A.H.E.R.A.

Management Plan for Asbestos Containing Building Materials

Inza R. Wood Middle School
11055 S.W. Wilsonville Rd.
Wilsonville, OR 97070

TRE Project No. 1020-90

Conducted By:

Prepared by

THREE RIVERS ENVIRONMENTAL, Inc.

ASBESTOS MANAGEMENT PLAN

FOR

Inza R. Wood Middle School
11055 S.W. Wilsonville Rd.
Wilsonville, OR 97070

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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LOCAL EDUCATION AGENCY (LEA) GENERAL RESPONSIBILITIES UNDER AHERA

Pursuant to Section 763.84 and Section 763.93 of the EPA Asbestos in Schools Regulation (40 CFR Part 763), each management plan must contain a true and correct statement, signed by the LEA designated person, that certifies that the general LEA responsibilities have been met. This form is provided to assist you in complying with this portion of AHERA.

LEA Name:	West Linn / Wilsonville School District
LEA Address:	Stafford Rd. West Linn, OR 97068
Designated Person Name:	Tim Woodley
Designated Person Address:	Stafford Rd. West Linn, OR 97068
Phone number:	(503)638-9869

ASSURANCES

1. This AHERA management plan was developed and has been submitted pursuant to the Asbestos Hazard Emergency Response Act of 1986, Public law 99-519; and the United States Environmental Protection Agency Rule: Asbestos Containing Materials in Schools, 40 CFR Part 763; and the undersigned does hereby certify that the LEA has and will ensure the following:

2. The activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763.

3..All custodial and maintenance employees will be properly trained as required in Part 763 and all other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration Asbestos Standard for Construction, the EPA Worker Protection Rule, or applicable State regulations).

4. All workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, post-response action activities, including periodic reinspection and surveillance activities, that are planned or in progress.

5. All short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.

6. All warning labels are posted in accordance with Section 763.95.

7. All management plans are available for inspection and notification of such availability has been provided as specified in the management plan under Section 763.93(g).

8. The undersigned person designated by the LEA pursuant to Section 763.84(g) (1) has received adequate training as stipulated in Section 763.84(g) (2).

9. The LEA has and will consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763.

Signature Tim L. Woodley Date: 11-1-99

LEA Designated Person, pursuant to
40 CFR 763.93(i) and 763.84

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 in 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.

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. The 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

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

Office of School District Services

AHERA GENERAL DATA SHEET

Inza R. Wood - Main	West Linn School District	Clackamas
Name of School Building	LEA (District)	County
PO Box 100	West Linn	97068-0100
Address	City	Zip Code
(503) 682-0101	Samuel Nutt	(503)638-9869
Building Telephone Number	District's Asbestos Program Manager	Telephone Number

Public X Private ___ State ___

CONSTRUCTION DATA

Year Built: Before 1930 ___ 1930-44 ___ 1945-60 ___ 1961-75 ___ After 1975 XX Actual 1980

Additions Dates: N/A Size (Sq. Ft. all floors) 43,285

Construction Type: Steel ___ Wood XX Concrete ___ Masonry XX Other ___

Roof Framing: Steel ___ Wood XX Concrete ___

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

Renovation: Yes ___ No XX Year: N/A

USE AND OCCUPANCY

Primary Use: School XX Athletic Facility ___ Office ___ Warehouse ___

Maintenance Building ___ Other (describe) ___

No. of Occupants: Staff 36 Students 317 Maint./Custodial Personnel 2

INSPECTOR*	MANAGEMENT PLANNER*
Name Gary Adler	Name John Newlin
Business Hall-Kimbrell	Business Hall-kimbrell
80026 Exp. Date ___	# 80046 Exp. Date ___

Course Provider Hall-Kimbrell

*Primary person if more than one person.

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

Office of School District Services

AHERA GENERAL DATA SHEET

Inza P. Wood-Maint Bldg	West Linn School District	Clackamas
Name of School Building	LEA (District)	County
PO Box 100	West Linn	97068-0100
Address	City	Zip Code
(503) 682-0101	Samuel Nutt	(503)638-9869
Building Telephone Number	District's Asbestos Program Manager	Telephone Number

Public X Private ___ State ___

CONSTRUCTION DATA

Year Built: Before 1930 __ 1930-44 __ 1945-60 __ 1961-75 __ After 1975 XX Actual 1986

Additions Dates: N/A Size (Sq. Ft. all floors) 264

Construction Type: Steel ___ Wood XX Concrete ___ Masonry ___ Other ___

Roof Framing: Steel ___ Wood XX Concrete ___

Heating System: Steam ___ Hot Water ___ Forced Air ___ Electric Baseboard ___ Heat Pump ___ Other None

Renovation: Yes ___ No XX Year: N/A

USE AND OCCUPANCY

Primary Use: School ___ Athletic Facility ___ Office ___ Warehouse XX

Maintenance Building ___ Other (describe) _____

No. of Occupants: Staff -0- Students -0- Maint./Custodial Personnel -0-

INSPECTOR*	MANAGEMENT PLANNER*
Name Gary Adler	Name John Newlin
Business Hall-Kimbrell	Business Hall-kimbrell
80026 Exp. Date	# 80046 Exp. Date

Course Provider Hall-Kimbrell

*Primary person if more than one person.

RECORDS RETENTION: INDEFINITE

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 Inza R. Wood Middle School

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
			Lineal Feet	Square Feet	
1. Damaged or significantly damaged TSI ACM					
2. Damaged friable surfacing ACM					
3. Significantly damaged friable surfacing ACM					
4. Damaged or significantly damaged friable miscellaneous ACM					
5. ACBM with potential for damage					2140
6. ACBM with potential for significant damage					
7. Other friable ACBM, or friable suspected ACBM					
8. Nonfriable ACBM, or nonfriable suspected ACBM					
• Total ACBM (Total 1 through 8)	Ft^2	0		0	2140
	L.F.		0		
Total Friable ACBM (Total 1 through 7)	Ft^2				
	L.F.				

LOCATIONS & QUANTITIES OF ASBESTOS CONTAINING BUILDING MATERIALS

SUMMARY OF FINDINGS

CAMPUS #8 INZA R. WOOD MIDDLE SCHOOL

Building #1 - Main Building

Laboratory analysis confirmed that mastic located under vinyl floor tiles in this building was asbestos containing. A new homogeneous sampling area has been created for this material and can be found in the Asbestos Management Plan. The specific location of the asbestos containing mastic is located on the drawing provided for this building.

Vinyl floor tiles previously considered asbestos containing were confirmed to be nonasbestos by laboratory analysis. These materials and their homogeneous sampling areas have been deleted from the Asbestos Management Plan.

Ceiling tile samples taken at the time of the inspection were confirmed to be nonasbestos by laboratory analysis.

Building #2 - Maintenance Building

No suspect materials were found in this building and no samples were taken.

Campus: 008 Inza R. Wood Middle School

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 Pads
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	MUP on Non-Suspect Pipe	40	Poured in Insulation
15	MUP on Pipe Covering	41	Contaminated Soil
16	MUP on Corr. Pipe Cover	42	Tectum
17	MUP 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, Accoustical - 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 place 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.

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AHE[illegible] verview

INZA WO[illegible] MIDDLE SCHOOL

MAIN BUILDING

C	Homogeneous Area	Condition			%ACM	Quanity	S/L	Response Action				Sample Data			Cost Estimates	
		SD	D	PD				OM	REP	REM	CL	Amo	Chry	Other	Repair	Removal
M	FLOOR TILE			X		100	SF	X								
CA	TRANSITE SIDING			X		40	SF	X								
M	FLOOR TILE			X		21000	SF	X								
Codes:																
T - Thermal																
S - Surfacing																
M - Misc																
CA - Transite																

PSI/Hall-Kimbrell Environmental Servic : Asbestos Petrographic Analysis

CLIENT: WEST LINN SCHOOL DISTRICT

CAMPUS NAME & NUMBER: INZA R. WOOD MIDDLE SCHOOL (008)

PROJECT #: 572-29-291

BUILDING NAME & NUMBER: MAIN BUILDING (001)

LOCATION	MATERIAL	SAMPLE NUMBER	CONS	HOMOG	COLOR	TOT ASB	CHRY	AMO	CRO	ANT	ACT/ TRE	WOOL	CEL	MICA	PER	BIND	OTHER 1	OTHER 2
Main Bldg/Music Room	DROP OR LAY-IN PANEL	118800	Y	Y	G	0	0	0	0	0	0	30	40	0	20	10	0	0
Main Bldg/Music Room	DROP OR LAY-IN PANEL	118801	Y	Y	G	0	0	0	0	0	0	30	40	0	20	10	0	0
Main Bldg/Music Room	DROP OR LAY-IN PANEL	118802	Y	Y	G	0	0	0	0	0	0	30	40	0	20	10	0	0
Main Bldg/East Wing	DROP OR LAY-IN PANEL	118803	Y	Y	G	0	0	0	0	0	0	30	40	0	25	10	0	0
Main Bldg/East Wing	DROP OR LAY-IN PANEL	118804	Y	Y	G	0	0	0	0	0	0	30	40	0	25	10	0	0
Main Bldg/West Wing	DROP OR LAY-IN PANEL	118805	Y	Y	G	0	0	0	0	0	0	30	40	0	25	10	0	0
Main Bldg/Library	ACOUSTICAL TILE	118806	Y	Y	B	0	0	0	0	0	0	30	40	0	20	10	0	0
Main Bldg/Library	ACOUSTICAL TILE	118807	Y	Y	K	0	0	0	0	0	0	30	40	0	20	10	0	0
Main Bldg/Commons	ACOUSTICAL TILE	118808	N	Y	K	0	0	0	0	0	0	80	0	0	0	20	0	0
Main Bldg/Commons	VINYL FLOOR TILE	118809	Y	Y	R	0	0	0	0	0	0	0	0	0	0	30	CA 70	0
Main Bldg/East Wing	VINYL FLOOR TILE	118810	Y	Y	G	0	0	0	0	0	0	0	0	0	0	30	CA 70	0
Main Bldg/West Wing	VINYL FLOOR TILE	118811	Y	Y	G	0	0	0	0	0	0	0	0	0	0	30	CA 70	0
Main Bldg/Commons	MASTIC	118812	Y	Y	G	15	15	0	0	0	0	0	5	0	0	0	GM 20	TA 60

