sampled:
Sampled by: R. Montgomery	Sampled by:	Sampled by:	Sampled by:
PumpNo: N/A	PumpNo:	PumpNo:	PumpNo:
Start Time: N/A	Start Time:	Start Time:	Start Time:
Stop Time: N/A	Stop Time:	Stop Time:	Stop Time:
Minutes Sampled: N/A	Minutes Sampled:	Minutes Sampled:	Minutes Sampled:
Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):	Start Flow Rate (LPM):	Start Flow Rate (LPM):
Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):
Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):	Average Flow Rate (LPM):	Average Flow Rate (LPM):
Volume: N/A L	Volume: L	Volume: L	Volume: L
Date Analyzed: 12/31/98	Date Analyzed:	Date Analyzed:	Date Analyzed:
Graticule Field Area: 0.00817	Graticule Field Area:	Graticule Field Area:	Graticule Field Area:
Total Fibers: 0/100	Total Fibers:	Total Fibers:	Total Fibers:
Coefficient of Variation: N/A	Coefficient of Variation:	Coefficient of Variation:	Coefficient of Variation:
Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Cleanance, P-Personalsample from breathing zone, EL-Excursion limit, NAE-Negativeaire exhaust, PA-postabatementareasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office:(503)557-2396 Fax:557-3025



# Air Sample Analysis Report <sup>Copy</sup>

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 1

PROJECT: Willamette Primary  
Patch & Repair

PAGE NO: 1 OF 1

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 10.0 fibers Specification Range: 100 < f/mm<sup>2</sup> < 1300

Sample ID No: 1	Sample ID No: B1	Sample ID No: B2	Sample ID No:
Laboratory No: MJ98-0872	Laboratory No: MJ98-0873	Laboratory No: MJ98-0874	Laboratory No:
Sample Location: Rob Walkenhauer 535-86-2210 1/2 face P	Sample Location: Blank	Sample Location: Blank	Sample Location:
Work Performed: Floor tile/removal	Work Performed: N/A	Work Performed: N/A	Work Performed:
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled:
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by:
Pump No: LV-53	Pump No: N/A	Pump No: N/A	Pump No:
Start Time: 08:20	Start Time: N/A	Start Time: N/A	Start Time:
Stop Time: 09:15	Stop Time: N/A	Stop Time: N/A	Stop Time:
Minutes Sampled: 55	Minutes Sampled: N/A	Minutes Sampled: N/A	Minutes Sampled:
Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):
Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):
Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):
Volume: 110 L	Volume: N/A L	Volume: N/A L	Volume: L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed:
Gritule Field Area: 0.00817	Gritule Field Area: 0.00817	Gritule Field Area: 0.00817	Gritule Field Area:
Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100	Total Fibers:
Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A	Coefficient of Variation:
Fibers/cc: 0.0085 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc	Fibers/cc: f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report Copy

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 2

PROJECT: West Linn High School  
Patch & Repair

PAGE NO: 1 OF 1

Method of analysis: NIOSH 7400 Limit of Detection: 5.5Fibers; Limit of Quantification: 10.0fibers; Specification Range: 100<f/mm2<1300

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: B1	SampleIDNo: B2
LaboratoryNo: MJ98-0875	LaboratoryNo: MJ98-0876	LaboratoryNo: MJ98-0877	LaboratoryNo: MJ98-0878
Sample Location: Bottom of stairs, boiler room AD	Sample Location: Rob Walkenhauer 535-86-2210 1/2 face P	Sample Location: Blank	Sample Location: Blank
Work Performed: Patch & Repair	Work Performed: Patch & Repair	Work Performed: N/A	Work Performed: N/A
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery
PumpNo: HV-04	PumpNo: LV-53	PumpNo: N/A	PumpNo: N/A
Start Time: 10:00	Start Time: 10:00	Start Time: N/A	Start Time: N/A
Stop Time: 11:10	Stop Time: 11:10	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 70	Minutes Sampled: 70	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 700 L	Volume: 140 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 4/100	Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: LOD	Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: <0.0067 f/cc	Fibers/cc: 0.0067 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Matthew Johnson



# Air Sample Analysis Report <sup>Cafay</sup>

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 3

PROJECT: Bolton Primary  
Patch & Repair

PAGE NO: 1 OF 2

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 100 fibers Specification Range: 100<f/mm2<1300

Sample ID No: 1	Sample ID No: 2	Sample ID No: B1	Sample ID No: B2
Laboratory No: MJ98-0879	Laboratory No: MJ98-0880	Laboratory No: MJ98-0877	Laboratory No: MJ98-0878
Sample Location: E. wall boiler room, below Hankison oiler AD	Sample Location: Bob Craft 568-15-4649 1/2 face P	Sample Location: Blank	Sample Location: Blank
Work Performed: Patch & Repair	Work Performed: Patch & Repair	Work Performed: N/A	Work Performed: N/A
Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98	Date Sampled: 12/28/98
Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery	Sampled by: R. Montgomery
Pump No: HV-04	Pump No: LV-53	Pump No: N/A	Pump No: N/A
Start Time: 11:50	Start Time: 11:50	Start Time: N/A	Start Time: N/A
Stop Time: 13:40	Stop Time: 14:00	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 110	Minutes Sampled: 130	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 2	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 2	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 2	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 1100 L	Volume: 260 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98	Date Analyzed: 12/31/98
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 10/100	Total Fibers: 2/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: 0.63	Coefficient of Variation: LOD	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: 0.0042 f/cc	Fibers/cc: 0.020 f/cc	Fibers/cc: 0.0054 f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative exhaust, PA-postabatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson



# Air Sample Analysis Report <sup>Copy</sup>

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-35  
 ATTN: Joe Simmons P.O. NO: Verbal  
 CONTRACTOR: Keystone Contracting, Inc. REPORT NO: 3  
 PROJECT: Bolton Primary Patch & Repair PAGE NO: 2 OF 2

Method of analysis: NIOSH 7400 Limit of Detection: 5.5Fibers; Limit of Quantification: 10.0fibers; Specification Range: 100<f/mm2<1300

SampleIDNo: B2	SampleIDNo:	SampleIDNo:	SampleIDNo:
LaboratoryNo: MJ98-0883	LaboratoryNo:	LaboratoryNo:	LaboratoryNo:
Sample Location: Blank	Sample Location:	Sample Location:	Sample Location:
Work Performed: N/A	Work Performed:	Work Performed:	Work Performed:
Date Sampled: 12/28/98	Date Sampled:	Date Sampled:	Date Sampled:
Sampled by: R. Montgomery	Sampled by:	Sampled by:	Sampled by:
Pump No: N/A	Pump No:	Pump No:	Pump No:
Start Time: N/A	Start Time:	Start Time:	Start Time:
Stop Time: N/A	Stop Time:	Stop Time:	Stop Time:
Minutes Sampled: N/A	Minutes Sampled:	Minutes Sampled:	Minutes Sampled:
Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):	Start Flow Rate (LPM):	Start Flow Rate (LPM):
Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):
Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):	Average Flow Rate (LPM):	Average Flow Rate (LPM):
Volume: N/A L	Volume: L	Volume: L	Volume: L
Date Analyzed: 12/31/98	Date Analyzed:	Date Analyzed:	Date Analyzed:
Griticle Field Area: 0.00817	Griticle Field Area:	Griticle Field Area:	Griticle Field Area:
Total Fibers: 0/100	Total Fibers:	Total Fibers:	Total Fibers:
Coefficient of Variation: N/A	Coefficient of Variation:	Coefficient of Variation:	Coefficient of Variation:
Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-postabatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

# Invoice

**THREE RIVERS  
ENVIRONMENTAL, Inc.**

DATE	INVOICE NO.
01/06/99	990014

**BILL TO**

West Linn-Wilsonville School District  
Joe Simmons  
Administration Building  
P.O. Box 35  
West Linn, OR 97068

**DIRECT PAYMENT TO:**

THREE RIVERS ENVIRONMENTAL, Inc.  
P.O. Box 216  
Gladstone, OR 97027

P.O. NO.	TERMS	SHIP DATE	TRE Project#
Verbal	Due on receipt	01/06/99	1020-35

QTY	DESCRIPTION	RATE	AMOUNT
8	Project Management/On-Site Air Monitoring AB	35.00	280.00
1	Patch And Repair, Keystone Contracting	1,187.50	1,187.50
	Bolton, West Linn High, Willamette & Wood		

**Total**

\$1,467.50

# ASBESTOS ABATEMENT SUMMARY

Project #: 1020-36

Job Location: Willamette Primary Floor: \_\_\_\_\_

Project: Bulk Sampling only - Willamette  
Primary - 1403 SE 12th Street West Hill OR 97068

For pipe provide: Total linear feet NA and pipe size NA

For other materials provide: Total square feet: NA

Type of ACM: chrysotile

Start Date: 1/28/99 Completion Date: 2-FEB, 1, 99

Methods to Control Emissions: NA

Give name of Contractor or Subcontractor:

Name: NA

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Contact person: \_\_\_\_\_

Name of Monitoring Lab: Three Rivers Environmental / E.H.S

Anticipated Disposal Site: \_\_\_\_\_

Supervisor in charge of job: \_\_\_\_\_

Project Manager: Matt Johnson TRE

Cert. #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Phone: \_\_\_\_\_

Asbestos Program Manager: Joe Simmons #CX-820756-0-0

Training date: 5/31/90 Exp. date: \_\_\_\_\_ Phone: \_\_\_\_\_

☐ O&M (less than 3 in. 3 sq. ft.)

☐ Small scale

☐ Large scale

Bulk Sampling  
Attach pre-abatement and post-abatement air sample results

**ENVIRONMENTAL HAZARDS SERVICES, L.L.C.**

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4807

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Three Rivers Environmental  
P.O. Box 216  
Gladstone, OR 97027

DATE OF RECEIPT: 01 FEB 1999  
DATE OF ANALYSIS: 01 FEB 1999  
DATE OF REPORT: 01 FEB 1999

CLIENT NUMBER: 38-2970  
EHS PROJECT #: 02-99-0043  
PROJECT: 1020-36

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	WLHS-001/ Black Tar-Like	NAD	10% Fibrous Glass 90% Non-Fibrous
02	WLHS-002/ Black Tar-Like	NAD	10% Fibrous Glass 90% Non-Fibrous
03	WLHS-003/ Black Tar-Like	NAD	10% Fibrous Glass 90% Non-Fibrous
04	WLHS-004/ Gray Powder	NAD	100% Non-Fibrous
05	WLHS-005/ Gray Powder	NAD	100% Non-Fibrous
06	WLHS-006/ Gray Powder	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
07	WLHS-007/ Gray Gran.	NAD	100% Non-Fibrous
08	WLHS-008/ Gray Gran.	NAD	100% Non-Fibrous
09	WLHS-009/ Gray Gran.	NAD	100% Non-Fibrous

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory: \_\_\_\_\_

Howard Varner, Laboratory Director

Irma Faszewski, Quality Assurance Coordinator

David Xu, MS, Senior Chemist

Feng Jiang, MS, Senior Geologist



# ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 38-2870  
EHS PROJECT #: 02-99-0043  
JECT: 1020-36

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

Environmental Hazards Services, Inc. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy ((TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

---

LEGEND      NAD = no asbestos detected  
             SCF = suspected ceramic fibers

---

plm1.doc27DEC1898/mb

-- PAGE 02 of 02 -- END OF REPORT --



# CHAIN OF C. STUDY

gpm

Page 1 of 1

ent by: AAA

Attention: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 File ( ) FAX: ( )

**SAMPLE TYPE**  
 ASBESTOS  
☐ PLM (bulk)  
☐ PCM (air)  
☐ TEM (air)  
☒ PLM (fiber)  
 AMERA Sample Group  
 Fudge stop  
**LEAD**  
☐ AA Flame (ph)  
☐ AA Flame (side wipe)  
☐ TCLP  
☐ EPA 200/500 Series (Drinking Water)  
**SAMPLE TURNAROUND**  
☒ Standard (5 day)  
☐ Priority (3 day)  
☐ Rush (24 hour)  
☐ Other (specify) \_\_\_\_\_

TRE Client Number: 1020  
 P.O. Number: \_\_\_\_\_  
 Project Number: 1020-36  
 Date Sampled: 1-27-99  
 Date Submitted: 1/28/99  
 Special Instructions: \_\_\_\_\_

Sample ID	Date	Feature Stop	Sample Description	Sample Location	Quantity (SF/LF)	Volume	Result
WLHS-001	1-27-99		ROOFING	120' So. EAST OF NO CORNER	85,000 SF.	Picture #12	
WLHS-002	11		11	LEFT OF PEATHOUSE 30'		" #3	
WLHS-003	11		11	REAR OF PEATHOUSE		" #4	
WLHS-004	11		EXTERIOR WINDOW PUTTY	OUTSIDE RM 509 LOWER L.	1500 SQ FT	" #5	
WLHS-005	11		11	OUTSIDE RM 528 WINDOW		"	
WLHS-006	11		11	OUTSIDE PHOTO LAB WINDOW		"	
WLHS-007	11		MOARTER BETWEEN GLASS BLOCKS	OUTSIDE RM 509 1ST ROW	5000 SQ FT	" #6	
WLHS-008	11		11	OUTSIDE RM 527 1ST ROW		"	
WLHS-009	11		11	OUTSIDE PHOTO LAB 1ST ROW		"	

Sampled By: (Sign) <i>Matthew Johnson</i>	Relinquished By: (Sign) <i>Matthew Johnson</i>	Date 1/28/99	Time 11:30	Received By: (Sign) <i>UNB</i>	Date 2/1/99	Time
				LAB:		

9999999999

02/02/99 8:23AM JEFFREY #348; Page 3/3

ASBESTOS ABATEMENT SUMMARY

Project #: 1020-44

Job Location: Willamette Primary School Floor: Lower Level

Project: Lower Level Girl's Rest Room

1403 SE 12TH STREET WEST Linn OR 97068

For pipe provide: Total linear feet \_\_\_\_\_ and pipe size \_\_\_\_\_

For other materials provide: Total square feet: glove bag

Type of ACM: \_\_\_\_\_

Start Date: 6/7/99 Completion Date: 8/4/99

Methods to Control Emissions: Wet Methods, Work Practices / Engineering Controls

Give name of Contractor or Subcontractor:

Name: IRS License # F5LSIS

Address: 1964 S SE Sunny side RD

City: Boring State: OR Zip: 97009

Phone: 658-6606 Contact person: Bruce Korum

Name of Monitoring Lab: Thomas Powers Environmental

Anticipated Disposal Site: Hillsboro Landfill

Supervisor in charge of job: RON CHAFF / VINCE CHAFF

Project Manager: MATT JOHNSON / TROY NOEL / SHAWN OLSON

Cert. #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Phone: \_\_\_\_\_

Asbestos Program Manager: See Simmons # CX-8207-96-01-0

Training date: 5/30/96 Exp. date: \_\_\_\_\_ Phone: 503-638-9869

☐ O&M (less than 3 ln. 3 sq. ft.)