T=Trace Amount

PSI/Hall-Kimbrell Environmental Services, Inc. Asbestos Petrographic Analysis

CLIENT: WEST LINN SCHOOL DISTRICT

BUILDING #: 8

PROJECT #: 572-19514

CAMPUS NAME: INZA WOOD MIDDLE SCHOOL

LOCATION	MATERIAL	SAMPLE NUMBER	CONS	HOMOG	COLOR	TOT ASB	CHRY	AMO	CRO	ANT	ACT/ TRE	WOOL	CEL	MICA	PER	BIND	OTHER 1	OTHER 2
UPPER L/MECH ROOM	DRYWALL	835148	Y	Y	W	0	0	0	0	0	0	0	10	0	0	50	GM 40	0
UPPER L/MECH ROOM	DRYWALL TAPE AND MUD	835149	N	Y	W	0	0	0	0	0	0	0	30	0	0	50	GM 20	0
UPPER L/MECH ROOM	DRYWALL	835150	Y	Y	W	0	0	0	0	0	0	0	10	0	0	50	GM 40	0
UPPER L/MECH ROOM	DRYWALL TAPE AND MUD	835151	Y	Y	E	0	0	0	0	0	0	0	30	0	0	50	GM 20	0
UPPER L/MECH ROOM	DRYWALL	835152	Y	Y	W	0	0	0	0	0	0	0	10	0	0	50	GM 40	0
UPPER L/MECH ROOM	DRYWALL TAPE AND MUD	835153	Y	Y	E	0	0	0	0	0	0	0	20	0	0	40	GM 40	0

T=Trace Amount

West Linn S.D. 3JT
37-0050

CAMPUS : 008 – Inza R. Wood Middle School
BUILDING : 001 – Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

* * * INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER – 02 * * *

SYSTEM: Heating Water

LOCATION:
All Floors in Building

TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	01	0
			02	0
			03	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
74 4 In. O. D.			
10 6 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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

* * * INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER – 03 * * *

SYSTEM: Dom. Hot Water

LOCATION:
All Floors in Building

TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	04	0
			05	0
			06	0

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
71 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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

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

SYSTEM: Dom. Cold Water
LOCATION: All Floors in Building
TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY: N/A
REASON for DAMAGE CATEGORY: N/A
POTENTIAL FOR DISTURBANCE: N/A

SAMPLE#	%ASB
07	0
08	0
09	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
62 4 In. O. D.			
12 6 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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

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

SYSTEM: Ceiling Matl.
LOCATION: Ground Floor
TYPE OF MATERIAL: Acoustical Tile (1x1)

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	10	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
19000 Square Feet			
		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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
N/A	N/A

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

SYSTEM: Ceiling Matl.
LOCATION: Ground Floor
TYPE OF MATERIAL: Drop or Lay-in Panel

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	11	0

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

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

SYSTEM: Ceiling Matl.
LOCATION: Ground Floor
TYPE OF MATERIAL: Acoustical Tile (1x1)

DAMAGE CATEGORY: N/A
REASON for DAMAGE CATEGORY: N/A
POTENTIAL FOR DISTURBANCE: N/A
SAMPLE#: 12
%ASB: 0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
350 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:

LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

* * * INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 97 * * *

SYSTEM: Floor Matl.

LOCATION:
All Floors in Building

TYPE OF MATERIAL: Vinyl Floor Tile

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	61	6

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
100 Square Feet	$337	$256	$593
		AREA TOTAL	$593

-MANAGEMENT PLAN RECOMMENDATION-

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

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 - 98 * * *

SYSTEM: Non-Friable

LOCATION:
Sub-Basement

TYPE OF MATERIAL: Transite Siding

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		Assumed

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

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

SYSTEM: Heating Water
LOCATION: All Floors in Building
TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	01	0
			02	0
			03	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
74 4 In. O. D.			
10 6 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:

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

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

SYSTEM: Dom. Hot Water
LOCATION: All Floors in Building
TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	04	0
			05	0
			06	0

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

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

SYSTEM: Ceiling Matl. LOCATION: Ground Floor TYPE OF MATERIAL: Acoustical Tile (1x1)

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	10	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
19000 Square Feet			
		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:

COMMENTS:

RESPONSE ACTION SCHEDULE	
START DATE	COMPLETION DATE
N/A	N/A

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

SYSTEM: Ceiling Matl. LOCATION: Ground Floor TYPE OF MATERIAL: Drop or Lay-in Panel

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	11	0

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

* * * INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 97 * * *

SYSTEM: Floor Matl.

LOCATION:
All Floors in Building

TYPE OF MATERIAL: Vinyl Floor Tile

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	61	6

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
100 Square Feet	$337	$256	$593
		AREA TOTAL	$593

-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

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

* * * INSPECTION RESULTS UNIFIED SAMPLING AREA NUMBER - 98 * * *

SYSTEM: Non-Friable

LOCATION:
Sub-Basement

TYPE OF MATERIAL: Transite Siding

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	Assumed	

AHERA COMPLIANCE PROGRAM
*** BOILER ROOM SUMMARY ***
West Linn S.D. 3JT

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
BOILER RM: 1

37-0050

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

JOINTS

DAMAGE CATEGORY:
N/A

REASON for DAMAGE CATEGORY:
N/A

POTENTIAL FOR DISTURBANCE:
N/A

SMP	%ASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
00	0%	Heating Water	UPSTAIRS FROM STORAGE AREA	MJP on Non-Suspect Pipe	35 8 In. O. D.

-MANAGEMENT PLAN RECOMMENDATION-

RECOMMENDED RESPONSE ACTION:
N/A

PRIORITY:
0

PREVENTIVE MEASURES:
See Part I and O&M Code: N/A

LEA RESPONSE:
ACTION ELECTION:

COMMENT:

RESPONSE ACTION SCHEDULE

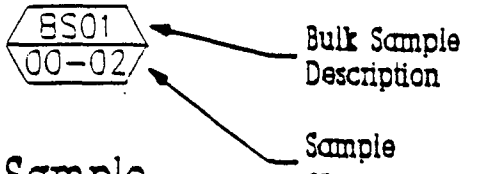
START DATE	COMPLETION DATE
N/A	N/A

	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
BOILER ROOM ESTIMATED COSTS	$0	$0	$0

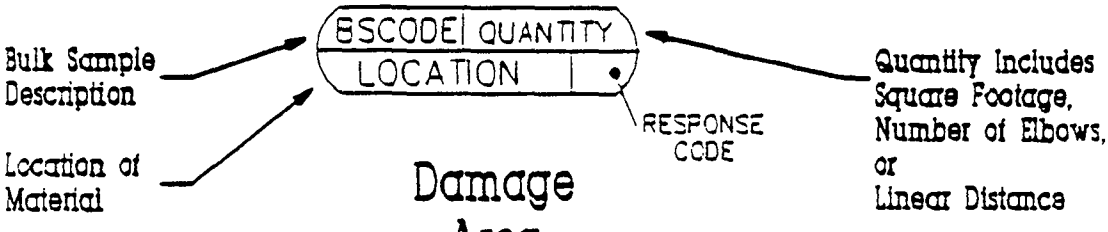
ASBESTOS LOCATION DIAGRAMS

Campus: 008 Inza R. Wood Middle School

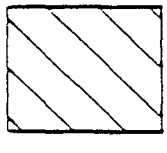
Location of Caution Label



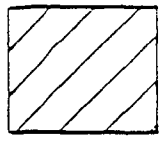
Sample Location



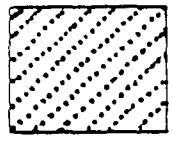
Damage Area



Vinyl Floor Tile



Drop, Lay In, Accoustical



Spray Applied Material

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 Pads
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	MUP on Non-Suspect Pipe	40	Poured in Insulation
15	MUP on Pipe Covering	41	Contaminated Soil
16	MUP on Corr. Pipe Cover	42	Tectum
17	MUP 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, Accoustical - 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 place 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.

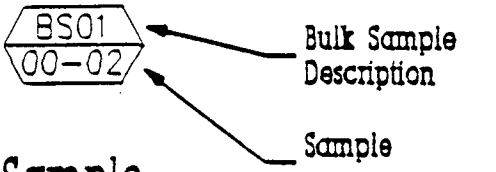
****

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

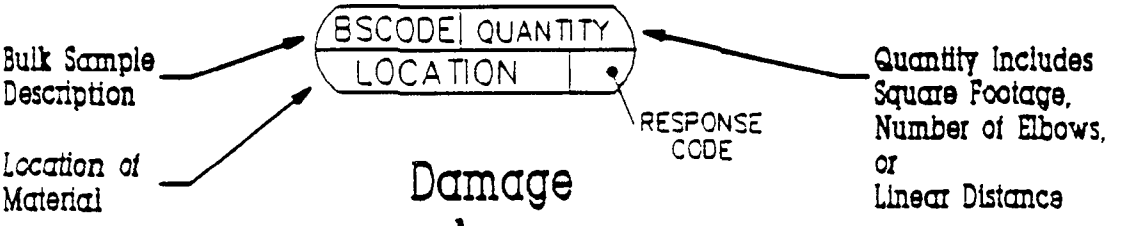
****

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.

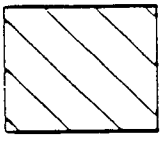
Location of Caution Label



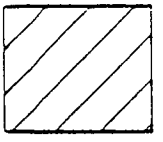
Sample Location



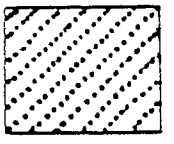
Damage Area



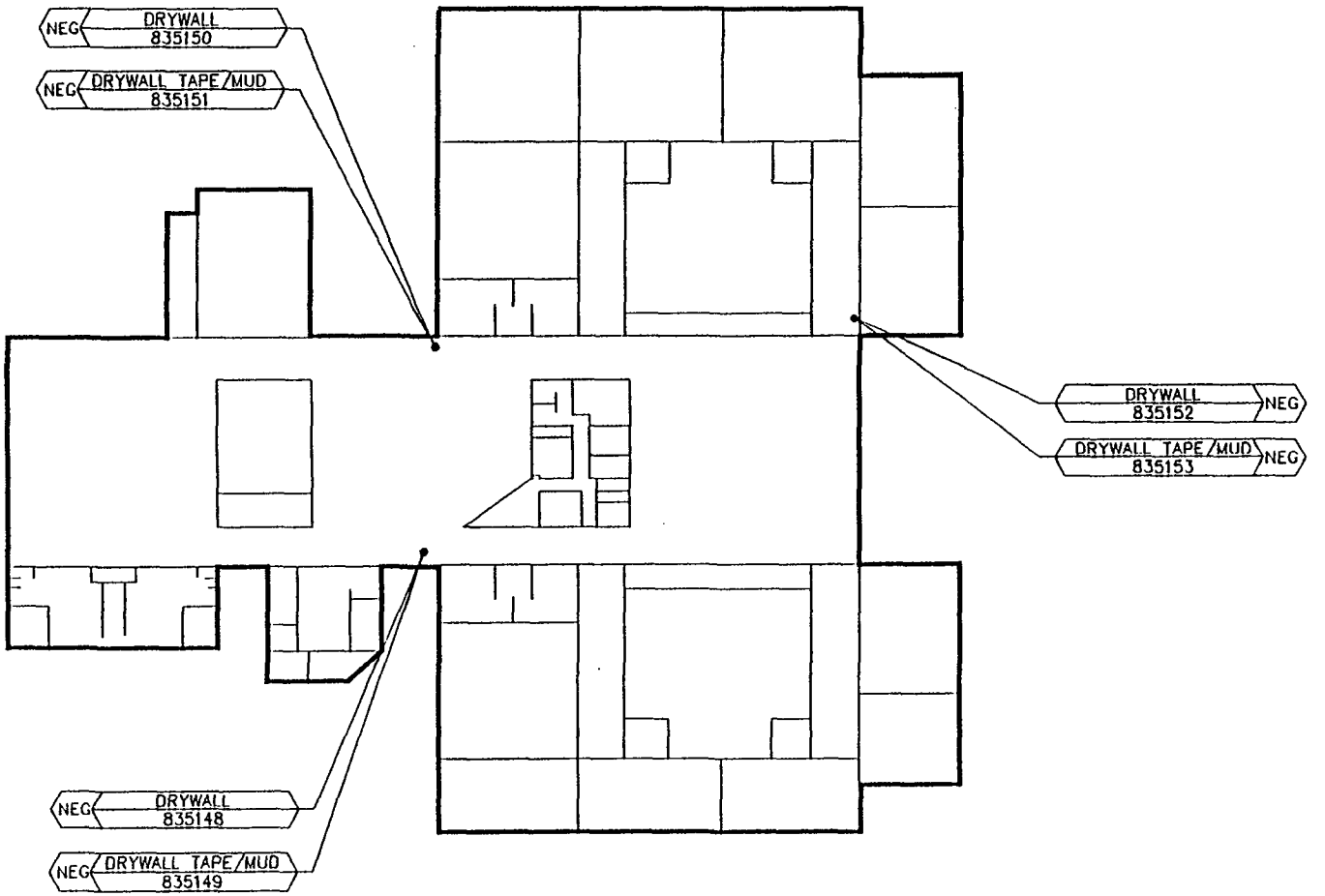
Vinyl Floor Tile



Drop, Lay In, Accoustical



Spray Applied Material



MAIN FLOOR

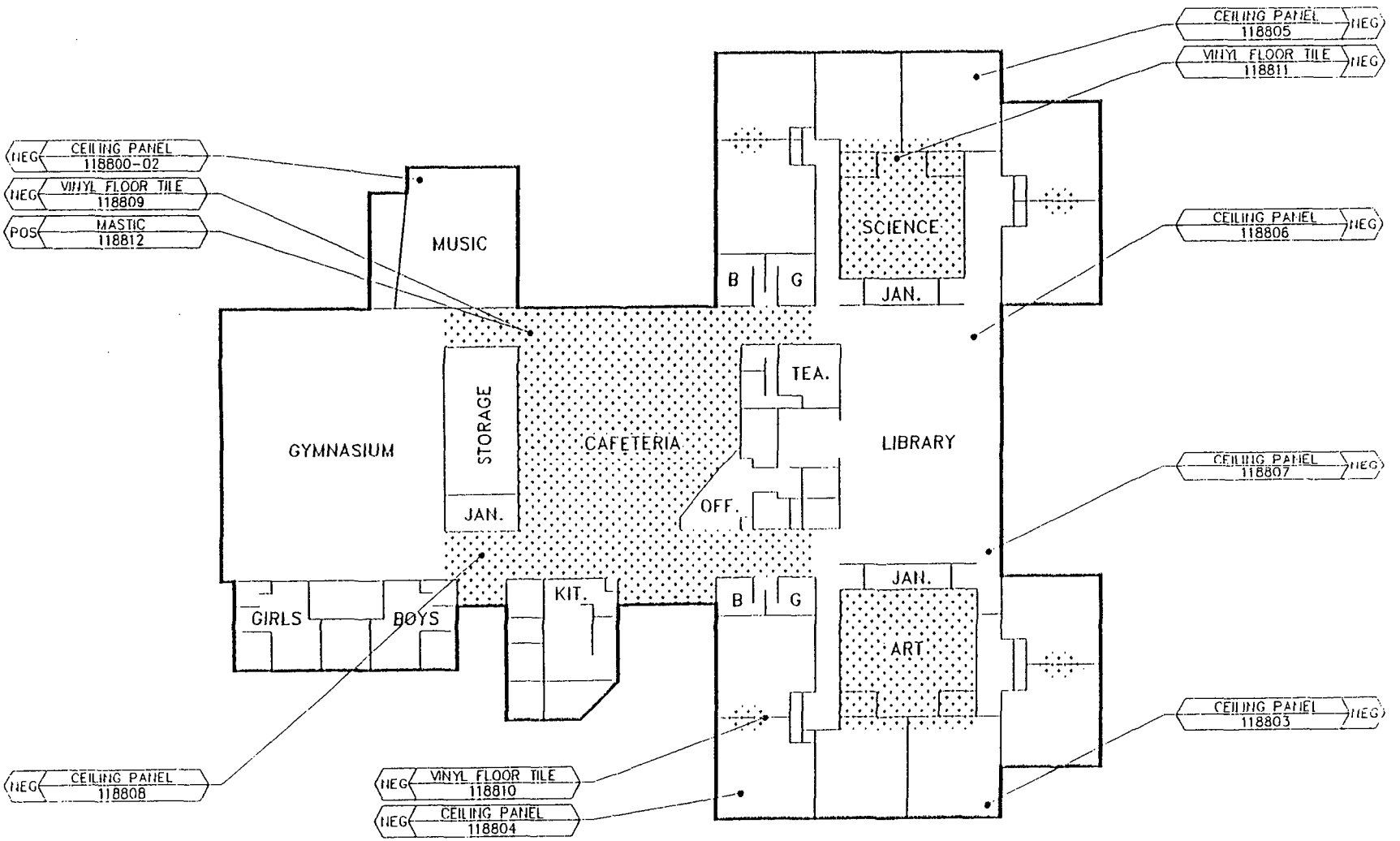
NOT TO SCALE

+/- DRYWALL 123456-78

BULK SAMPLE TYPE

SAMPLE IDENTIFICATION NUMBER

DESIGNED BY: D. ZOLLER	psi Professional Service Industries, Inc. 4821 S.W. Kelly Avenue Portland, Oregon 97201
DRAWN BY: B. McCULLOCH	PROJECT NO. 572-19-514
CHECKED BY: P. QUINN	SHEET NO. 51408-1
DATE: 03-23-92	AHERA 3-YEAR REINSPECTION WEST LINN SCHOOL DISTRICT INZA R. WOOD MIDDLE SCHOOL MAIN FLOOR