☐ Small scale

☒ Large scale

Attach pre-abatement and post-abatement air sample results



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Insulation Removal Specialist

REPORT NO: 1

PROJECT: Willamette Primary School  
Lower Level Girls Restroom

PAGE NO: 1 OF 2

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers Limit of Quantification: 100fibers Specification Range: 100<f/mm2<4300

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: 3	SampleIDNo: 4
LaboratoryNo: MJ99-0352	LaboratoryNo: MJ99-0353	LaboratoryNo: MJ99-0354	LaboratoryNo: MJ99-0355
Sample Location: Entrance of Airlock AD	Sample Location: Exhaust of Neg Air Machine #17 NAE	Sample Location: 6' Inside of Girls Restroom C	Sample Location: 12' Inside of Girls Restroom C
Work Performed: Glove Bag Removal	Work Performed: Glove Bag Removal	Work Performed: N/A	Work Performed: N/A
Date Sampled: 6/8/99	Date Sampled: 6/8/99	Date Sampled: 6/8/99	Date Sampled: 6/8/99
Sampled by: M. Johnson	Sampled by: M. Johnson	Sampled by: M. Johnson	Sampled by: M. Johnson
PumpNo: HV-07	PumpNo: HV-09	PumpNo: HV-01	PumpNo: HV-09
Start Time: 18:15	Start Time: 18:15	Start Time: 20:55	Start Time: 20:55
Stop Time: 20:15	Stop Time: 20:15	Stop Time: 22:55	Stop Time: 22:55
Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10
Volume: 1200 L	Volume: 1200 L	Volume: 1200 L	Volume: 1200 L
Date Analyzed: 6/8/99	Date Analyzed: 6/8/99	Date Analyzed: 6/8/99	Date Analyzed: 6/8/99
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 6/100	Total Fibers: 3/100	Total Fibers: 6/100	Total Fibers: 8/100
Coefficient of Variation: LOQ	Coefficient of Variation: LOD	Coefficient of Variation: LOQ	Coefficient of Variation: LOQ
Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasampled during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-postabatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025

# Air Sample Analysis Report



CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Insulation Removal Specialist

REPORT NO: 1

PROJECT: Willamette Primary School  
Lower Level Girls Restroom

PAGE NO: 2 OF 2

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers Limit of Quantification: 10.0fibers Specification Range: 100<f/mm2<1300

SampleIDNo: B1	SampleIDNo: B2	SampleIDNo:	SampleIDNo:
LaboratoryNo: MJ99-0356	LaboratoryNo: MJ99-0357	LaboratoryNo:	LaboratoryNo:
SampleLocation: Blank	SampleLocation: Blank	SampleLocation:	SampleLocation:
WorkPerformed: N/A	WorkPerformed: N/A	WorkPerformed:	WorkPerformed:
DateSampled: 6/8/99	DateSampled: 6/8/99	DateSampled:	DateSampled:
Sampledby: M. Johnson	Sampledby: M. Johnson	Sampledby:	Sampledby:
PumpNo: N/A	PumpNo: N/A	PumpNo:	PumpNo:
StartTime: N/A	StartTime: N/A	StartTime:	StartTime:
StopTime: N/A	StopTime: N/A	StopTime:	StopTime:
MinutesSampled: N/A	MinutesSampled: N/A	MinutesSampled:	MinutesSampled:
StartFlowRate (LPM): N/A	StartFlowRate (LPM): N/A	StartFlowRate (LPM):	StartFlowRate (LPM):
StopFlowRate (LPM): N/A	StopFlowRate (LPM): N/A	StopFlowRate (LPM):	StopFlowRate (LPM):
AverageFlowRate (LPM): N/A	AverageFlowRate (LPM): N/A	AverageFlowRate (LPM):	AverageFlowRate (LPM):
Volume: N/A L	Volume: N/A L	Volume: L	Volume: L
DateAnalyzed: 6/8/99	DateAnalyzed: 6/8/99	DateAnalyzed:	DateAnalyzed:
GraticuleFieldArea: 0.00817	GraticuleFieldArea: 0.00817	GraticuleFieldArea:	GraticuleFieldArea:
TotalFibers: 0/100	TotalFibers: 0/100	TotalFibers:	TotalFibers:
CoefficientofVariation: N/A	CoefficientofVariation: N/A	CoefficientofVariation:	CoefficientofVariation:
Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanroom, P-Personal sample from breathing zone, FL-Excursion limit, NAE-Negative air exhaust, PA-postabatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzedby: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Insulation Removal Specialist

REPORT NO: 2

PROJECT: Willamette Primary School  
Lower Level Mechanical Room

PAGE NO: 1 OF 2

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 100 fibers Specification Range: 100 < f/m<sup>3</sup> < 1300

Sample ID No: 1	Sample ID No: 2	Sample ID No: 3	Sample ID No: 4
Laboratory No: MJ99-0362	Laboratory No: MJ99-0363	Laboratory No: MJ99-0364	Laboratory No: MJ99-0365
Sample Location: Entrance of Airlock AD	Sample Location: Exhaust of Neg Air Machine #17 NAE	Sample Location: 2' Inside of Mechanical Room C	Sample Location: 2' In Front of SDP #1 C
Work Performed: Glove Bag Removal	Work Performed: Glove Bag Removal	Work Performed: N/A	Work Performed: N/A
Date Sampled: 6/8/99	Date Sampled: 6/8/99	Date Sampled: 6/8/99	Date Sampled: 6/8/99
Sampled by: M. Johnson	Sampled by: M. Johnson	Sampled by: M. Johnson	Sampled by: M. Johnson
Pump No: HV-08	Pump No: HV-03	Pump No: HV-08	Pump No: HV-03
Start Time: 20:45	Start Time: 20:45	Start Time: 22:50	Start Time: 22:50
Stop Time: 22:45	Stop Time: 22:45	Stop Time: 24:50	Stop Time: 24:50
Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 120
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10
Volume: 1200 L	Volume: 1200 L	Volume: 1200 L	Volume: 1200 L
Date Analyzed: 6/8/99	Date Analyzed: 6/8/99	Date Analyzed: 6/8/99	Date Analyzed: 6/8/99
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area: 0.00817
Total Fibers: 10/100	Total Fibers: 2/100	Total Fibers: 8/100	Total Fibers: 7/100
Coefficient of Variation: 0.63	Coefficient of Variation: LOD	Coefficient of Variation: LOQ	Coefficient of Variation: LOQ
Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc	Fibers/cc: <0.0039 f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasampled during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: Insulation Removal Specialist

REPORT NO: 2

PROJECT: Willamette Primary School  
Lower Level Mechanical Room

PAGE NO: 2 OF 2

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 100 fibers Specification Range: 100 < f/mm2 < 1900

Sample ID No: B1	Sample ID No: B2	Sample ID No:	Sample ID No:
Laboratory No: MJ99-0366	Laboratory No: MJ99-0367	Laboratory No:	Laboratory No:
Sample Location: Blank	Sample Location: Blank	Sample Location:	Sample Location:
Work Performed: N/A	Work Performed: N/A	Work Performed:	Work Performed:
Date Sampled: 6/8/99	Date Sampled: 6/8/99	Date Sampled:	Date Sampled:
Sampled by: M. Johnson	Sampled by: M. Johnson	Sampled by:	Sampled by:
Pump No: N/A	Pump No: N/A	Pump No:	Pump No:
Start Time: N/A	Start Time: N/A	Start Time:	Start Time:
Stop Time: N/A	Stop Time: N/A	Stop Time:	Stop Time:
Minutes Sampled: N/A	Minutes Sampled: N/A	Minutes Sampled:	Minutes Sampled:
Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):	Start Flow Rate (LPM):
Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):
Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):	Average Flow Rate (LPM):
Volume: N/A L	Volume: N/A L	Volume: L	Volume: L
Date Analyzed: 6/8/99	Date Analyzed: 6/8/99	Date Analyzed:	Date Analyzed:
Gonicle Field Area: 0.00817	Gonicle Field Area: 0.00817	Gonicle Field Area:	Gonicle Field Area:
Total Fibers: 0/100	Total Fibers: 0/100	Total Fibers:	Total Fibers:
Coefficient of Variation: N/A	Coefficient of Variation: N/A	Coefficient of Variation:	Coefficient of Variation:
Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanse, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Matthew Johnson

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025

# Air Sample Analysis Report



CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: ~~Keystone Contracting, Inc.~~ <sup>IRS</sup> REPORT NO: 6

PROJECT: Willamette Primary

PAGE NO: 1 OF 1

Method of analysis: NIOSH-7400 Limit of Detection: 5.5 Fibers Limit of Quantification: 10.0 fibers Specification Range: 100<f/m<sup>3</sup><1300

SampleIDNo: 1	SampleIDNo: 2	SampleIDNo: B1	SampleIDNo: B2
LaboratoryNo: TN99-0022	LaboratoryNo: TN99-0023	LaboratoryNo: TN99-0024	LaboratoryNo: TN99-0025
Sample Location: 10' to rht. frm drwy. entring from hlwy. rm. 16 AD	Sample Location: 10' to rht. frm drwy. entring from hlwy. rm. 14 AD	Sample Location: Blank	Sample Location: Blank
Work Performed: Glovebag	Work Performed: Glovebag	Work Performed: N/A	Work Performed: N/A
Date Sampled: 7/12/99	Date Sampled: 7/12/99	Date Sampled: 7/12/99	Date Sampled: 7/12/99
Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel
PumpNo: HV-06	PumpNo: HV-08	PumpNo: N/A	PumpNo: N/A
Start Time: 08:39	Start Time: 08:44	Start Time: N/A	Start Time: N/A
Stop Time: 11:40	Stop Time: 11:43	Stop Time: N/A	Stop Time: N/A
Minutes Sampled: 280	Minutes Sampled: 179	Minutes Sampled: N/A	Minutes Sampled: N/A
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A
Volume: 2800 L	Volume: 1790 L	Volume: N/A L	Volume: N/A L
Date Analyzed: 7/12/99	Date Analyzed: 7/12/99	Date Analyzed: 7/12/99	Date Analyzed: 7/12/99
Gaticule Field Area: 0.00817	Gaticule Field Area: 0.00817	Gaticule Field Area: 0.00817	Gaticule Field Area: 0.00817
Total Fibers: 3.5/100	Total Fibers: 11.5/100	Total Fibers: 0/100	Total Fibers: 0/100
Coefficient of Variation: LOD	Coefficient of Variation: 0.6	Coefficient of Variation: N/A	Coefficient of Variation: N/A
Fibers/cc: <0.0017 f/cc	Fibers/cc: 0.0030 f/cc	Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-postabatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Troy Noel





# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: IRS

REPORT NO: 5

PROJECT: Willamette Primary

PAGE NO: 1 OF 3

Method of analysis: NIOSH 7400 Limit of Detection: 5.5 Fibers; Limit of Quantification: 10.0 fibers; Specification Range: 100 < f/mm2 < 1300

Sample ID No: 1	Sample ID No: 2	Sample ID No: 3	Sample ID No: 4
Laboratory No: TN99-0012	Laboratory No: TN99-0013	Laboratory No: TN99-0014	Laboratory No: TN99-0015
Sample Location: 15' E. of N. dr. ldn. to pkg. lot in rm. 17 AD	Sample Location: 10' from entry door in rm. 14 N. wall AD	Sample Location: Entrance to girls restroom AD	Sample Location: In rm. 16 on E. walls by entry AD
Work Performed: Glove bag vertical pipe	Work Performed: Glove bag vertical pipe	Work Performed: Glovebag vertical pipe	Work Performed: Glovebag vertical pipe
Date Sampled: 7/9/99	Date Sampled: 7/9/99	Date Sampled: 7/9/99	Date Sampled: 7/9/99
Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel
Pump No: HV-08	Pump No: HV-06	Pump No: HV-22b	Pump No: HV-17
Start Time: 10:47	Start Time: 10:49	Start Time: 10:57	Start Time: 11:00
Stop Time: 2:03	Stop Time: 2:05	Stop Time: 2:05	Stop Time: 2:08
Minutes Sampled: 196	Minutes Sampled: 196	Minutes Sampled: 188	Minutes Sampled: 188
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10
Volume: 1960 L	Volume: 1960 L	Volume: 1880 L	Volume: 1880 L
Date Analyzed: 7/9/99	Date Analyzed: 7/9/99	Date Analyzed: 7/9/99	Date Analyzed: 7/9/99
Germicidal Field Area: 0.00817	Germicidal Field Area: 0.00817	Germicidal Field Area: 0.00817	Germicidal Field Area: 0.00817
Total Fibers: 12.5/100	Total Fibers: 15.5/100	Total Fibers: 6.5/100	Total Fibers: 25.5/100
Coefficient of Variation: 0.58	Coefficient of Variation: 0.53	Coefficient of Variation: LOQ	Coefficient of Variation: 0.44
Fibers/cc: 0.0030 f/cc	Fibers/cc: 0.0037 f/cc	Fibers/cc: <0.0025 f/cc	Fibers/cc: 0.0064 f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments: <Sample calculated at Limit of Quantification (10 fibers/100 fields)

Analyzed by: Troy Noel

P.O. Box 216 Gladstone Oregon, 97027 Office: (503) 557-2396 Fax: 557-3025



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: IRS

REPORT NO: 5

PROJECT: Willamette Primary

PAGE NO: 2 OF 3

Method of analysis: NIOSH 7-400 Limit of Detection: 5.5 Fibers; Limit of Quantification: 100 fibers; Specification Range: 100 < 1/mm2 < 1300

SampleIDNo: 5	SampleIDNo: 6	SampleIDNo: 7	SampleIDNo: 8
LaboratoryNo: TN99-0016	LaboratoryNo: TN99-0017	LaboratoryNo: TN99-0018	LaboratoryNo: TN99-0019
Sample Location: 15' E. of N. door entr. ldng. to pkg. in rm. 17 AD	Sample Location: 10' from entry door in rm. 14 N. wall AD	Sample Location: Entrance to girls restroom AD	Sample Location: In rm. 16 on E. wall by entry AD
Work Performed: Glovebag vertical pipe	Work Performed: Glovebag vertical pipe	Work Performed: Glovebag vertical pipe	Work Performed: Glovebag vertical pipe
Date Sampled: 7/9/99	Date Sampled: 7/9/99	Date Sampled: 7/9/99	Date Sampled: 7/9/99
Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel	Sampled by: T. Noel
Pump No: HV-08	Pump No: HV-06	Pump No: HV-22b	Pump No: HV-17
Start Time: 2:03	Start Time: 2:05	Start Time: 2:05	Start Time: 2:08
Stop Time: 4:04	Stop Time: 4:05	Stop Time: 4:05	Stop Time: 4:10
Minutes Sampled: 121	Minutes Sampled: 120	Minutes Sampled: 120	Minutes Sampled: 122
Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10	Start Flow Rate (LPM): 10
Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10	Stop Flow Rate (LPM): 10
Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10	Average Flow Rate (LPM): 10
Volume: 1210 L	Volume: 1200 L	Volume: 1200 L	Volume: 1220 L
Date Analyzed: 7/9/99	Date Analyzed: 7/9/99	Date Analyzed: 7/9/99	Date Analyzed: 7/9/99
Gonucle Field Area: 0.00817	Gonucle Field Area: 0.00817	Gonucle Field Area: 0.00817	Gonucle Field Area: 0.00817
Total Fibers: 10/100	Total Fibers: 15/100	Total Fibers: 13/100	Total Fibers: 11/100
Coefficient of Variation: 0.63	Coefficient of Variation: 0.54	Coefficient of Variation: 0.57	Coefficient of Variation: 0.61
Fibers/cc: 0.0038 f/cc	Fibers/cc: 0.0059 f/cc	Fibers/cc: 0.0057 f/cc	Fibers/cc: 0.0042 f/cc

Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Troy Noel



# Air Sample Analysis Report

CLIENT: West Linn-Wilsonville School District TRE JOB NO: 1020-44

ATTN: Joe Simmons

P.O. NO: Verbal

CONTRACTOR: IRS

REPORT NO: 5

PROJECT: Willamette Primary

PAGE NO: 3 OF 3

Method of analysis: NIOSH7400 Limit of Detection: 5.5Fibers, Limit of Quantification: 10.0fibers, Specification Range: 100<f/mm2<4300

SampleIDNo: B1	SampleIDNo: B2	SampleIDNo:	SampleIDNo:
LaboratoryNo: TN99-0020	LaboratoryNo: TN99-0021	LaboratoryNo:	LaboratoryNo:
Sample Location: Blank	Sample Location: Blank	Sample Location:	Sample Location:
Work Performed: N/A	Work Performed: N/A	Work Performed:	Work Performed:
Date Sampled: 7/9/99	Date Sampled: 7/9/99	Date Sampled:	Date Sampled:
Sampled by: T. Noel	Sampled by: T. Noel	Sampled by:	Sampled by:
Pump No: N/A	Pump No: N/A	Pump No:	Pump No:
Start Time: N/A	Start Time: N/A	Start Time:	Start Time:
Stop Time: N/A	Stop Time: N/A	Stop Time:	Stop Time:
Minutes Sampled: N/A	Minutes Sampled: N/A	Minutes Sampled:	Minutes Sampled:
Start Flow Rate (LPM): N/A	Start Flow Rate (LPM): N/A	Start Flow Rate (LPM):	Start Flow Rate (LPM):
Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM): N/A	Stop Flow Rate (LPM):	Stop Flow Rate (LPM):
Average Flow Rate (LPM): N/A	Average Flow Rate (LPM): N/A	Average Flow Rate (LPM):	Average Flow Rate (LPM):
Volume: N/A L	Volume: N/A L	Volume: L	Volume: L
Date Analyzed: 7/9/99	Date Analyzed: 7/9/99	Date Analyzed:	Date Analyzed:
Graticule Field Area: 0.00817	Graticule Field Area: 0.00817	Graticule Field Area:	Graticule Field Area:
Total Fibers: 0/100	Total Fibers: 0/100	Total Fibers:	Total Fibers:
Coefficient of Variation: N/A	Coefficient of Variation: N/A	Coefficient of Variation:	Coefficient of Variation:
Fibers/cc: N/A f/cc	Fibers/cc: N/A f/cc	Fibers/cc: f/cc	Fibers/cc: f/cc

Abbreviations: AP-Areasample prior to abatement, AD-Areasample during abatement, C-Cleanance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-postabatement areasample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Troy Noel

## SMALL SCALE SHORT DURATION

This section reflects requirements outlined in 40 CFR 763.91 and 763.95

The idea of small scale, short duration projects are jobs involving **small quantities** of asbestos. Generally, these are projects where the **primary intent** is not to disturb asbestos and if disturbed, worker exposure levels are not to exceed the **PEL (0.1 f/cc)**.

### DEQ/EPA

DEQ described small scale short duration activities as maintenance work that does not require a certified supervisor to oversee the work. IF the maintenance work is less than 3 square or 3 linear feet of friable material at any one time then certification is not required, nor is notification to the Department. (OSHA still requires some training).

DEQ does require that all persons disturbing asbestos be certified if they are not doing maintenance work and/or they disturb more than 3 square or 3 linear feet of friable material at any one time.

DEQ/EPA defines "small scale short duration activities" means a task for which the removal of asbestos is not the primary objective of the job, is less than 3 square or 3 linear feet, including, but not limited to:

- removal of small quantities of insulation on beams or above ceilings;
- replacement of a gasket on a valve;
- installation or removal of a small section of wallboard;
- removal of thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag.
- minor repair to damaged thermal system insulation which does not require removal
- repair to wallboard;
- replacement of a gasket on a valve;
- repair involving encapsulation, enclosure or removal, to small amounts of friable material in performance of emergencies of routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function.

AHERA (schools K-12) defines small scale job according to EPA's definition listed above. Those activities that will fit inside a single glove bag or mini-enclosure; no more than 3 square or 3 linear feet of ACM. Neither a supervisor or clearances are required, but it does need to be recorded.

### OR-OSHA/OSHA

OR-OSHA does not really have a definition for small scale short duration activities that would be recognized as such by DEQ. OR-OSHA's versions of small scale short duration/maintenance activities could be classified as Class III, Class I, or Class II asbestos work.

IF a person is doing maintenance activities then it is **Class III** asbestos work. If a worker intends to disturb TSI or surfacing material, but it is not the primary purpose of the work, then they must use the general work practices outlined OR-OSHA asbestos rules 1926.1101 (g) (9).

- A competent person-who has complete a minimum 16-hour/AHERA type course. (However we are still bound by the DEQ that if we disturb more than 3 square/linear feet then certified supervisor/workers must be used.)
- OR-OSHA specifies that the following work procedure s can be used:
  - standard glovebags on straight runs of piping
  - negative air glovebags
  - negative air glove boxes
  - water spray process systems
  - negative air mini-enclosure
  - approved alternate methods
- OR-OSHA still requires than an adjacent equipment room or area to the regulated area be available for the decontamination of employees and their contaminated equipment. The area needs to be of appropriate size so as not to spread contamination and the floor covered with an impermeable drop cloth. A three chamber decontamination unit/hygiene facility is not required as long as the total work involves less than 25 linear or 10 square feet.

If a person intends to disturb TSI or surfacing material, then it is **Class I** asbestos work regardless of the size of the project. The worker must use the work practices outlined OR-OSHA asbestos rules 1926.1110 (g) (4) & (5).

- A competent person/a supervisor-who has completed an EPA/DEQ five day supervisor course.
- OR-OSHA specifies that the following work procedures can be used:
  - negative pressure exposure (NPE)
  - standard glovebags on straight runs of piping
  - negative air glovebags
  - negative air glove boxes
  - water spray process systems
  - negative air mini-enclosure
  - approved alternate methods
  - a three-chamber decontamination unit/hygiene facility is not required as long as the total work involves less than 25 linear or 10 square feet. An adjacent equipment room or area to the regulated area must be available for the decontamination area.

If a person intends to disturb asbestos material that is not TSI or surfacing material, the it is **Class II** asbestos work regardless of the size of the project. This includes flooring (vinyl, sheet vinyl, asphalt), roofing (shingles built-up, felts), cement asbestos (transite), gaskets, wallboard, construction mastics, etc.

- A competent person/a supervisor-who has completed an EPA/DEQ five day supervisor course. (However DEQ does not require a certified supervisor if the material is kept non-friable.)
- The worker must use the general work practices outlined OR-OSHA asbestos rule 1925.1101 (g) (7) & (8).

- An adjacent equipment room or area to the regulated area must be available for the decontamination area. A three-chamber decontamination unit/hygiene facility is not required.

## 7. OPERATIONS AND MAINTENANCE PLAN

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## I. INTRODUCTION

With the enactment of the Asbestos Hazard Emergency Response Act regulations, Local Education Agencies are charged with producing a plan of action that will facilitate the safe and effective management of asbestos materials in their school systems. The most effective way of managing the problem is to completely remove all asbestos-containing materials from the building, thus removing the problem in its entirety. In some cases, however, this wholesale removal is not economically feasible or even desirable from a building usage standpoint. When asbestos-containing materials can not be completely removed, a comprehensive Operations and Maintenance Program as required by 40 CFR 763.91 will allow the local education agency to control the asbestos problem until removal of the materials is feasible.

## II. DEFINITIONS

Several definitions pertinent to an Operations and Maintenance Program are identified in 40 CFR 763.83. These are as follows:

*Asbestos-Containing Material (ACM)* when referring to school buildings means any material which contains more than one percent asbestos.

*Asbestos-Containing Building Material (ACBM)* means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

*Asbestos Debris* means pieces of ACBM that can be identified by color, texture, or composition; or means dust, if the dust is determined by an accredited inspector to be ACM.

*Operations and Maintenance Program* means a program of work practices to maintain friable ACBM in good condition, to insure cleanup of asbestos fibers previously released, and to prevent further release by minimizing and controlling damage to friable ACBM.

*Fiber Release Episode* means any uncontrolled or unintentional disturbance of ACBM resulting in visible emissions.

*Friable*, when referring to material in a school building, means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that, when dry, it may be crumbled, pulverized or reduced to powder by hand pressure.

*High-Efficiency Particulate Air (HEPA)* refers to a filtering system capable of trapping and retaining at least 99.97% of all non-dispersed particles 0.3 millimeters in diameter or larger.

*Removal* means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

*Repair* means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

*Response Action* means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACBM.

*Routine Maintenance Area* is an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

## III. PROGRAM ELEMENTS

### A. WORKER PROTECTION

40 CFR 763.91(b) serves to extend the protection provided by 40 CFR 763.121 (for worker protection during asbestos abatement projects) to employees of local education agencies who perform Operations and Maintenance and repair activities involving ACM who are not covered by the OSHA Asbestos Construction Standard 29 CFR 1926.58. This standard will be adhered to during all Operations and Maintenance or repair operations involving the disturbance of friable ACBM.