MAIN FLOOR

NOT TO SCALE

LEGEND

- POSITIVE FLOOR TILE ONLY
- POSITIVE FLOOR TILE AND MASTIC
- POSITIVE MASTIC ONLY

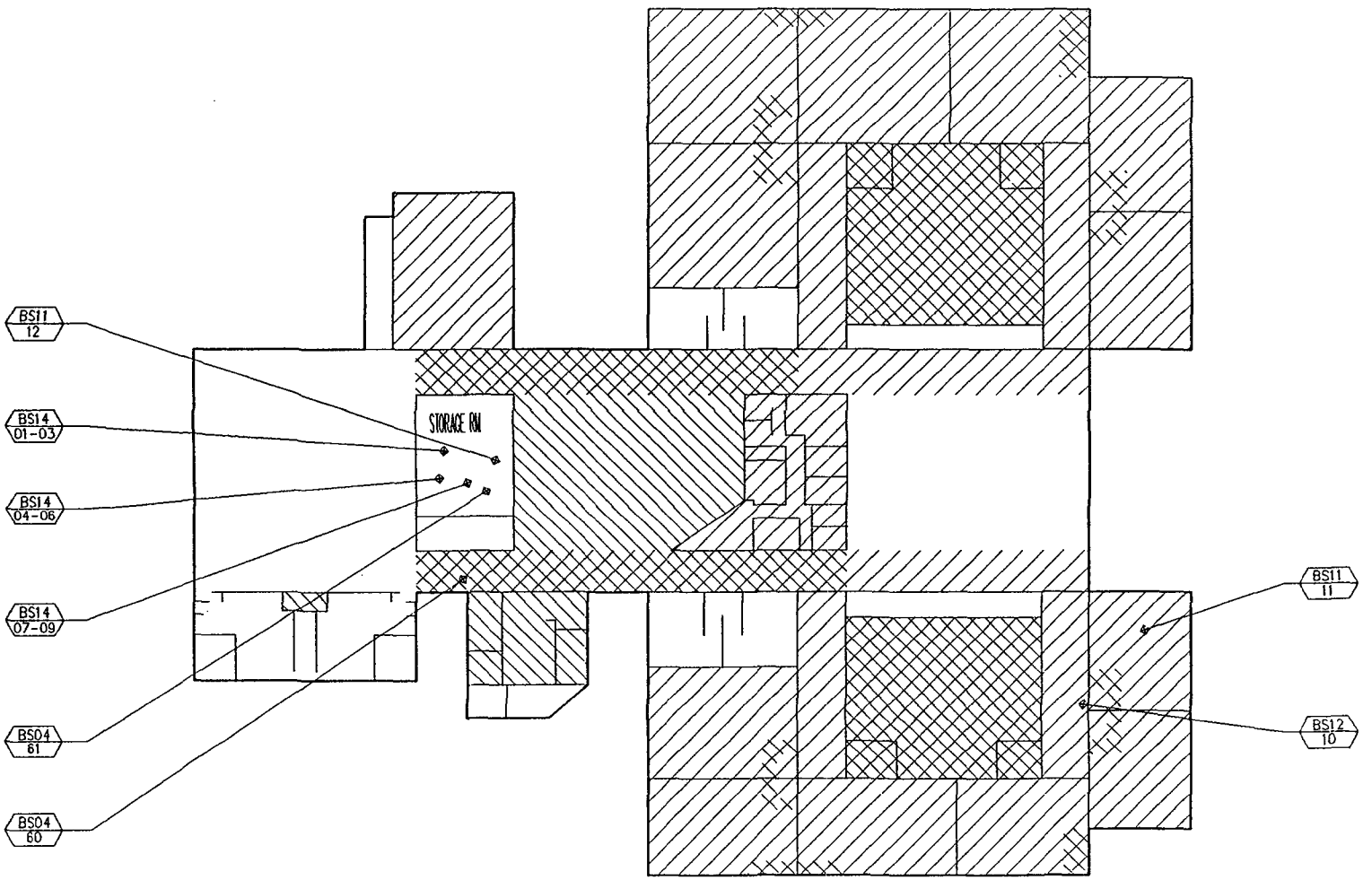
#/ DRYWALL 123456-78 — #/ BULK SAMPLE TYPE; SAMPLE IDENTIFICATION NUMBER

DESIGNED BY:	S. BETTELYOUN
DRAWN BY:	J. JACKMAN
CHECKED BY:	P. QUINN
DATE:	12-09-92

Professional Service Industries, Inc.
4621 S.W. Kelly Avenue
Portland, Oregon 97201

PROJECT NO. 572-29-291
SHEET NO. 291-6

AHERA INSPECTION
WEST LINN SCHOOL DISTRICT
INZA R. WOOD MIDDLE SCHOOL
MAIN FLOOR



LEGEND:

VINYL FLOOR TILE

DROP, LAY IN, ACCOUSTICAL

SPRAY/TROWEL APPLIED MATERIAL

CAUTION BOILER ROOM ENTRANCE
LOCATION OF CAUTION LABEL

BS01 00-02
SAMPLE LOCATION

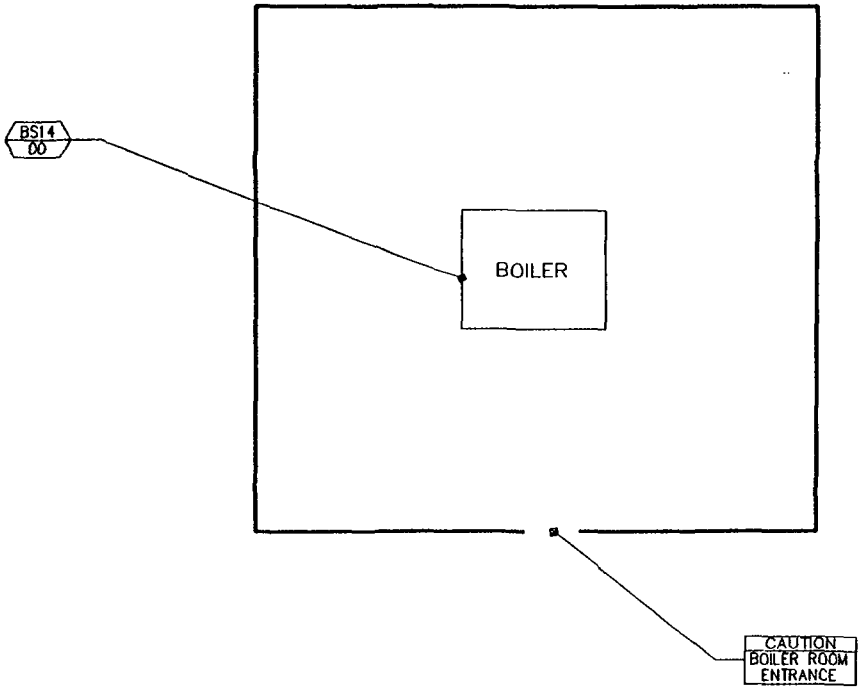
BSCODE | QUANTITY
LOCATION | RESPONSE CODE
DAMAGE AREA

HALL-KIMBRELL ENVIRONMENTAL SERVICES
4840 WEST FIFTEENTH STREET
LAWRENCE, KANSAS 66044

DATE 10/03/88
008001A

AHERA COMPLIANCE PROGRAM

37-0050-008-001
WEST LINN SCHOOL DISTRICT
WOOD SCHOOL



BOILER ROOM

LEGEND:

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 | RESPONSE CODE — DAMAGE AREA

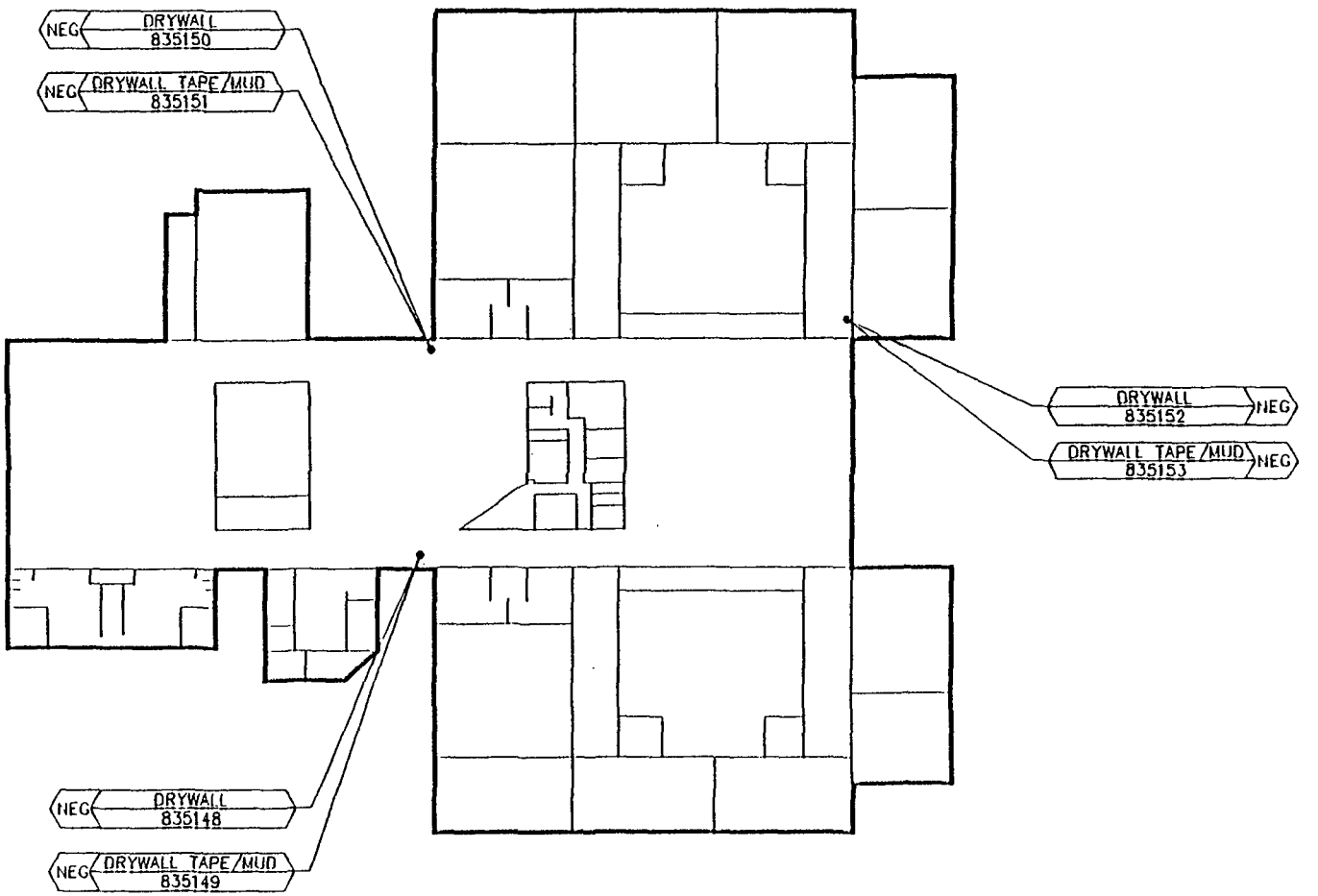
HALL-KIMBRELL ENVIRONMENTAL SERVICES
4840 WEST FIFTEENTH STREET
LAWRENCE, KANSAS 66044

DATE 10/03/88

0080018

AHERA COMPLIANCE PROGRAM

37-0050-008-001
WEST LINN SCHOOL DISTRICT
WOOD SCHOOL



MAIN FLOOR

NOT TO SCALE

N

+/- DRYWALL 123456-78

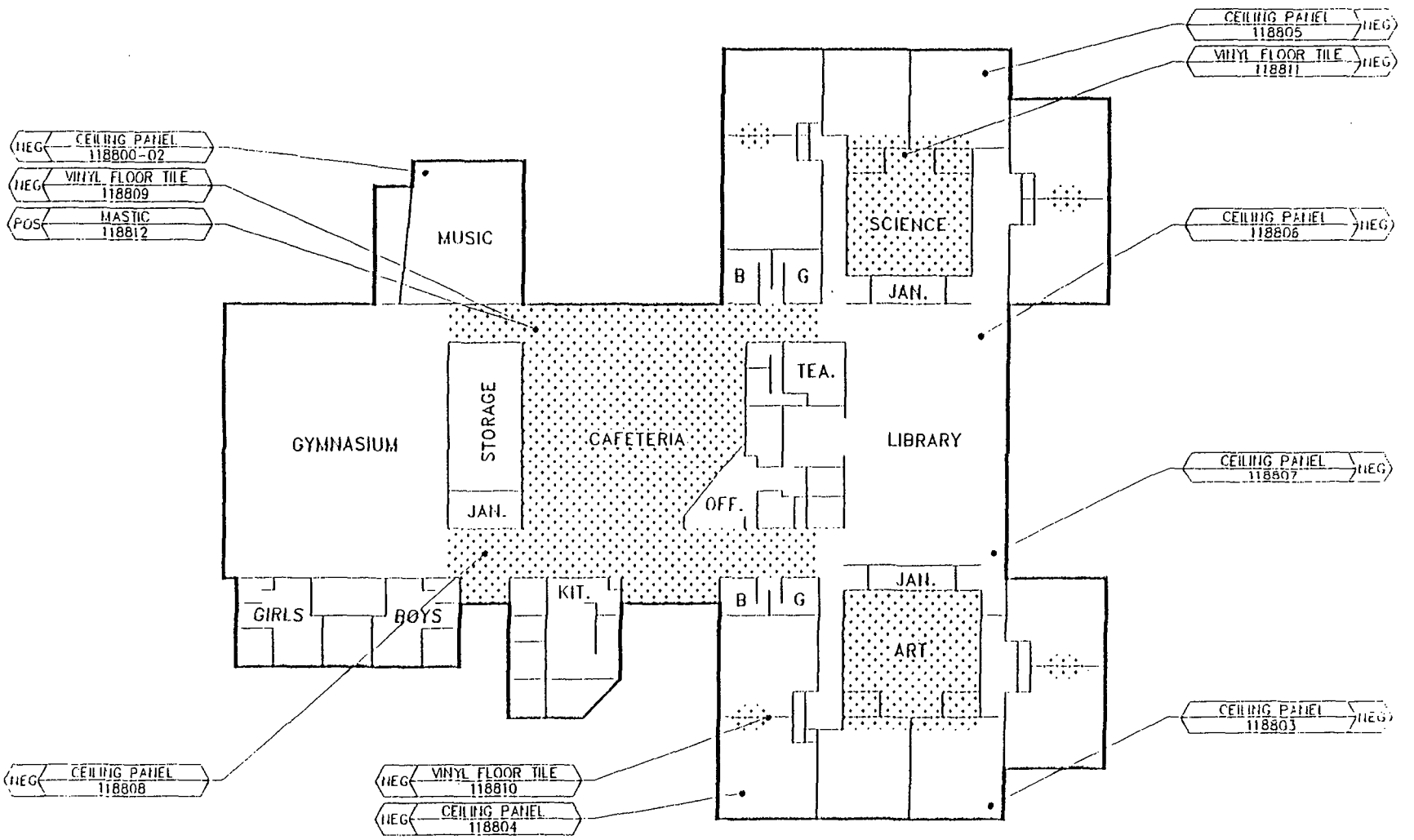
BULK SAMPLE TYPE

SAMPLE IDENTIFICATION NUMBER

DESIGNED BY: D. ZOLLER	PROJECT NO. 572-19-514
DRAWN BY: B. McCULLOCH	SHEET NO. 51408-1
CHECKED BY: P. QUINN	
DATE: 03-23-92	

DSI Professional Service Industries, Inc.
4821 S.W. Kelly Avenue
Portland, Oregon 97201

AHERA 3-YEAR REINSPECTION
WEST LINN SCHOOL DISTRICT
INZA R. WOOD MIDDLE SCHOOL
MAIN FLOOR



MAIN FLOOR

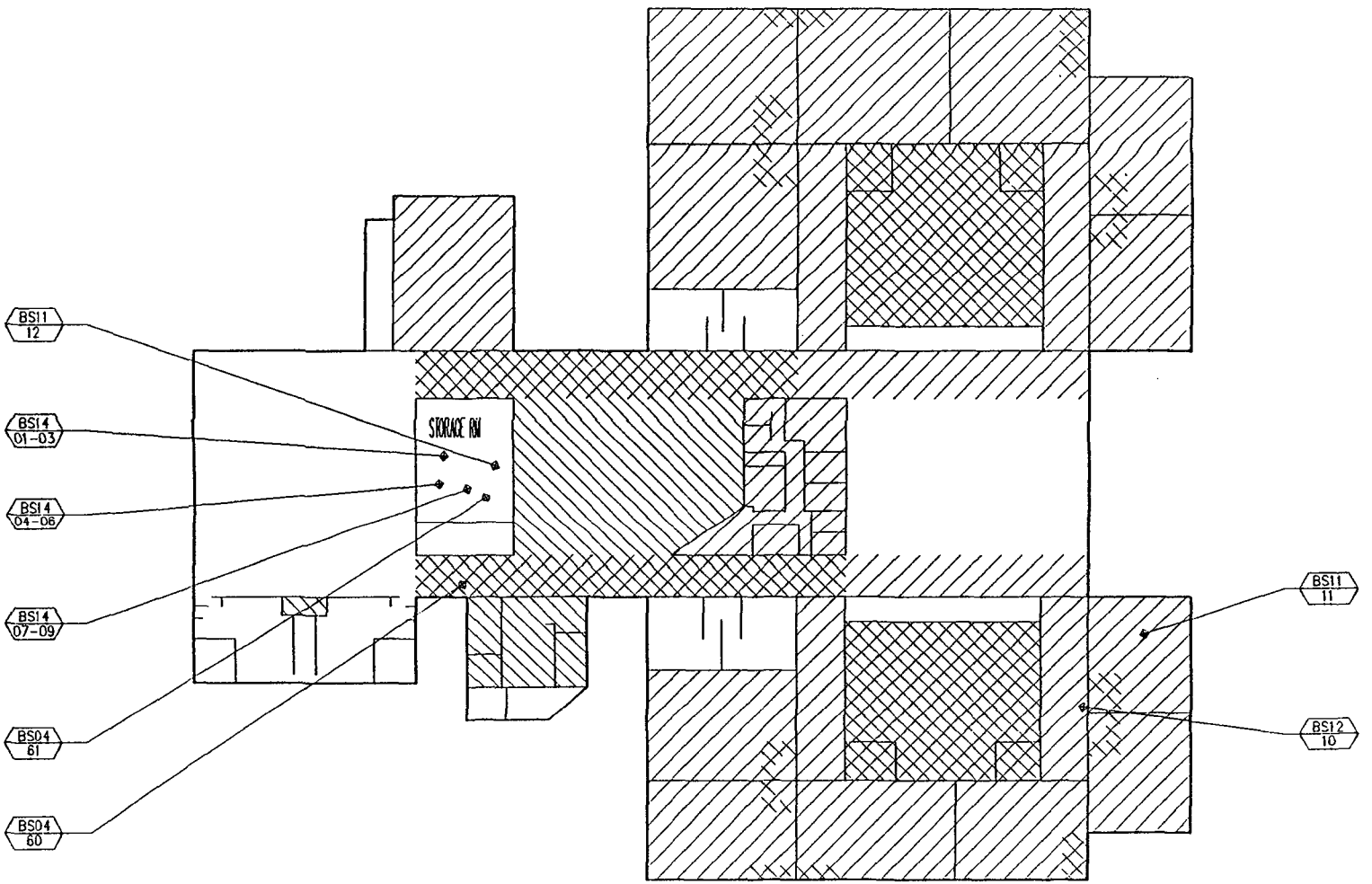
NOT TO SCALE

LEGEND

- POSITIVE FLOOR TILE ONLY
- POSITIVE FLOOR TILE AND MASTIC
- POSITIVE MASTIC ONLY

1/ DRYWALL 123456-78 — BULK SAMPLE TYPE; SAMPLE IDENTIFICATION NUMBER

DESIGNED BY: S. BETHELYON	PSI Professional Service Industries, Inc. 4821 S.W. Kelly Avenue Portland, Oregon 97201
DRAWN BY: J. JACKMAN	PROJECT NO. 572-23-291
CHECKED BY: P. CURRIE	SHEET NO. 291-6
DATE: 12-09-92	AHERA INSPECTION WEST LINN SCHOOL DISTRICT INZA R WOOD MIDDLE SCHOOL MAIN FLOOR



LEGEND:

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
RESPONSE CODE
DAMAGE AREA

HALL-KIMBRELL ENVIRONMENTAL SERVICES
4840 WEST FIFTEENTH STREET
LAWRENCE, KANSAS 66044

DATE 10/03/88
008001A

AHERA
COMPLIANCE PROGRAM

37-0050-008-001
WEST LINN SCHOOL DISTRICT
WOOD SCHOOL

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) Bolton Middle School			
BUILDING: (001) Bolton 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	$337	$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) Administratiion 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

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 04/24/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
40 Square Feet	$286	$204	$490
		AREA TOTAL	$490

-MANAGEMENT PLAN RECOMMENDATION-

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

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 - 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# 60
%ASB 2

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
21000 Square Feet	$70,770	$53,760	$124,530
		AREA TOTAL	$124,530

-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
LEA COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

****

AHERA COMPLIANCE PROGRAM
*** BOILER ROOM SUMMARY ***
West Linn S.D. 3JT

CAMPUS : 008 - Inza R. Wood Middle School 37-0050 Inspected By: Gary Adler
BUILDING : 001 - Inza R. Wood Main Bldg Certification #: HK80026 St: KS
BOILER RM: 1 State Cert #: St:

JOINTS

DAMAGE CATEGORY: N/A

REASON for DAMAGE CATEGORY: N/A

POTENTIAL FOR DISTURBANCE: N/A

%ASB*	SYSTEM ID	LOCATION	MATERIAL DESCRIPTION	MATERIAL QUANTITY
0%	Heating Water	UPSTAIRS FROM STORAGE AREA	MJP on Non-Suspect Pipe	35 8 In. O. D.

-MANAGEMENT PLAN RECOMMENDATION-

RECOMMENDED RESPONSE ACTION: N/A

PRIORITY: 0

PREVENTIVE MEASURES: See Part I and O&M Code: N/A

LEA RESPONSE:
ACTION ELECTION:

LEA COMMENT:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
BOILER ROOM ESTIMATED COSTS	$0	$0	$0

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
71 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:

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

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

SYSTEM: Dom. Cold Water
LOCATION: All Floors in Building
TYPE OF MATERIAL: MJP on Non-Suspect Pipe

DAMAGE CATEGORY: N/A
REASON for DAMAGE CATEGORY: N/A
POTENTIAL FOR DISTURBANCE: N/A

SAMPLE#	%ASB
07	0
08	0
09	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
62 4 In. O. D.			
12 6 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:

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

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:

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

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

SYSTEM: Ceiling Matl.
LOCATION: Ground Floor
TYPE OF MATERIAL: Acoustical Tile (1x1)

DAMAGE CATEGORY:	REASON for DAMAGE CATEGORY:	POTENTIAL FOR DISTURBANCE:	SAMPLE#	%ASB
N/A	N/A	N/A	12	0

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
350 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:

COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
N/A	N/A

****

West Linn S.D. 3JT
37-0050

CAMPUS : 008 - Inza R. Wood Middle School
BUILDING : 001 - Inza R. Wood Main Bldg
Inspection Dates: 07/01/88 to 07/14/89

Inspected By: Gary Adler
Certification #: HK80026 St: KS
State Cert #: St:
Gross Square Ft: 47,285

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
40 Square Feet	$286	$204	$490
		AREA TOTAL	$490

-MANAGEMENT PLAN RECOMMENDATION-

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

LEA RESPONSE:
ACTION ELECTION: Same as recommended
COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

****

* * * 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#: 60
%ASB: 2

MATERIAL QUANTITIES	REMOVAL COST	REPLACEMENT COSTS	TOTAL COSTS
21000 Square Feet	$70,770	$53,760	$124,530
		AREA TOTAL	$124,530

-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
COMMENTS:

RESPONSE ACTION SCHEDULE

START DATE	COMPLETION DATE
Summer 1989	Ongoing

****

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 plant

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

ANNUAL (PARENT/LEGAL GUARDIAN/OCCUPANT) NOTIFICATION RECORDS

West Linn
Wilsonville
School District
3JT

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

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

This section reflects requirements outlined in 40 CFR 763.92 (a)(l), (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 Woodley, 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
--Addition 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.

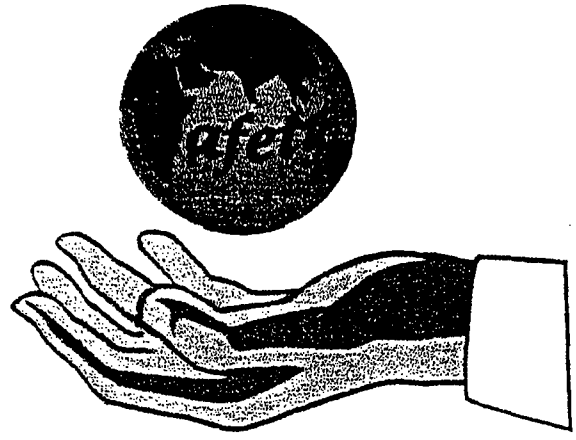
CONTRACT SERVICES

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

Course Title: AHERA 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 Woodley	School District	673-7041
3.		
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Certificate of Completion

Presented by

Three Rivers Environmental, Inc.

Jeri Nelson

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 McHill
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.

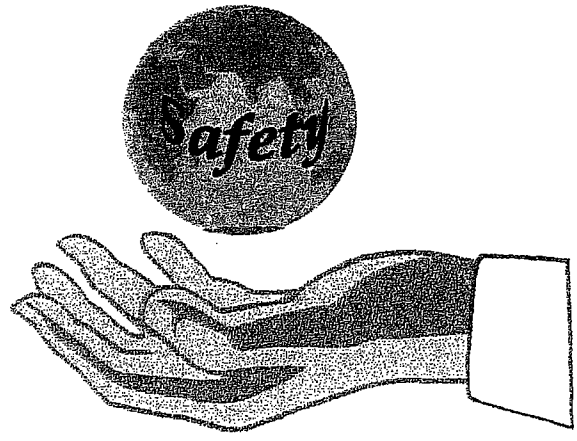
October 14, 1999
West Linn - Wilsonville School District
22210 SW Stafford Road
West Linn, Oregon 97068

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: 503-663-3143

Attendance Roster

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

SIGNATURE	PRINTED NAME	PHONE NUMBER
1. Gary Cromwell	Gary Cromwell	650-2636
2. Darryl Cromwell	Darryl Cromwell	503-65-2636
3. Nancy Betinski	NANCY BeHINESKI	655-7152
4.	BILL RAY	650-3842
5.	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. ROBERT STEWARD	Robert Steward	N/A
2. Robin K McIntosh	Robin K McIntosh	503-722-9775
3. F E Ransom	Frank E Ransom	7607086
4. Harold A Pauly	HAROLD PAULEY	503 725 7166
5. BLAINE CHRISTOPHER	BLAINE CHRISTOPHER	503 771-8127
6. PEDRO TORRESS	PEDRO TORRESS	503 6 918439
7. Terry Casey	Terry Casey	673-7436
8. Kim Vachter	Kim Vachter	673-7013
9. Linda Varsandar	Linda Varsandar	666-1975
10. JESUS LUNA	JESUS LUNA	803-7060
11. JOSE LUNA	~~JOSE LUNA~~	998-7252
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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. Vicki Yeomans	VICKI YEOMANS	673-7023
2. Steve Lewellen	Steve Lewallen	" "
3. John W Hartley Jr	John W. HARtley Jr	673-7100
4. Refugio Luna	Refugio Luna	774-6428
5. Larry Johnson	LARRY JOHNSON	625-4547
6. [illegible]	LARRY FODGE	678-1494
7. Kevin Washington	Kevin Washington	794-9452
8. Ron D Mosa	Ron D Mosa	653-1832
9. [illegible] Rigg	Bettel Rigg	570-0466
10. Doug Nimrod	DOUG NIMROD	998-7252
11. [illegible]	Rocky Bounds	831-1027
12. Mickey Mouse	mickey mouse	824-3105
13. Allan Perrine	Allan Perrine	656-6685
14. [illegible]	Gary Hines	557-8506
15. Tom Nixon	TOM NIXON	682-8434
16. [illegible]	Lester Bob [illegible]	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.	David Jolliffe	539 5826
2.	Terry L. Sturman	630-3675
3.	Robin Nolan	631-4832
4.	Reynaldo R. Espino	675-8260
5.	Vicki Holtcamp	638-4460
6.	Claude Koch	653-9482
7.	Colin Wall	723-1453
8.	Jim Lacey	772-7105
9.	Linda Jacobs	636-2698
10.	Leo Moser	435-2979
11.	Jerry Hagen	635 9277
12.	Cheryl Sommer	673-7265
13.	Gwyneth A. Nolin	673-7013
14.	Carol Zuercher	673-7013
15.	Jeri Nelson	673-7013
16.	John Erickson	632-4421
17.	SERGIO BARROSO	723-0614
18.	FLORA VARRAGUIN	
19.	Aldo Castro	430-17-81
20.	Jose Angel Rosas	691-89-39

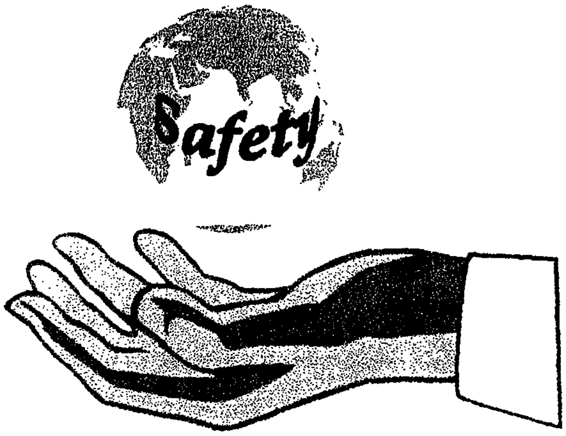
"Safety for a Worldwide Workplace"