During initial cleaning (and additional cleaning as necessary) of all buildings, those employees performing the cleaning will be supplied with and will use the following personal protective equipment:

Disposable Coveralls - a "Tyvek" brand or similar disposable coverall will be worn over the clothes to prevent capturing asbestos fibers on the clothing.

Respirator - an individual personalized respirator will be provided to all workers doing the cleaning. The respirator will be appropriately fit-tested to ensure that it functions effectively for that individual. Each respirator will be supplied with disposable cartridges approved for asbestos dust by NIOSH and will be worn at all times during the cleanup operation.

Following cleanup each day, all used disposable respiratory cartridges and coveralls will be disposed of in six-mil asbestos disposal bags.

## B. TRAINING

Prior to the implementation of any Operations and Maintenance provisions of the Management Plan, all members of the maintenance and custodial staff who, during the performance of their duties, may work in a building containing ACBM will receive general awareness training of not less than two hours in duration. As well, similar training will be given to all new maintenance/custodial personnel within 60 days of their start date. As per 40 CFR 763.92 (a)(i-v), the accepted course for this level of training is "Developing an Operations and Maintenance Plan" given by Hall-Kimbrell Environmental Services, Inc., 4840 West 15th Street, Lawrence, Kansas, 66044, and will include as a minimum:

- Information on asbestos, its forms, and uses.
- Information on the health affects of asbestos exposure.
- Locations of ACBM in the school buildings in which they work.
- Recognition of damage, deterioration, and delamination of ACBM.

- Name and telephone number of the LEA person designated to carry out LEA responsibilities under 40 CFR 763.84.
- Availability and location of the Management Plan.

All members of the maintenance/custodial staff who are likely to conduct any activities that may disturb ACBM will receive the previously described general awareness training and an additional 14 hours as required by 40 CFR 763.92 (2)(i-iv). The accepted course for this level of additional training is "Operations and Maintenance Training" given by Hall-Kimbrell Environmental Services, 4840 West 15th Street, Lawrence, Kansas, 66044, and will include as a minimum:

- Descriptions of proper methods of handling ACBM.
- Information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560-OPTS-86-001), and other personal protective equipment and measures.
- The provisions of the following pieces of legislation:
  - 40 CFR 763.91, Appendices A, B, C, D of Subpart E
  - EPA regulations in 40 CFR Part 763, Subpart G
  - EPA regulations in 40 CFR Part 61, Subpart M
  - OSHA regulations in 29 CFR 1926.58
- Hands-on training in the use of respiratory protection, other personal protective equipment and measures, and good work practices.

All types of training will emphasize the necessity to not disturb ACBM or assumed ACBM during routine maintenance activities. Employees will be instructed on the following at a minimum:

- Avoid performing any activities on ACM or assumed ACM that may cause abrasion or physical deterioration of the material. This includes sanding, nailing, drilling, cutting, or otherwise damaging the material.

- Avoid damaging ACM during maintenance activities NOT directly involving the ACM such as installing drapes, carpets, moving furniture, etc.
- To always use a HEPA-vacuum and wet methods to clean up asbestos dust or debris. NEVER use a regular vacuum or dry method.
- To avoid any activities that may inadvertently release asbestos fibers into the air such as removing ventilation filters, drying and/or shaking the filters, and removing suspended ceiling tiles below ACM without taking the proper precautions and using the proper personal protective equipment.

### C. INITIAL CLEANING

In accordance with 40 CFR 763.91, all buildings under the direction of the School District will undergo an initial cleaning process prior to commencing with any response actions, with the exception of Operations and Maintenance and repair, as detailed in the Inspection Report/Management Plan Data. The initial cleaning will be done in all areas of all buildings where friable ACBM, damaged or significantly damaged thermal system ACM, or friable suspected ACBM assumed to be ACM, were determined to be present following the completion of an inspection, sampling and analysis program performed in accordance with 40 CFR 763.85 through 40 CFR 763.87.

The following procedures will be followed for the initial cleaning of all appropriate areas of each building:

1. All carpets will be HEPA vacuumed and/or steam cleaned.
2. All horizontal surfaces including sills, frames, door tops, wall protrusions, signs, air vents, suspended light fixtures, and other immovable fixtures will be HEPA vacuumed. Following HEPA vacuuming, the same areas will be wet cleaned in order to remove any residual fibers not picked up during the vacuuming process.
3. All walls will be wet wiped, except for those with sprayed-on or trowelled-on materials or with other applications with high liquid absorption potential.

4. All uncarpeted floors will be wet mopped.
5. All debris, filters, wet mop heads, dust mops, cloths, etc., will be sealed, while still wet, in leak-tight containers. Disposal containers will be six-mil polyethylene bags labelled in such a fashion that they illustrate their usage as asbestos storage containers. These bags will be kept in a single location, in a routine maintenance area in each building and will always be kept closed and tied. When the bag becomes full, it will be tied shut and placed into another six-mil bag and tied again. Full bags will be placed in a 55-gallon steel or fiberboard drum. When full, the drum will be transported to an EPA-approved asbestos landfill site and the material will be disposed of as asbestos-containing waste.

### D. ADDITIONAL CLEANING

In all areas where friable ACM exists, normal daily cleaning procedures will be altered as necessary to ensure that fiber entrainment in the air will be minimized. Sweeping and dry mopping will not be allowed in areas containing friable ACM. Until all ACM is removed from ceilings, etc., all daily mopping will be carried out with dampened, disposable mop heads. These mop heads will not be used in asbestos-free areas and will be changed at the end of the day and disposed of as asbestos-contaminated waste in six-mil polyethylene disposal bags. In addition, certain areas will receive additional cleaning on a regular basis as per the O&M supplement at the end of this section.

### E. OPERATIONS AND MAINTENANCE ACTIVITIES

1. Small-Scale, Short Duration Activities and Minor Fiber Release Episodes

Appendix B to Subpart E of 40 CFR 763.91 defines small-scale, short duration maintenance activities as, but not limited to:

- Removal of ACM insulation on pipes
- Removal of small quantities of ACM insulation on beams or above ceilings
- Removal of ACM gaskets on a valve

- Removal or installation of a small section of drywall
- Installation of electrical conduits through or proximate to ACM.

Small scale is further subdefined in Appendix B of Subpart E as:

- Removal of small quantities of ACM only if required as part of maintenance activity not intended as asbestos abatement
- Removal of ACM thermal system insulation in quantities no greater than can be contained in one glove bag
- Minor repairs to damaged thermal system insulation requiring no removal.
- Repairs to ACM wallboard
- Repairs involving encapsulation, enclosure, or removal, to small amounts of friable ACM only if required in performance of an emergency or a routine maintenance activity not intended as asbestos abatement. The work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. This enclosure must conform spatially and geometrically to the localized work area in order to perform its intended containment function.

Section 40 CFR 763.91 (f)(i) defines a minor fiber release episode as the falling or dislodging of less than or equal to three square or linear feet of friable ACM.

During the process of performing small-scale, short duration asbestos renovation or maintenance tasks, the following procedures will be utilized:

- The area will be isolated with physical barriers, whenever possible, restricting entry only to those persons necessary to perform the task. Warning signs will be posted at all entry points to the area.
- All HVAC ducts, windows, and other sources of air circulation to the area will be sealed. Where necessary, the air handling systems will be shut off or modified to meet this need.
- If a fiber release has occurred, the entire area will be precleaned using those techniques described in *Section C, under*

*Initial Cleaning.* HEPA vacuum and/or wet methods will always be employed for any type of cleaning. All workers directly involved with the cleaning will always use the prescribed personal protective equipment.

- All objects in the area will be removed from the area to protect them from contamination during the maintenance activity. Where it is not possible or feasible to move the objects, the objects will be completely covered with six-mil polyethylene plastic sheeting prior to commencement of the maintenance activity. This will include all fixtures and other components that exist in the immediate work area.
- Next, a layer of six-mil polyethylene plastic sheeting will be placed on the floor beneath the item or area affected by the maintenance activity. This sheeting will be at least one foot wide and long for each foot above the floor where the work is to be conducted, but will not under any circumstances, be less than six feet by six feet. When the work area is confined by walls, the plastic sheeting will extend up the walls at least one foot, and will be sealed along the top edges with duct tape.
- All work activities involving the ACM will be performed using wet methods, HEPA vacuums, glove bags, mini-enclosures, and/or protective clothing as appropriate to the maintenance activity. These methods are detailed in *Section E-3 of Operations and Maintenance Activities.*
- All repair work done on the damaged or affected ACM will be done with materials such as asbestos-free spackling, plaster, cement, or insulation. The existing ACM affected by the maintenance activity will be sealed with latex paint or an encapsulant, or the appropriate response action as identified in the Management Plan will be implemented.
- All asbestos-containing debris will be saturated with amended water and sealed in double six-mil polyethylene disposal bags. These bags will be labelled as ACM and will be disposed of at an EPA

approved landfill site. All plastic, duct tape, etc., used to cover objects, floors, etc., will be treated as asbestos-contaminated waste and will be disposed of in like manner.

## 2. Maintenance Activities other than Small Scale, Short Duration and Major Fiber Release Episodes.

Section 40 CFR 763.91 (f)(2) defines a major fiber release episode as the falling or dislodging of more than three square or linear feet of friable ACM.

For those maintenance activities other than small scale, short duration or for a major fiber release episode, all response actions will be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

Regardless of the response action designed for the specific activity or repair, the areas involving the work will be sealed off and restricted with signs posted, and prepared for the work in a manner consistent with the procedures outlined for small-scale short duration activities in *Section E-1 of Operations and Maintenance Activities*.

## 3. ACM Removal Procedures

### a. Wet Methods.

Regardless of the removal method employed, wet methods will always be used where practical during any maintenance activity that involves the disturbance of ACM. In some cases, wet methods will not be employed (working on live electrical equipment, for example) and this will be determined prior to the commencement of the activity.

At all times, amended water will be used as the wetting agent. Amended water is water that has a surfactant added that restricts evaporation and enhances the penetration of the water into the ACM. Commercially available products such as those containing a concentrate of a 50-50 mixture of polyoxyethylene esters and polyoxyethylene ethers with three percent emulsifier will be used. These products

will be added to normal tap water and used as per manufacturer's instructions.

Amended water will be applied to all ACM using an airless sprayer to minimize disturbance of the ACM. During the maintenance or repair activity, the material will continue to be wetted, as needed, to ensure that all ACM is wet during the activity and remains wet until final disposal.

### b. Glove Bag Techniques

The glove bag techniques will be used for removal of ACM on small scale activities mainly involving pipes, valves, Tees, fixtures, or other small components of mechanical systems as detailed in Appendix B of Subpart E of 40 CFR 763. Prior to installation and use of the glove bag, signs will be posted and the work area will be sealed off and prepared as detailed in *Section E-1 of Operations and Maintenance Activities*. The worker(s) performing the glove bag operation will be equipped with a disposable Tyvek-type suit and a personal respirator equipped with disposable cartridge filters NIOSH approved for use with asbestos dust.

After performing all preparatory work and donning personal-protective equipment, the glove bag is cut along the sides to fit around the pipe or fixture to be worked on. All tools necessary to perform the work, as well as a quantity of bridging encapsulant, are inserted into the attached inside pocket of the bag.

The glove bag is then attached around the work area by folding the open edges together and sealing with staples and tape. The side edges of the glove bag are then sealed using duct tape and/or Velcro ties to form a tight seal. The bottom seam of the bag is also taped to ensure its integrity. Once a tight seal is obtained, the end of a smoke tube is inserted through the marked entry port and a small amount of smoke is squeezed into the bag. After tape sealing the port (and removing the smoke tube), the bag is gently squeezed to allow the smoke to exit through any available leak holes. Leaks identified in this way are sealed with more duct tape, the entry port is opened, and

the bag is squeezed lightly to remove excess smoke. Next, the portable sprayer nozzle is put through the port and the work area is completely wetted with amended water. The nozzle is removed and the HEPA vacuum hose is inserted into the port and sealed tightly with duct tape.

The worker's arms are inserted into the armholes and gloves and the ACM is removed from the work area. When necessary, the amended water spray nozzle is inserted into the bag during removal to ensure that the ACM is kept wet at all times.

When all necessary ACM is removed and the item cleaned of all visible material, a spray nozzle from the encapsulant sprayer is inserted and the pipe fixtures, etc., are sprayed with encapsulant. The rough edges of the cut ACM are then coated/sealed with the bridging encapsulant.

The worker then removes his arms from the armholes and turns on the HEPA vacuum, to remove air from the bag. As the air is being removed from the bag, the bag is squeezed near the top, and twist sealed and taped closed. The HEPA vacuum is turned off, the nozzle removed, and the entry port is sealed tightly. Then the bag is cut along the top and removed from the working area, then placed in a six-mil polyethylene bag for disposal with other contaminated waste materials.

#### *c. Mini-Enclosures*

This methodology is employed in areas where glove bags are not practical, such as for the removal of asbestos from a small ventilation system or a short length of duct as detailed in Appendix B of Subpart E of 40 CFR 763.

The mini-enclosure will vary in construction, shape, and size, depending upon the specific requirements of an individual activity. In general, all mini-enclosures will be constructed according to the following criteria:

- The structure will consist of six-mil polyethylene plastic sheeting supported by a preconstructed

framework of 2" by 4" studs formed around the work area. The plastic will be stapled and taped to the framework. Two layers of sheeting will be used, one attached to the studs on the inside of the mini-enclosure and the other on the outside.

- The structure will be minimized in size so as to allow entry to only the number of workers directly involved with the maintenance activity. Where possible, the number of workers will be restricted to one or two maximum.
- The floor inside the mini-enclosure will be covered with two layers of six-mil plastic and will extend no less than one foot up each wall where it will be tape sealed to the wall's plastic. All penetrations into or through the mini-enclosure, such as pipe runs, will be sealed with duct tape.
- A small change room (approximately three feet by three feet by seven feet) will be constructed contiguous to the mini-enclosures. Entry to the change room and from the change room to the mini-enclosure will be through double plastic-sheeted entryways. The first layer of plastic in the entryway will be sealed to the doorway at the top and on the right side, the second layer will be sealed at the top and on the left side.
- After completing the maintenance or repair activity, the worker will enter the change room, HEPA vacuum his disposable coveralls, and remove them prior to leaving the change room. He will then wet wipe his respirator, leaving it on until exiting the change room.
- During the ACM removal, the workers will wear protective coveralls and dual cartridge respirators NIOSH-rated for asbestos dust. Wet methods of removal using amended water will be used at all times in the mini-enclosure. As in glove bag removal,

following the removal of ACM the working areas will be sprayed with encapsulant and exposed cur ACM will be coated with a bridging encapsulant when appropriate.

- Next, all debris in the mini-enclosure will be placed in double six-mil polyethylene bags labelled appropriately for disposal of ACM. The bags will be wet cleaned before removal from the work area through the change room. All interior surfaces of the mini-enclosure will then be cleaned using HEPA vacuum and or wet cleaning techniques.
- Inside the mini-enclosure, the air will be sprayed with water using an airless sprayer. The worker will start at the top and spray the entire volume down to the floor level in order to remove any airborne asbestos fibers prior to dismantling the mini-enclosure.
- The worker will then proceed to the change room and HEPA vacuum his coveralls and clean and spray the room in the same fashion as the mini-enclosure. He will then wet wipe his respirator while still wearing it, HEPA-vacuum and remove his coveralls, and exit the change room.
- The mini-enclosure will then be dismantled from the outside by removing the plastic and bundling it inwards, rolling it, and placing it in a six-mil bags, labelled for asbestos-contaminated waste and disposed of appropriately. The 2" by 4" studs will be dismantled and stored for further use.
- Following the dismantling of the mini-enclosure the worker removes his respirator and disposes of the cartridges as asbestos-contaminated waste.

#### F. WASTE DISPOSAL

All asbestos-containing waste material is double-bagged in six-mil polyethylene plastic bags. These

bags are preprinted to show that they contain asbestos-containing material. Asbestos waste is kept in a controlled location in a routine maintenance area of the facility. Filled bags of waste are carried to this area and placed in sealable metal or fiber 55-gallon drums. When the drums are full, they are sealed, labelled, and transported to a landfill site approved for asbestos by EPA. Upon arrival at the landfill site, the bags are removed from the drums and handed over to the landfill operator. The drums are wet wiped and returned to the school for re-use. The drums are not re-used if, upon opening, it is observed that one or more of the bags has ruptured inside of the drum. In this case, the drum is resealed and disposed of along with all bags inside of it.

The waste containers are transported to the landfill site in a covered, lockable vehicle and all transported containers are accompanied by a proper chain of custody form that details the origin of the material, date and quantities of transport, types of containers and destination of containers. If transported by a third party hauler, information on the hauler is also included on the form. The chain of custody form is signed at each transfer point and after final transport to the landfill site, a copy of the form is maintained in our records as evidence of receipt at the site. A sample copy of this form is included.

Prior to any transportation of asbestos-containing material, notification will be made to the following parties:

1. Regional US EPA office - written notification will be sent detailing the name and location of the landfill site to be used and the approximate weight and volume of asbestos involved.
2. EPA Certified Landfill Site - Prior to each transport the landfill supervisor will be notified of the weight and volume of the material, the expected date and time of arrival at the site, and the types of containers to be transported.

#### G. RECORDKEEPING

Permanent records will be kept regarding Operations and Maintenance activities in facilities under the control of the LEA. These include:

1. Whenever any cleaning activity as prescribed in 40 CFR 763.91 (c) is undertaken records will contain the name of the individuals performing the cleaning, the dates of the cleaning, the locations cleaned, the methods utilized, and any other information pertinent to that particular cleaning episode. A copy of the O&M Cleaning Report Form is attached.
2. Whenever any Operations and Maintenance activity is undertaken as outlined in 40 CFR 763.91 (d) records will contain the name and duties of each person involved; the start and completion date and time of the activity; the locations where the activity occurred; a description of the activity; preventive measures used; amount (if any) of ACM removed; and the name and location of the storage or disposal site for the ACM. A copy of the Small-Scale O&M Activity Report Form is attached.
3. Whenever a major activity as described in 40 CFR 763.91 (e) is undertaken, records will indicate the name, signature, state of accreditation, and accreditation number of each person involved; the start and completion date and time; the locations where the activity occurred; a description of the activity; preventive measures used; whether ACBM was removed; and the name and location of the storage or disposal site for the removed material. A copy of the Major O&M Activity Report Form is attached.
4. For every fiber release episode described in 40 CFR 763.91 (f), the records will detail the date, time, and location of the episode; the method of repair; preventive measures or response action taken; the names of those persons doing the work; whether ACBM was removed; and the name and location of the storage or disposal site for the removed material. A copy of the Fiber Release Episode Report Form is attached.
5. Copies of all inspection reports, results and amendments will be kept in the file with the Operations and Maintenance Program and activity reports. This also includes results of any re-inspections or

periodic surveillance as prescribed in 40 CFR 763.85 (b) and 40 CFR 763.92 (b).

6. Current lists of all custodians and maintenance personnel including name, address, date of hire, asbestos training course, and dates, as well as copies of certificates from any special related courses taken by the employees. A copy of the Maintenance/Custodial Staff Training Report Form is attached.
7. A current list of all areas where asbestos removal, enclosures, or encapsulation has taken place. A copy of the Asbestos Abatement Activity Record Form is attached.
8. A current inventory of equipment available for Operations and Maintenance activities.
9. Copies of ACM disposal records and/or chain of custody documentation.

All records will be maintained in a single location at the LEA site. Copies of all records and information pertinent to individual facilities will also be maintained at those facilities by the designated campus asbestos coordinator.

#### H. WARNING LABELS

Warning labels will have been attached immediately adjacent to any friable and non-friable ACBM and assumed ACM located in routine maintenance areas as per 40 CFR 763.95. The labels will be of a size, print, and color which is readily visible to persons entering an area containing ACBM. The labels will read as follows:

\*\*\*\*\*  
 CAUTION  
 ASBESTOS HAZARDOUS  
 DO NOT DISTURB WITHOUT PROPER  
 TRAINING AND EQUIPMENT  
 \*\*\*\*\*

## I. BUILDING INVENTORY - ALL ACM

See "List of School Buildings and ACM Status" in Section: Management Plan Introduction.

## J. PERIODIC SURVEILLANCE

All facilities will undergo a semi-annual surveillance in order to detect deterioration taking place on any ACM in the facility. This will consist of a visual evaluation of the materials and specific records will be maintained detailing the material type, damage, or deterioration noted, as well as any repair or response action undertaken. This semi-annual surveillance will be performed utilizing the protocol defined in the "plan for periodic surveillance" in the management plan.

## K. EMERGENCY RESPONSE

In the event of the occurrence of an asbestos-related emergency in a facility under the direction of the LEA, the following procedures will be employed:

1. Immediately upon notice of the emergency, the party involved will vacate the area of involvement and immediately contact the LEA Coordinator and/or his designee at the facility.
2. If the person(s) observing the incident is trained to handle ACM activities, that person(s) will take action to immediately isolate the area of involvement from the rest of the building by evacuating any unnecessary personnel from the area, turning off or isolating all air-moving equipment in the area, isolating the area by closing all entryways, and posting warning signs indicating the presence of a hazardous area.
3. If the person(s) observing the incident is not trained to handle ACM activities, that person will immediately contact a member of the staff who has the appropriate training and alert that person to the problem. The trained staff member will then proceed to take the actions indicated in 2.

4. If the occurrence is of such a size that a response action must be designed by an accredited designer, no further work will be done and the area will remain isolated as in 2. until the appropriate response action can be determined. Otherwise, the appropriate repair/maintenance activity will commence following the performance of the procedures detailed in *Section E-1 of Operations and Maintenance Activities*.

5. Following completion of the repair/maintenance activities, the appropriate forms will be completed as per *Section G-7 Recordkeeping*. These forms will become a part of the permanent Operations and Maintenance records.

## L. EQUIPMENT LIST

An Operations and Maintenance Plan involves "specialized" equipment and supplies to resolve and/or control the problems. The materials can be purchased from a number of asbestos or industrial safety supply houses and some can be found in hardware stores. The following materials and equipment are commonly associated with successful operations and maintenance planning.

### OPERATIONS AND MAINTENANCE PLANNING MATERIALS AND EQUIPMENT LIST

1. Tyvek disposable coveralls
2. Rubber gloves
3. Half-face dual cartridge negative pressure respirators with NIOSH-approved cartridges
4. Safety goggles
5. Surfactant
6. Misting spray bottle
7. Misting spray tank
8. Dust mop/broom
9. Polyethylene sheeting (six-mil)
10. Asbestos disposal bags (six-mil)
11. Fiber or metal disposal drums
12. Glove bags
13. HEPA Vacuum with attachments
14. Duct tape
15. Hand tools
16. Warning signs and labels
17. Scrim cloth for pipe wrap
18. Foil tape for pipe wrap
19. Encapsulant - bridging and penetrating
20. Smoke tube kits



OPERATIONS AND MAINTENANCE PLANNING  
COST AND MATERIALS CHECKLIST

ITEMS	PURCHASED		PER BUILDING	
	Initial	Ongoing	Unit Cost	Quantity
Disposabie Tyvek Coveralls w/Hood Bottles X-large				
Rubber gloves				
Half-face negative pressure dual cartridge respirators				
Respirator filters				
Safety goggles				
Surfactant				
Misting spray bottle				
Misting spray tank				
Polyethylene sheeting (six-mil)				
Asbestos disposal bags (six-mil)				
Fiber disposal drums				
Glove bags				
HEPA vacuum with attachments: vacuum bags vacuum filters cone attachment				
Vacuum bags				
Vacuum filters				
Cone attachment				
Duct tape				
Hand tools				
"DANGER: ASBESTOS..." signs & labels				
Scrim cloth for pipe wrap				
Foil tape for pipe wrap				
Encapsulant     - penetrating - bridging				
Smoke tube kits				

## M. AIR MONITORING

A requirement of 40 CFR 763.91 is that the LEA ascertain, through monitoring or historical data, the airborne concentration of asbestos fibers during all maintenance and repair activities involving ACBM or assumed ACBM. Coverage of EPA's worker protection rule at 40 CFR 763.121 is extended to maintenance and custodial staff at schools who perform Operations and Maintenance activities.

These regulations establish a Permissible Exposure Limit (PEL) of 0.2 fibers per cubic centimeter (f/cm<sup>3</sup>) over 8-hours for abatement project workers and an action level of 0.1 f/cm<sup>3</sup> that, once met or exceeded, triggers a number of required work practices including air monitoring, regulated work areas, engineering and work practice controls, respiratory protection, protective clothing, hygiene facilities and practices, training, medical surveillance and recordkeeping.

In response to the requirement of these regulations, 8-hour "time weighted average" air sampling will be conducted in all routine maintenance areas and in general occupancy areas of all buildings so that initial background concentrations of asbestos resulting from the existence of the ACBM may be determined. As well, during any small-scale, short-duration maintenance activity involving ACM, air monitoring will be performed as follows:

- Personal samples will be collected from the breathing zone of the employee(s) performing the maintenance activity.
- Area samples will be collected in the vicinity of the maintenance activity so that a determination may be made of the level of contamination expected to be produced in surrounding areas as a result of the activity.

All air monitoring will be done in accordance with 40 CFR 763.121 including collection on 0.8 micrometer 25-millimeter filters mounted in an open-face filter holder and analysis using the NIOSH 7400 method. The samples will be taken for the determination of the 8-hour time weighted average concentrations and ceiling concentrations of asbestos fibers.

Following analysis of the air filters, results of all analyses will be recorded on the O&M Maintenance Activity form for inclusion in the Operations and Maintenance Program's permanent records. A copy of the Air Monitoring Data and Log is attached.

## N. MEDICAL MONITORING

Medical monitoring is required for all employees working on or around ACBM where exposure is likely to exceed the OSHA action level of 0.1 f/cm<sup>3</sup>, 8-hour TWA during the course of work. This is required through 40 CFR 763.91's extension of EPA's Worker Protection Rule at 40 CFR 763.121 to maintenance and custodial staff at schools who perform operations and maintenance activities.