ASBESTOS AWARENESS TRAINING
FEBRUARY 21, 2000

Smith, Jason
Moser, Leo
Simmons, Phil
Riggar, 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): 02/21/00
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. Jason D Smith	Jason D Smith	503 682-7521
2. Leo Moser	Leo Moser	435-2979
3. Phil Simmons	Phil Simmons	570-9753
4. Butch Rigger	Butch Rigger	570-0466
5. Harold R Pauley	HAROLD R PAULEY	775 7166
6. Ryan Oleatherage	Ryan Oeatherage	557-7347
7. James H. Wart	James H. Wart	632-6892
8. William J Herring	WILLIAM HERRING	632-4582
9. John W Hartley	John W. HARTLEY Jr	698-4771
10. Larry Johnson	LARRY JOHNSON	635-4541
11. Colin Wall	COLIN WALL	232-2157
12. James A Griffin	JAMES A GRIFFIN	656-4688
13. Jose Luna	JOSE F. LUNA	259-9483
14. Rocky Bounds	Rocky Bounds	582-8506
15. Jesus Luna	Jesus Luna	259-9483
16. [illegible]	Ramiro Luna	848-9287
17. [illegible] Washington	Kevin Washington	794-9452
18. [illegible]	Cheryl Sommer	250-7009
19. [illegible]	Claude Koch	655-9482
20. [illegible]	David J Rose	632-3708

"Safety for a Worldwide Workplace"

Course Title: ASBESTOS AWARENESS
Date(s): 02/21/CC
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.	MARK L. RAINEY	673-7013
2.	Terry Olson	
3. Pam Garza	Pam Garza	
4.	VICKI YEOMANS	
5.	Robin Nolan	
6.	GARY HINES	
7.	Steve Lewallen	673-7909
8.	BILL RAY	673-7845
9.	Jim Peter	656-6665
10. Darryl	Darryl Cromwell	650-2636
11.	THOMAS NIXON	680-8434
12.	John L. Daley	631-8603
13.	Linda Sackett	636-2698
14.	Kim Kaehler	656-5429
15. Terry C. Sturman		630-3675
16. Joe Symmons	Joe Simmons	673-7016
17.	DAVID THOMAS	673-7013
18.	BLAINE CHRISTOPHER	771-8127
19.	JERRY HOWARD	673-7500
20.	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 AWARENESS
Date(s): 3/20/00
Location: WEST LINN SCHOOL DIST.
ADMINISTRATION BLDG.
WEST LINN, OR

PAC PRO Safety & Health Services
660 N.W. Bella Vista Drive • Gresham, Oregon 97[illegible]
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. Baffney	Les O. Baffney	503-762-4086
2. [illegible]	[illegible]	[illegible]
3. [illegible]	[illegible]	
4. [illegible]	ROBERT STEWARD	N/A
5. [illegible]	[illegible]	[illegible]
6. [illegible]	[illegible]	[illegible]
7. Mark Dvorak	MARK DVORAK	657-7630
8. [illegible]	[illegible]	[illegible]
9. [illegible]	[illegible]	[illegible]
10. [illegible]	[illegible]	[illegible]
11. [illegible]	[illegible]	[illegible]
12. [illegible]	[illegible]	824-3105
13. [illegible]	[illegible]	[illegible]
14. [illegible]	[illegible]	[illegible]
15. [illegible]	[illegible]	[illegible]
16. [illegible]	[illegible]	[illegible]
17. [illegible]	[illegible]	[illegible]
18. [illegible]	[illegible]	[illegible]
19. [illegible]	[illegible]	[illegible]
20. [illegible]		

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

PACPRO 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.	Dave Jolliffe	
2.	Jeri Nelson	673-7513
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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 war 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 coy 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 <u>must</u> 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)

ASBESTOS SAMPLE / MATERIAL LOCATION DIAGRAM

ASBESTOS SAMPLE ANALYSIS DATA

GLACIER ENVIRONMENTAL INC.
Office 503-650-8370 - Fax 503-650-8371 - P.O. Box 519 - Gladstone, OR 97027
Environmental Safety & Health Services

CLIENT: WEST LINN WILSONVILLE SCHOOL DISTRICT
FACILITY: INZA R. WOOD MIDDLE SCHOOL
INSPECTION DATES: 5/23/01 to 5/23/01

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

ASBESTOS INVESTIGATIVE REPORT

Sample #:	Material Description:	Sample Location:	HSA#	Total Asbestos:
W-001	Ceiling Tile (1x1) spline	Staff Room	01	0%
W-002	Ceiling Tile (1x1) spline	Reception	01	0%
W-003	Ceiling Tile (1x1) spline	Corridor	01	0%
W-004	Mastic of Ceiling Tile (1x1) spline	Staff Lounge	02	0%
W-005	Mastic of Ceiling Tile (1x1) spline	Work Center	02	0%
W-006	Mastic of Ceiling Tile (1x1) spline	Office	02	0%
W-007	Floor Tile (12x12) grey	Reception	03	0%
W-008	Floor Tile (12x12) grey	Reception	03	0%
W-009	Floor Tile (12x12) grey	Office	03	0%
W-010	Mastic of, Floor Tile (12x12) grey	Office	04	**10%**
W-011	Mastic of, Floor Tile (12x12) grey	Reception	04	Not Analyzed
W-012	Mastic of, Floor Tile (12x12) grey	Office	04	Not Analyzed
W-013	Cove Base Mastic, brown	Reception	05	0%
W-014	Cove Base Mastic, brown	Corridor	05	0%
W-015	Cove Base Mastic, brown	Staff Lounge	05	0%
W-016	Carpet Mastic	Reception	06	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.

GLACIER ENVIRONMENTAL INC.
Office 503-650-8370 - Fax 503-650-8371 - P.O. Box 519 - Gladstone, OR 97027
Environmental Safety & Health Services

CLIENT: WEST LINN WILSONVILLE SCHOOL DISTRICT
FACILITY: INZA R. WOOD MIDDLE SCHOOL
INSPECTION DATES: 5/23/01 to 5/23/01

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

ASBESTOS INVESTIGATIVE REPORT

Sample #:	Material Description:	Sample Location:	HSA#	Total Asbestos:
W-017	Carpet Mastic	Corridor	06	0%
W-018	Carpet Mastic	Staff Lounge	06	0%
W-019	Drywall / Taping Compound	Staff Lounge	07	0%
W-020	Drywall / Taping Compound	Staff Lounge	07	0%
W-021	Drywall / Taping Compound	Staff Lounge	07	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.

Certificate of Completion

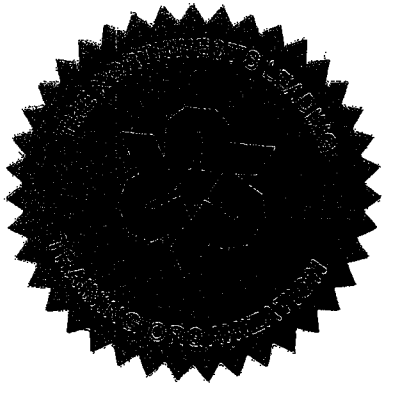
This is to certify that

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

Cert. # 00-6082
Conducted at:
Pac Pro Safety & Health Services

Prezant

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

Certificate of Completion

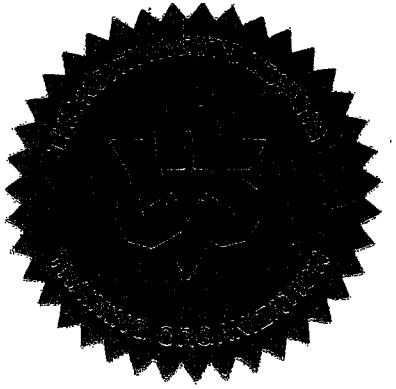
This is to certify that

Darren D. Lee

has satisfactorily completed
4 hours of refresher training as a

Management Planner

in compliance with TSCA Title II
AHERA Accredited



October 25, 2000

Training Coordinator

Date Expires Oct 25, 2001

Cert. # 00-6080
Conducted at:
Pac Pro Safety & Health Services

Prezant

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

21 PLM

CHAIN OF CUSTODY

THREE RIVERS ENVIRONMENTAL
P.O. Box 216 Gladstone, OR. 97027
Phone: (503) 557-2396 FAX: (503) 557-3025

EHS 05-01-3354

Attention: _____
Company Name: _____
Mailing Address: _____
_____
PH.( ) _____ FAX:( ) _____

SAMPLE TYPE

ASBESTOS
- ☐ PLM (bulk)
- ☒ PLM AHERA Sample Group Positive stop
- ☐ PCM (Air)
- ☐ TEM (Air)

LEAD
- ☐ AA Flame (air)
- ☐ AA Flame (Paint, Wipe)
- ☐ TCLP
- ☐ EPA 200/500 Series (Drinking Water)
- ☐ Other (specify) _____

SAMPLE TURNAROUND
- ☐ Standard (5 day)
- ☐ Priority (3 day)
- ☒ Rush (24 hour)

TRE Client Number: ~~INEA~~ R. WOOD
P.O. Number: _____
Project Number: 01007
Date Sampled: 5/23/01
Date Submitted: 5/25/01
Special Instructions: _____