This medical monitoring program will be provided to all persons at the cost of the LEA as required by the regulations. The program will consist of the following elements:

- Preplacement Examination - will be provided within 30 days of commencement of employment and will include a medical history, chest X-ray, and pulmonary function test as per 40 CFR 763.121(J)(2).
- Annual Examinations - will be provided at least annually and will include medical history, chest X-ray, and pulmonary function tests as per 40 CFR 763.121(J)(3).
- Termination Examination - will be provided within 30 days pre or post termination date and will include medical history, chest X-ray, and pulmonary function tests as per 40 CFR 763.121(J)(4).

Where determined by medical examination that an individual cannot work while wearing a respirator, that person will not be required or allowed to perform maintenance activities involving ACBM.

Medical records will be maintained in the personnel files and be made available to the Environmental Protection Agency, the Assistant Secretary of Labor for Occupational Safety and Health, the Director of NIOSH, authorized physicians, and upon the request of the employee (or former employee) to his physician. All records will be maintained for at least 20 years as required by 40 CFR 763.121(f)(6).

## OPERATIONS AND MAINTENANCE CODES

The following codes are intended for use as reference to the general requirements for Preventive Measures by material types. The codes are referenced in the inspection results location of the Management Plan and are presented here for convenience.

The codes given are for all friable ACM and non-friable ACM that have the potential to become friable during school maintenance activities involving the material. In all cases, the description of activities in the Operations and Maintenance Codes refers back to the specific requirements detailed in the Operations and Maintenance program and 40 CFR 763.

### OMA - Pipe Insulations and Mudded Joint Fittings

Work area preparation and cleaning must be in accordance with the requirement of 40 CFR 763.91(d).

Repair minor dents and tears in the protective jacket with duct tape or bridging encapsulant with glass cloth reinforcement. Duct tape should only be used for temporary control until the bridging encapsulant is installed.

For small-scale, short-duration activities, if glove bag removal is not feasible, wrap uncovered pipe insulation with protective jackets consisting of a bridging encapsulant with glass cloth reinforcement. If a glove bag is used, it must be used in accordance with *Section E-3 of Operations and Maintenance Activities*.

Wrap moderately water damaged or contact damaged pipe insulations with new protective jackets, or re-insulate affected areas. Eliminate the source of the water damage. Any activity

other than small-scale, short-duration requires design by a person accredited to design response actions. The activity must be undertaken by those accredited to perform them. Therefore, those types of activities will not be undertaken on a routine basis.

Monitor the condition of the asbestos-containing materials, under procedures outlined in the "Plan for Periodic Surveillance" located in the Management Plan.

Clean area, as necessary, using procedures detailed in *Section D of Additional Cleaning*.

### OMB - Insulation on Boilers, Breeching, Ducts, etc.

Work area preparation and cleanup must be in accordance with the requirements of 40 CFR 763.91 (d).

Repair minor dents and tears in insulation on boilers and breeching with a bridging encapsulant with glass cloth reinforcement. Duct tape or non-asbestos mastic should only be used for temporary control until the protective jacket is applied.

Wrap uncovered insulations with new protective jackets or coverings consisting of a bridging encapsulant with glass cloth reinforcement.

Minor damage to duct work insulated with ACM should be repaired with a bridging encapsulant with glass cloth reinforcement. Duct tape or non-asbestos mastic should only be used for temporary control until the protective jacket is applied.

If any small-scale removal is required as a part of the repair process or maintenance activity, then a glove bag or mini-enclosure must be used as described in *Section E-3 of Operations and Maintenance Activities*. Clean the area, as necessary, using procedures detailed in *Section D of Additional Cleaning*.

Monitor the condition of the asbestos-containing materials, under procedures outlined in the "Plan for Periodic Surveillance" located in the Management Plan.

## OMC - Fireproofing

Work area preparation and cleaning must be in accordance with the requirements of 40 CFR 763.91(d).

The fireproofing may be sprayed with an encapsulant if the fireproofing is well-bonded to its substrate and is less than one inch thick. This is to be considered a temporary control measure with a life expectancy of five to six years. Test results have shown that, due to the impact of the spray, spraying with an encapsulant can, on occasion, cause more fibers than a gross wet removal project. ACM removal, enclosure or encapsulation, can only be performed if it is classified as a small-scale, short-duration maintenance activity NOT intended as asbestos abatement as defined in Appendix B to Subpart E of 40 CFR 763.91. In cases where the activity is not small-scale, the activity must be designed and performed by an accredited person.

Use caution when work involved hanging ducts, conduit or pipes, etc. from surfaces sprayed with fireproofing. Avoid disturbing fireproofing whenever possible.

All materials must be monitored as detailed in the section "Plans for Periodic Surveillance" located in the Management Plan.

Clean the area, as necessary, using procedures detailed in *Section D of Additional Cleaning*.

## OMD - Acoustical Plasters (Sprayed On/Trowelled On)

If the plaster is in good condition, with no delamination, deterioration or signs of water damage, it should be left alone but carefully monitored for signs of change in status. This must be performed as detailed in the "Plan for Periodic Surveillance" in the Management Plan.

If the plaster is water damaged and/or is becoming delaminated from the substrate, it should be removed rather than encapsulated. Encapsulation can make the condition worse by increasing the rate of delamination. The source of the water damage must be eliminated. Unless the required removal is a part of a required small-scale, short-duration maintenance activity then the removal/repair must be designed and performed by an accredited person.

Avoid disturbing acoustical plaster by not hanging plants, drilling holes in the ceiling, moving furniture, etc. Work area preparation and cleanup for all types of maintenance work must be in accordance with the requirements of 40 CFR 763.912(d). When the plaster must be disturbed, mist the affected area with amended water and use a HEPA vacuum to collect fibers being released.

All materials must be monitored as detailed in the section "Plans for Periodic Surveillance" located in the Management Plan.

Clean the area, as necessary, using procedures detailed in *Section D of Additional Cleaning*.

## OMF - Debris

Work area preparation and cleanup must be in accordance with the requirements of 40 CFR 763.91(f) for minor fiber release episodes (three square or linear feet or less of friable ACM).

Small amounts can be cleaned up using a HEPA vacuum and wet wiping or set mopping. Dispose of larger pieces by misting and carefully moving the pieces to an asbestos disposal bag to be properly discarded. Repair of the damaged material that resulted in the debris must be performed as per 40 CFR 763.91 (f)(iv).

## OMG - Ceiling Tiles

Work area preparation and cleanup must be in accordance with the requirements of 40 CFR 763.91(f) for minor fiber release episodes (three square or linear feet or less of friable ACM).

When ceiling tiles are noted as asbestos-containing materials, precautions can be taken to greatly minimize exposure from the tiles.

Whenever the tiles are cut, broken, or damaged, they should be disposed of properly and replaced by new tiles. Replacement tiles must be asbestos free. Tiles should never be broken to fit into an asbestos disposal bag. Any activity other than small-scale, short-duration maintenance activities must be designed and performed by an accredited person.

All materials must be monitored as detailed in the section "Plans for Periodic Surveillance" located in the Management Plan.

#### **OMH - Tape/Woven Paper**

Work area preparation and cleanup must be in accordance with the requirements of 40 CFR 763.91(f).

Asbestos-containing tape is used primarily for sealing seams on duct work. Loose or frayed ends of the tape must be wetted with amended water, cut, and properly disposed. Care must be taken not to damage the tape by ripping or tearing it during this procedure.

Damaged tape should be carefully painted with a bridging encapsulant with minimal overspray or overbrushing. When the tape must be disturbed, mist it with amended water (unless the disturbance is due to the encapsulation process) and use a HEPA vacuum to collect fibers being released.

#### **OMI - Miscellaneous/ Cementitious Materials**

Fiber release from cementitious (non-friable) materials is normally extremely low, unless these materials are broken, drilled, sanded or otherwise disturbed. During disturbance, the material should be thoroughly dampened and a HEPA vacuum used to collect fibers being released. Work area preparation and cleanup must be in accordance with 40 CFR 763.91(d). Some examples of cementitious materials that may contain asbestos are:

- Floor tiles
- Tile underlay
- Wall plasters (some)
- Transite pipes
- Scratch coats
- Drywall plaster (some)
- Transite panelling
- Linoleum
- Asbestos cement pipes

#### **OMZ - Other Materials**

This code applies to miscellaneous ACM that rarely creates a significant problem but can pose an exposure risk when being damaged or removed. Listed are some of the asbestos-containing materials that fall into this classification. If an asbestos-containing material is not directly addressed in the operations and maintenance codes, an operations and maintenance procedure may be applied using one or more of the codes that involve similar materials. All disposal must be in accordance with *Section F of Waste Disposal*.

*Batt Insulation* - Cutting or tearing the asbestos-layered paper backing can cause fiber release. Wet the backing with amended water and wear a half-face respirator if batting needs to be cut or moved.

*Friable Wallboard* - Precautions must be taken to minimize exposure from the wallboard. Replace broken or damaged wallboard with a non-asbestos material. If removal is necessary, wet the material and try to remove it in one piece. The wallboard must never be broken up to fit into an asbestos disposal bag.

*Vibration Joint Cloth* - Vibration joint cloth is most often found on duct work near air handlers. Loose or frayed ends should be wet with amended water or a diluted encapsulant. Carefully cut and remove the joint cloth and dispose of properly.

*Earth Floors* - When mechanical insulations located in crawl spaces or tunnels deteriorate or are damaged, the earth floors beneath them can become contaminated. Often the asbestos materials are broken up and ground into the loose earth by maintenance workers performing work in these areas. All work involving contaminated soil must be designed and performed by accredited persons.

*Vinyl Asbestos Floor Tiles (VAT)* - Damaged, vinyl floor tiles can become friable and could present a problem when a small-scale, short-duration maintenance activity requires removal of small areas of VAT. Work area preparation and cleaning must be in accordance with 40 CFR 763.91 (d). Mix amended water to a slightly stronger than normal strength. Spray the entire surface of the tiles to be removed, wait six to eight hours and repeat the spraying. Most vinyl

asbestos tile glues are water soluble and the tiles will loosen so that they may be physically removed, placed in a sealed plastic bag, and disposed of as asbestos waste. When the tiles are loose, the ends will curl up or under. Always dispose of the paper underlay material with the VAT, as it usually contains asbestos. In most cases, VAT removal will be designed and performed by accredited persons.

## INITIAL/ADDITIONAL CLEANING RECOMMENDATIONS

### (Supplement to O&M Plan)

This section is provided as a supplement to the Operations and Maintenance Plan included in this document, as required by 40 CFR 763.91 (c) and 763.93 (e)(9).

The AHERA regulations require that each LEA which after inspection was found to contain areas with friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM, the area(s) will be asbestos cleaned at least once after the completion of the inspection and before the initiation of any response action other than O&M Procedures or repair. The procedures for the required cleaning are found in 40 CFR 41852; however, a more detailed description is found in the body of the O&M Plan, "Initial Cleaning".

Hall-Kimbrell and the accredited Management Planner agree with the EPA to the need for a thorough asbestos cleaning of the areas described above. That initial cleaning measure is necessary in order to collect and remove as much of the settled asbestos dust and fibers as possible that have been deposited over the past months or years. However, all materials containing asbestos should not be treated equally under this provision, since depending on the material's degree of friability, accessibility, asbestos content, condition, and other variables, the amount of asbestos contamination in and around the area will vary greatly. The accredited inspector performed an assessment of the materials taking into consideration these and other variables which contribute to the likelihood/probability of routine or accidental fall out and possible building occupant exposure. The relative degree of exposure potential and, therefore, past fall out probability are inter-related in that a material whose damage category has been determined to

be damaged or significantly damaged has a very high probability of having produced a higher degree of area contamination than a similar material with a rating of "potential for damage".

In order to aid the school district in understanding the relative degrees of exposure and/or contamination potential and probability, Hall-Kimbrell has provided three (3) priority ranking categories. Hall-Kimbrell's recommendation for cleaning in and around the areas is as follows:

### Priority 1 Materials/Areas

- A) Initial cleaning as described in the O&M Plan as soon as feasible but in no event later than July 9, 1989.
- B) Additional cleaning as was performed initially at least once every two months until materials are abated.

### Priority 2 Materials/Areas

- A) Initial cleaning as described in O&M Plan no later than July 9, 1989. NOTE: For economic efficiency, the LEA should perform the initial cleaning at the same time as the Priority I materials/areas are cleaned.
- B) Additional cleaning, as was performed initially, at least once every six months thereafter until materials are abated.

### Priority 3 Materials/Areas

Since these materials are either non-friable ACBM, non-friable assumed ACM, or other well-bound miscellaneous material with a low likelihood of exposure potential or contamination under routine use, Hall-Kimbrell does not feel that initial nor additional cleaning is absolutely necessary. However, since past renovations, remodeling, or other possible disturbance may have occurred and unknown to Hall-Kimbrell the school district should use its best judgement based on past activities in determining whether these Priority III materials should be treated otherwise.

LEA Response to Cleaning Recommendations

The AHERA regulations require that the LEA provide a response to the management planner's cleaning recommendations. If you agree with the recommendations provided and agree to conduct the necessary cleaning based on the schedule recommended indicate by checking the first block. If you do not agree and plan to carry out an alternative, additional cleaning schedule, please indicate by checking the second block and provide a description of the cleaning plan the LEA will perform.

☐ I do agree with the recommendations and cleaning schedule and will carry out the plan according to that schedule.

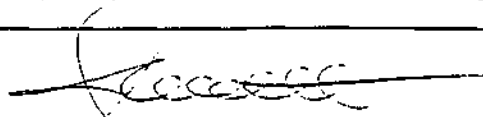
☒ I do not agree with the recommended schedule for additional cleaning and elect the following:

Initial cleaning will be performed prior to the initiation of any response act other than O&M or repair.

Additional cleaning will be performed when it is deemed necessary by the LEA.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

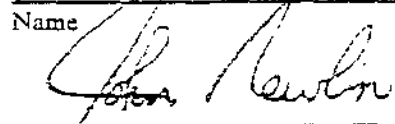
By: LEA Designated Person:

  
\_\_\_\_\_  
Signature

Samuel Nugent

Name

By: Management Planner

  
\_\_\_\_\_  
Signature

John Newlin

Name

# **OPERATIONS AND MAINTENANCE PROGRAM**

## **FORMS**



## ASBESTOS ABATEMENT ACTIVITY RECORD\*

District Name: \_\_\_\_\_ Campus Name: \_\_\_\_\_

LEA Asbestos Coordinator: \_\_\_\_\_ Phone: \_\_\_\_\_

[illegible]

\* This record includes all asbestos abatement undertaken that was not associated with a small-scale maintenance activity

## MAINTENANCE/CUSTODIAL STAFF TRAINING RECORD

Campus Name: \_\_\_\_\_ Building Name: \_\_\_\_\_

[illegible]

ACM WASTE DISPOSAL  
CHAIN OF CUSTODY RECORD

Campus \_\_\_\_\_

Building: \_\_\_\_\_

Asbestos Coordinator \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_

---

Material Summary

Material Origin: \_\_\_\_\_ Date of Release: \_\_\_\_\_

Container Type(s): \_\_\_\_\_ Quantity: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total No. of Containers: \_\_\_\_\_ Total Quantity: Volume \_\_\_\_\_ Weight \_\_\_\_\_

Drums Sealed: ☐ Yes ☐ No ☐ Not Applicable

Bags Doubled & Tied: ☐ Yes ☐ No ☐ Not Applicable

Containers Labeled: ☐ Yes ☐ No

---

Material Destination

Name of Landfill Site: \_\_\_\_\_ Address: \_\_\_\_\_

Landfill Site Supervisor: \_\_\_\_\_ Phone: \_\_\_\_\_

EPA Certified for Asbestos Disposal: YES / NO\*

If NO, Explain: \_\_\_\_\_

---

CHAIN OF CUSTODY

Relinquished By	Date and Time	Received By	Date and Time	Carrier
Relinquished By	Date and Time	Received By	Date and Time	Carrier
Relinquished By	Date and Time	Received By	Date and Time	Carrier
Relinquished By	Date and Time	Received By	Date and Time	Carrier

## O & M CLEANING REPORT

Campus: \_\_\_\_\_ Building: \_\_\_\_\_

Locations: \_\_\_\_\_ Date(s): \_\_\_\_\_

### Staff Assigned

Name	Title	Duties

### Cleaning Methods

Location	Methods Used

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### SMALL-SCALE O & M ACTIVITY REPORT

Campus: \_\_\_\_\_

Building: \_\_\_\_\_

Location: \_\_\_\_\_

start stop  
Date: \_\_\_\_\_ / \_\_\_\_\_

Time: \_\_\_\_\_ / \_\_\_\_\_

#### Maintenance Activity

Description of Activity: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACM Removed: YES / NO

Quantity: \_\_\_\_\_

Removal Method: \_\_\_\_\_

Disposal/Storage Site: \_\_\_\_\_

Site Supvr: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

#### Equipment/Preventive Measures

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Area Isolated        | <input type="checkbox"/> Signs Posted        | <input type="checkbox"/> HEPA Vacuum   | <input type="checkbox"/> Isolate Air Handlers           |
| <input type="checkbox"/> Tyvek Suits          | <input type="checkbox"/> Respirators         | <input type="checkbox"/> Goggles       | <input type="checkbox"/> Poly sheeting                  |
| <input type="checkbox"/> Disposal Bags        | <input type="checkbox"/> Disposal Drums      | <input type="checkbox"/> Duct Tape     | <input type="checkbox"/> Tools(detail below)            |
| <input type="checkbox"/> Encapsulant-Bridging | <input type="checkbox"/> Encapsulant-penetr. | <input type="checkbox"/> Minienclosure | <input type="checkbox"/> Change Room                    |
| <input type="checkbox"/> Enclosure            | <input type="checkbox"/> Glove Bag           | <input type="checkbox"/> Amended Water | <input type="checkbox"/> Repair Materials(detail below) |

Tools and Repair Materials-List All

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Staff Assigned

Name	Title	Duties	Date/Time	
			start	finish

Further Action Necessary: \_\_\_\_\_

Comments: \_\_\_\_\_

### FIBER RELEASE EPISODE REPORT

Campus: \_\_\_\_\_

Building: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Description of Episode: \_\_\_\_\_  
\_\_\_\_\_

Type of Episode(Major or Minor): \_\_\_\_\_

Person Identifying Episode: \_\_\_\_\_

#### Corrective Action

Method of Repair / Response Action: \_\_\_\_\_  
\_\_\_\_\_

ACM Removed: YES / NO

Quantity: \_\_\_\_\_

Removal Method: \_\_\_\_\_

Disposal/Storage Site: \_\_\_\_\_

Site Supvr: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

#### Equipment/Preventive Measures

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Area Isolated  | <input type="checkbox"/> Signs Posted        | <input type="checkbox"/> HEPA Vacuum   | <input type="checkbox"/> Isolate Air Handlers           |
| <input type="checkbox"/> Tyvek Suits  | <input type="checkbox"/> Respirators         | <input type="checkbox"/> Goggles       | <input type="checkbox"/> Poly sheeting                  |
| <input type="checkbox"/> Disposal Bags  | <input type="checkbox"/> Disposal Drums      | <input type="checkbox"/> Duct Tape     | <input type="checkbox"/> Tools(detail below)            |
| <input type="checkbox"/> Encapsulant-Bridging   | <input type="checkbox"/> Encapsulant-penetr. | <input type="checkbox"/> Minienclosure | <input type="checkbox"/> Change Room                    |
| <input type="checkbox"/> Enclosure  | <input type="checkbox"/> Glove Bag           | <input type="checkbox"/> Amended Water | <input type="checkbox"/> Repair Materials(detail below) |
| <input type="checkbox"/> Gross Removal(attach info on contractor, and all activity details) |  |  | <input type="checkbox"/> Notify Asbestos Coordinator    |

Tools and Repair Materials-List All

_____	_____	_____
_____	_____	_____
_____	_____	_____

#### Staff Assigned

Name	Title	Accreditation(if applic.)		Duties	Date/Time	
		State	Number		start	finish

Further Action Necessary: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## MAJOR O & M ACTIVITY REPORT

Campus: \_\_\_\_\_

Building: \_\_\_\_\_

Location: \_\_\_\_\_

start                      stop

Date: \_\_\_\_\_ / \_\_\_\_\_

Time: \_\_\_\_\_ / \_\_\_\_\_

### Maintenance Activity

Response Plan Designer: \_\_\_\_\_ State of Accred./Accred. #: \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACM Removed: YES / NO                      Quantity: \_\_\_\_\_                      Removal Method: \_\_\_\_\_

Disposal/Storage Site: \_\_\_\_\_                      Site Supvr: \_\_\_\_\_  
Address: \_\_\_\_\_                      Phone: \_\_\_\_\_

### Equipment/Preventive Measures

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Area Isolated        | <input type="checkbox"/> Signs Posted        | <input type="checkbox"/> HEPA Vacuum   | <input type="checkbox"/> Isolate Air Handlers           |
| <input type="checkbox"/> Tyvek Suits          | <input type="checkbox"/> Respirators         | <input type="checkbox"/> Goggles       | <input type="checkbox"/> Poly sheeting                  |
| <input type="checkbox"/> Disposal Bags        | <input type="checkbox"/> Disposal Drums      | <input type="checkbox"/> Duct Tape     | <input type="checkbox"/> Tools(detail below)            |
| <input type="checkbox"/> Encapsulant-Bridging | <input type="checkbox"/> Encapsulant-penetr. | <input type="checkbox"/> Minienclosure | <input type="checkbox"/> Change Room                    |
| <input type="checkbox"/> Enclosure            | <input type="checkbox"/> Glove Bag           | <input type="checkbox"/> Amended Water | <input type="checkbox"/> Repair Materials(detail below) |

☐ Gross Removal(attach info on contractor, and all activity details)

Tools and Repair Materials-List All

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Staff Assigned

Name	Title	Accreditation		Duties	Date/Time	
		State	Number		start	finish

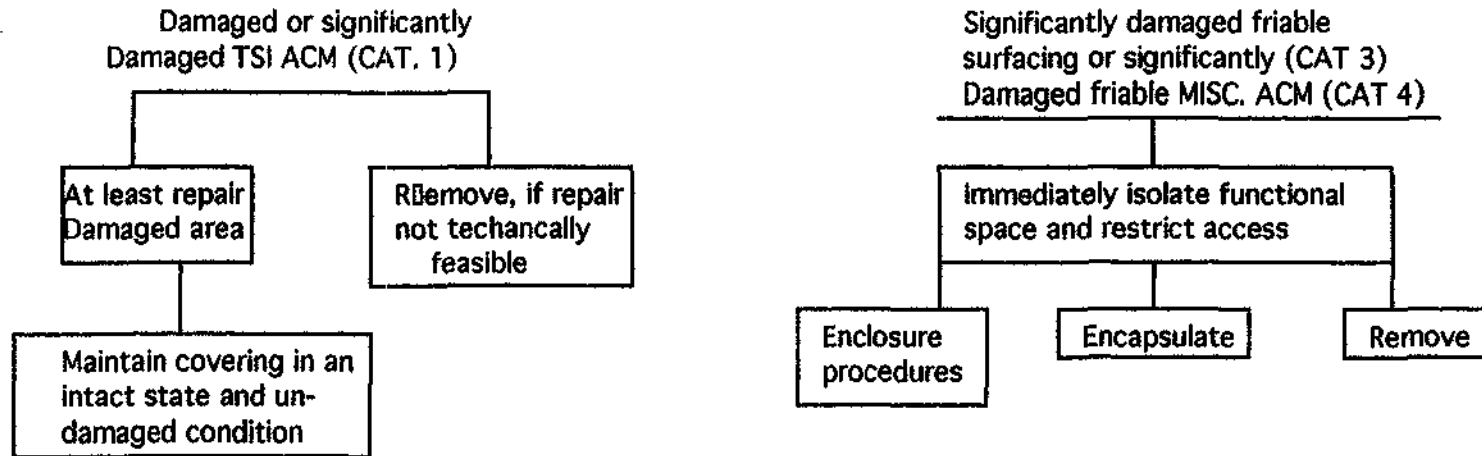
Further Action Necessary: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

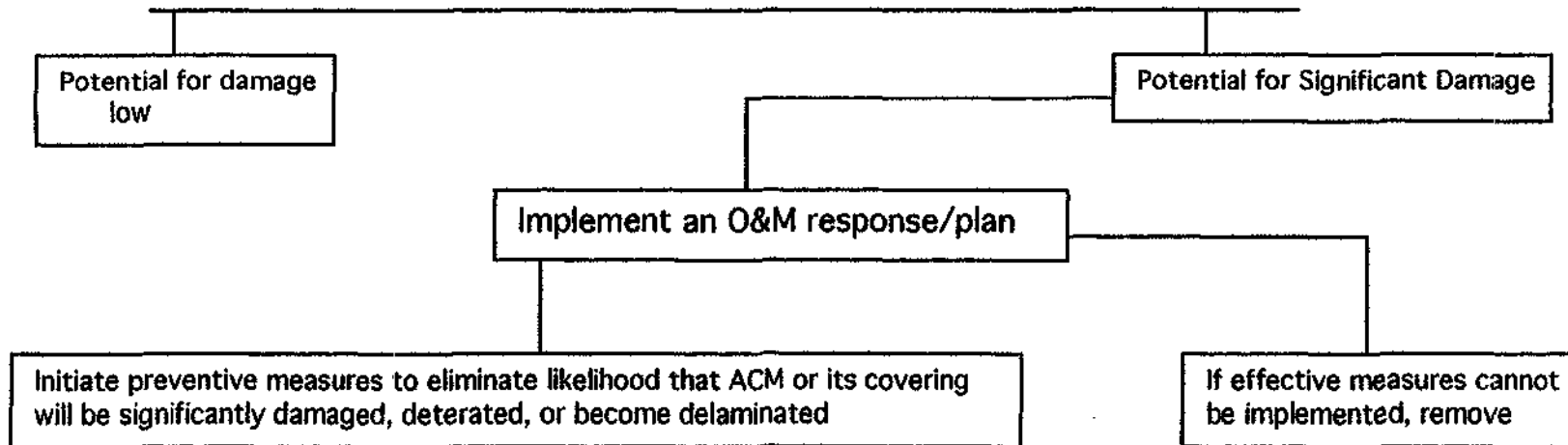
Supvr Signature: \_\_\_\_\_

Date: \_\_\_\_\_

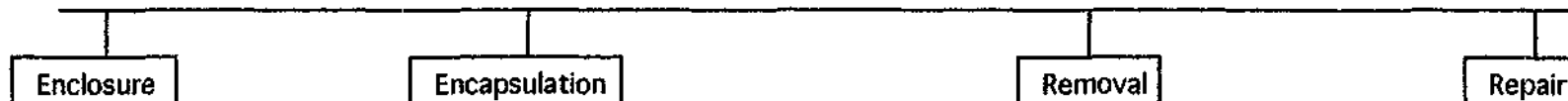
## POSSIBLE RESPONSE ACTIONS



## FRIABLE SURFACING, TSI OR FRIABLE MISCELLANEOUS ACM WITH POTENTIAL FOR DAMAGE (CAT. 2) (CAT 5) (CAT 6)

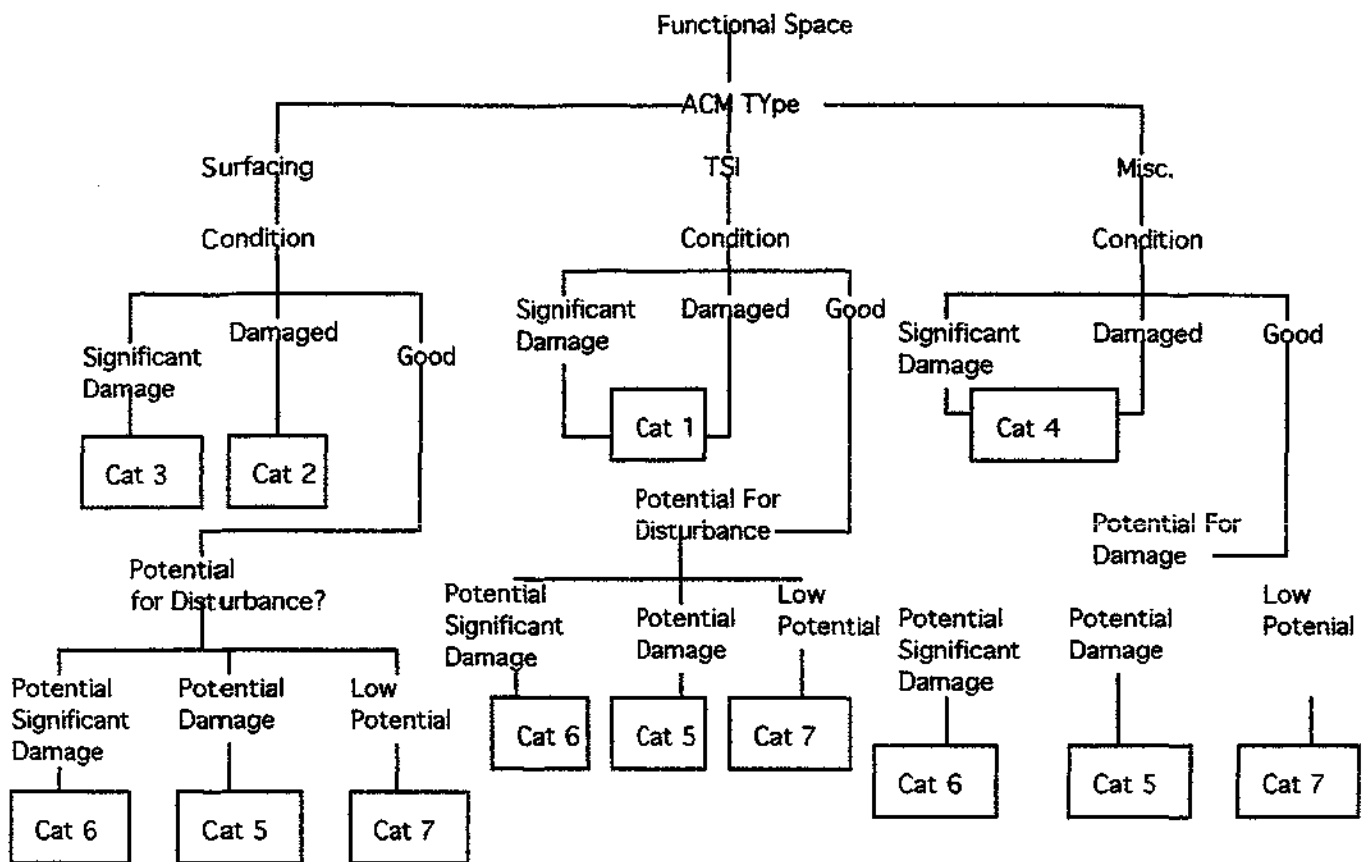


## DAMAGED FRIABLE SURFACING OR DAMAGED FRIABLE MISC. ACM (CAT 2),(CAT 1)





# Decision Tree for Determination of Physical Assessment Categories



## Physical Assessment Categories

- Cat 1 : Damaged or Significantly damaged thermal system insulation ACBM
- Cat 2 : Damaged friable surface ACBM
- Cat 3 : Significantly damaged friable surfacing ACBM
- Cat 4 : Damaged or significantly damaged friable miscellaneous ACBM
- Cat 5 : ACBM with potential for damage
- Cat 6 : ACBM with potential for significant damage
- Cat 7 : Any remaining friable ACBM or friable suspected ACBM

---

**A.H.E.R.A.**

THIS IS TO CERTIFY THAT

**JEFF SMITH**

HAS ATTENDED

**ABATEMENT  
PROJECT DESIGNER  
REFRESHER  
TRAINING COURSE**

Expiration date: 9/24/92

Course date: 9/24/91

Course location: Seattle, WA

Certificate: PDR-91-7811

Social Security #: 543-92-7811



ENVIRONMENTAL  
BUILDING  
CONSULTANTS  
INC.  
PORTLAND, OREGON

This refresher course certificate  
is given in conjunction with the  
original course certificate.

A handwritten signature is written over a horizontal line. The signature appears to be "G. Smith".

---

**A.H.E.R.A.**

THIS IS TO CERTIFY THAT

**JEFF SMITH**

HAS ATTENDED

**ABATEMENT  
PROJECT DESIGNER  
REFRESHER  
TRAINING COURSE**

Expiration date: 9/24/93

Course date: 9/24/92

Course location: Seattle, WA

Certificate: PDR-92-7811

Social Security #: 543-92-7811

This refresher course certificate  
is given in conjunction with the  
original course certificate.



ENVIRONMENTAL  
BUILDING  
CONSULTANTS  
INC.  
PORTLAND, OREGON

*Margaret A. Baker*

---

# **A.H.E.R.A.**

THIS IS TO CERTIFY THAT

**JEFF SMITH**

HAS ATTENDED

**ABATEMENT PROJECT DESIGNER  
REFRESHER**

TRAINING COURSE

Expiration date: 09/24/94

Course date: 09/24/93

Course location: Seattle, Washington

Certificate: RF-93-7811

Social Security #: 543-92-7811



ENVIRONMENTAL  
BUILDING CONSULTANTS, INC

AHERA is the Asbestos Hazard  
Emergency Response Act enacting  
Title II of Toxic Substance  
Control Act (TSCA)

A handwritten signature in cursive script, reading "Gregory M. Baker", is written over a horizontal line.

---

**A.H.E.R.A.**

THIS IS TO CERTIFY THAT

**JEFF SMITH**

HAS ATTENDED

**AHERA ASBESTOS PROJECT DESIGNER  
REFRESHER**

TRAINING COURSE

Expiration date: 09/23/95

Course date: 09/23/94

Course location: Kent, Washington

Certificate: RF-94-7811

Social Security #: 543-92-7811



ENVIRONMENTAL  
BUILDING CONSULTANTS, INC

AHERA is the Asbestos Hazard  
Emergency Response Act enacting  
Title II of Toxic Substance  
Control Act (TSCA)

*David Stover*

A.H.E.R.A.

THIS IS TO CERTIFY THAT

**JEFF SMITH**

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE  
for  
ASBESTOS ABATEMENT PROJECT DESIGNER  
**REFRESHER**

Course date: 09/22/95

Course location: Seattle, Washington

Certificate: PDR-95-7811

Social Security #: 543-92-7811



Expiration Date: 09/22/96

AHERA is the Asbestos Hazard Emergency  
Response Act enacting Title II of Toxic Sub-  
stance Control Act (TSCA)

For verification of the authenticity of this  
certificate contact: PBS Environmental  
1220 SW Morrison, Portland, OR 97205  
(503) 248-1939

This refresher course certificate is given in  
conjunction with the original course certificate.

*David Stover*

A.H.E.R.A.

THIS IS TO CERTIFY THAT

**JEFFERY SMITH**

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE  
for  
ASBESTOS ABATEMENT PROJECT DESIGNER  
**REFRESHER**

Course date: 09/18/96

Course location: Seattle, Washington

Certificate: PDR-96-7811

Social Security #: 543-92-7811



Expiration Date: 09/18/97

AHERA is the Asbestos Hazard Emergency  
Response Act enacting Title II of Toxic Sub-  
stance Control Act (TSCA)

For verification of the authenticity of this  
certificate contact: PBS Environmental  
1220 SW Morrison, Portland, OR 97205  
(503) 248-1939

This refresher course certificate is given in  
conjunction with the original course certificate.

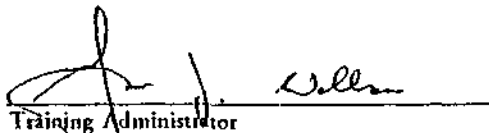
*David Stover*

# Certificate of Completion

This is to certify that  
**Jeffrey L. Smith**  
has satisfactorily completed  
8 hours of refresher training in  
**Project Designer**

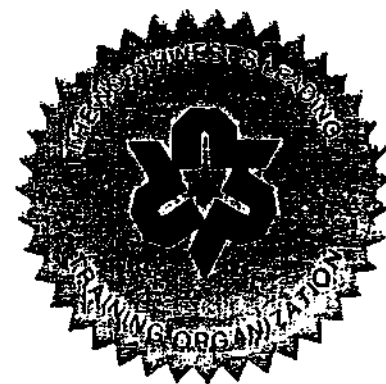
in compliance with TSCA Title II  
AIHERA Accredited

Sep 17, 1997

  
Training Administrator

Exp. Date: Sep 17, 1998

 **Prezant**



Cert. # 97-3993

Conducted at:  
Pac Pro Safety  
Holiday Inn / Portland, OR

Prezant Associates, Inc. • 330 Sixth Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-8858



# Certificate of Completion

This is to certify that  
**Jeffrey Smith**  
has satisfactorily completed  
8 hours of refresher training as a  
**Project Designer**

in compliance with TSCA Title II  
AHERA Accredited

Aug 28, 1998

  
Training Administrator

Exp. Date: Aug 28, 1999

 **Prezant**



Cert. # 98-08188

Conducted at:  
Pac Pro - Portland OR

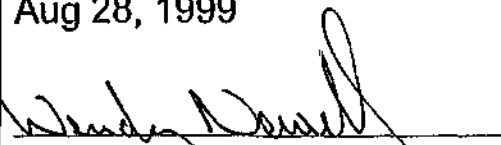
Prezant Associates, Inc. • 330 Sixth Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-9858

# Certificate of Completion

This is to certify that  
**Jeffrey Smith**  
has satisfactorily completed  
One day of refresher training as a  
**Project Designer**

in compliance with TSCA Title II  
AHERA Accredited

Aug 28, 1999



Training Coordinator

Exp. Date: Aug 27, 2000



**Prezant**



Cert. #991785

Conducted at:

Three Rivers Environmental, Inc. -  
Gladstone, OR

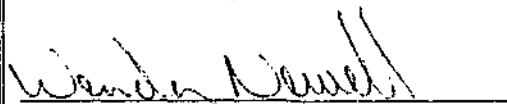
Prezant Associates, Inc. • 330 Sixth Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-8858

# Certificate of Completion

This is to certify that  
**Jeff Smith**  
has satisfactorily completed  
*4 hours of refresher training as a*  
**Building Inspector**

in compliance with TSCA Title II  
AHERA Accredited

Sep 23, 1999



Training Coordinator

Exp. Date: Sep 22, 2000



**Prezant**



Cert. #99-1930

Conducted at:  
PacPro - Gresham, OR

Prezant Associates, Inc. • 330 Sixth Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-8858

# Certificate of Completion

This is to certify that  
**Matthew Johnson**  
has satisfactorily completed  
4 hours of refresher training as a  
**Building Inspector**  
in compliance with TSCA Title II  
AIHERA Accredited

Aug 24, 1998

  
Training Administrator

Exp. Date: Aug 24, 1999



Cert. # 98-08182

Conducted at:  
Pac Pro - Portland OR

# Certificate of Completion

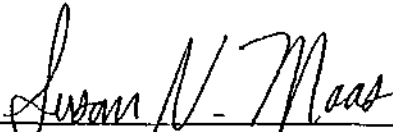
This is to certify that  
**Matthew Johnson**  
has satisfactorily completed  
3 days training as a

**Building Inspector**

in compliance with TSCA Title II/AHERA Accredited

Nov 17 - 19, 1997

Conducted at: Pac Pro Safety @  
Pony Soldier Inn

  
Training Administrator

Exp. Date: Nov 19, 1998

 **Prezant**

Prezant Associates, Inc. • 330 6th Avenue North, Suite 200 • Seattle, Washington 98109 • (206) 281-8858



Cert. # 97-4729

Exam Date: Nov 19, 1997