Sample ID	Date	Positive Stop	Sample Description	Sample Location	Quantity (SF/LF)	Volume	Result
W-001	5-23-01	*	CEILING TILE (1x1) SPLINE	~~STAFF~~ RM.			
W-002	"	|	" "	RECEPTION			
W-003	"	|	" "	CORRIDOR			
W-004	"	*	MASTIC of CEILING TILE (1x1) SPLINE	~~STAFF~~ LOUNGE			
W-005	"	|	" "	WORK CENTER			
W-006	"	|	" "	~~RECEPTION~~ OFFICE			
W-007	"	*	~~MASTIC~~ 12x12 FLOOR TILE (GREY)	RECEPTION			
W-008	"	|	" "	RECEPTION			
W-009	"	|	" "	OFFICE			
W-010	"	*	MASTIC of (12x12 FLOOR TILE, GREY)	RECEPTION			
W-011	"	|	" "	RECEPTION			
W-012	"	|	" "	OFFICE			
W-013	"	*	COVE BASE MASTIC (BROWN)	RECEPTION			
W-014	"	|	" "	CORRIDOR			
W-015	"	|	" "	STAFF LOUNGE			
W-016	"	*	CARPET MASTIC ~~FLOOR~~	RECEPTION			
W-017	"	|	" "	CORRIDOR			
W-018	"	|	" "	STAFF LOUNGE			

Sampled By: (Sign)	Relinquished By: (Sign)	Date	Time	Recieved By: (Sign)	Date	Time
		5/26/01	10:00AM	E Holcomb E Holcomb	5-29-01	9:00
				LAB:		

CHAIN OF CUSTODY

THREE RIVERS ENVIRONMENTAL
P.O. Box 216 Gladstone, OR. 97027
Phone: (503) 557-2396 FAX: (503) 557-3025

Attention: _____
Company Name: _____
Mailing Address: _____
_____
PH.( ) _____ FAX:( ) _____

SAMPLE TYPE

ASBESTOS
- ☐ PLM (Bulk)
- ☒ PLM AHERA Sample Group Positive stop
- ☐ PCM (Air)
- ☐ TEM (Air)

LEAD
- ☐ AA Flame (air)
- ☐ AA Flame (Paint, Wipe)
- ☐ TCLP
- ☐ EPA 200/500 Series (Drinking Water)
- ☐ Other (specify) _____

SAMPLE TURNAROUND
- ☐ Standard (5 day)
- ☐ Priority (3 day)
- ☒ Rush (24 hour)

TRE Client Number: ~~INZA~~ R. WOOD
P.O. Number: _____
Project Number: 01007
Date Sampled: 5/23/01
Date Submitted: 5/25/01
Special Instructions: _____

Sample ID	Date	Positive Stop	Sample Description	Sample Location	Quantity (SF/LF)	Volume	Result
W-019	5-23/01	*	DRYWALL/TAPING COMPOUND	STAFF LOUNGE			
W-020	"	|	" "	" "			
W-021	"	|	" "	" "			

Sampled By: (Sign)	Relinquished By: (Sign)	Date	Time	Recieved By: (Sign)	Date	Time
		5/25/01	10:00am	E Holcomb E Holcomb	5-29-01	9:00
				LAB:		

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237
804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Three Rivers Environmental
P.O. Box 216
Gladstone, OR 97027

DATE OF RECEIPT: 29 MAY 2001
DATE OF ANALYSIS: 29 MAY 2001
DATE OF REPORT: 29 MAY 2001

CLIENT NUMBER: 38-2970 A
EHS PROJECT #: 05-01-3354
PROJECT: 01007

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	W-001/ White/Beige Fib.	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
02	W-002/ White/Beige Fib.	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
03	W-003/ White/Beige Fib.	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
04	W-004/ Brown Adhes.	NAD	10% Cellulose 90% Non-Fibrous
05	W-005/ Brown Adhes.	NAD	10% Cellulose 90% Non-Fibrous
06	W-006/ Brown Adhes.	NAD	10% Cellulose 90% Non-Fibrous
07	W-007/ Brown Vinyl	NAD	10% Cellulose 90% Non-Fibrous
08	W-008/ Brown Vinyl	NAD	10% Cellulose 90% Non-Fibrous
09	W-009/ Brown Vinyl	NAD	10% Cellulose 90% Non-Fibrous
10	W-010/ Black Adhes.	10% Chrysotile 10% Total Asbestos	90% Non-Fibrous
11	W-011/	DID NOT ANALYZE	
12	W-012/	DID NOT ANALYZE	
13	W-013/ Brown Adhes.	NAD	20% Wollastonite 80% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 38-2970 A
EHS PROJECT #: 05-01-3354
PROJECT: 01007

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
14	W-014/ Brown Adhes.	NAD	20% Wollastonite 80% Non-Fibrous
15	W-015/ Brown Adhes.	NAD	20% Wollastonite 80% Non-Fibrous
16	W-016/ Green/Yellow Adhes.	NAD	10% Cellulose 90% Non-Fibrous
17	W-017/ Green/Yellow Adhes.	NAD	10% Cellulose 90% Non-Fibrous
18	W-018/ Green/Yellow Adhes.	NAD	10% Cellulose 90% Non-Fibrous
19	W-019/ Beige Gran.	NAD	10% Cellulose 90% Non-Fibrous
20	W-020/ Beige Gran.	NAD	10% Cellulose 90% Non-Fibrous
21	W-021/ Beige Gran.	NAD	10% Cellulose 90% Non-Fibrous

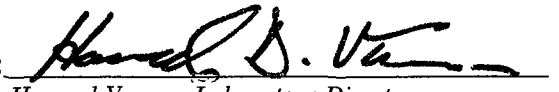
QC SAMPLE: M1-1999-2

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Rebekah Swanson

Reviewed By Authorized Signatory: 

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 38-2970 A
EHS PROJECT #: 05-01-3354
PROJECT: 01007

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. California Certification #2319. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. 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.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/19APR2001/ dpb

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA

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 285 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 for:

BULK ASBESTOS FIBER ANALYSIS

December 31, 2001
Effective through

David F. Alderman
For the National Institute of Standards and Technology

NVLAP Lab Code: 101882-0

National Institute of Standards and Technology

NVLAP®

National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation

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.

JW 9.14.00

AHERA

Six Month Periodic Surveillance

WEST LINN SCHOOL DISTRICT #3Jt

OF

Inza R. Wood Primary School
11055 S.W. Wilsonville Rd.
Wilsonville, OR 97070

Project No. 1020-109

ROBERT C. MONTGOMERY	Robert C Montgomery	99-1931 Ore.
AHERA Inspector	**Signature & Date**	**Certification # & State**
ROBERT C. MONTGOMERY	Robert C Montgomery 5-17-00	MP-00-8795, OCE
Management Planner	**Signature & Date**	**Certification # & State**

Prepared by:

THREE RIVERS ENVIRONMENTAL, Inc.

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

PERIODIC SURVEILLANCE REPORT

Client: West Linn School District
TRE Job#: 1020-109

Campus: Inza R. Wood Middle School
Building: Main
Address: 1105 SW Wilsonville Rd.
Date of Surveillance: May 2000

Person Conducting Surveillance: Robert Montgomery

Material Description: Vinyl Floor Tile
Homogeneous area(s): HK USA #97
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

Material Description: Transite Siding
Homogeneous area(s): HK USA #98
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: Hard Fitting Mag
Homogeneous area(s): 1 hard fitting slightly damaged in mechanical room
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

THREE RIVERS
ENVIRONMENTAL, Inc.

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 ln. 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: *MJP 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 ln. 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

INZA R. WOOD MIDDLE SCHOOL
1105 SW Wilsonville Rd.
Wilsonville, OR

Project No. 1020-40

April 1999

Prepared by

THREE RIVERS ENVIRONMENTAL

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

PERIODIC SURVEILLANCE REPORT

Client: West Linn School District
TRE Job#: 1020-40

Campus: Inza R. Wood Middle School
Building: Main
Address: 1105 SW Wilsonville Rd.
Date of Surveillance: April 1999

Person Conducting Surveillance: Matthew Johnson

Material Description: Vinyl Floor Tile
Homogeneous area(s): HK USA #97
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

Material Description: Transite Siding
Homogeneous area(s): *HK USA #98*
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

Periodic Surveillance Report

for

WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT

INZA R. WOOD MIDDLE SCHOOL
1105 SW Wilsonville Rd.
Wilsonville, OR

Project No. 1020-12

August 1997

Prepared by

THREE RIVERS ENVIRONMENTAL

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

PERIODIC SURVEILLANCE REPORT

Client: West Linn School District

TRE Job#: 1020-12

Campus: Inza R. Wood Middle School
Address: 1105 SW Wilsonville Rd.

Building: Main
Date of Surveillance: August 1997

Person Conducting Surveillance: Glenn Bryant

Material Description: Vinyl Floor Tile
Homogeneous area(s): HK USA #97
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

Material Description: Transite Siding
Homogeneous area(s): HK USA #98
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

INZA R. WOOD MIDDLE SCHOOL
1105 SW Wilsonville Rd.
Wilsonville, OR

Project No. 1020-10

February 1997

Prepared by

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

PERIODIC SURVEILLANCE REPORT

Client: West Linn School District
TRE Job#: 1020-10

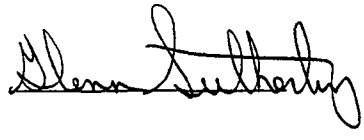
Campus: Inza R. Wood Middle School
Building: Main
Address: 1105 SW Wilsonville Rd.
Date of Surveillance: Feb. 1997

Person Conducting Surveillance: Glenn Sutherby

Material Description: Vinyl Floor Tile
Homogeneous area(s): HK USA #97
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

Material Description: Transite Siding
Homogeneous area(s): HK USA #98
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

Periodic Surveillance Report

for

WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT

INZA R. WOOD MIDDLE SCHOOL
1105 SW Wilsonville Rd.
Wilsonville, OR

Project No. 1020-08

January 1996

Prepared by

THREE RIVERS ENVIRONMENTAL
170 E Arlington Gladstone, Oregon 97027 (503) 656-4601

THREE RIVERS ENVIRONMENTAL

PERIODIC SURVEILLANCE REPORT

Client: West Linn School District

TRE Job#: 1020-08

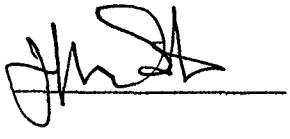
Campus: Inza R. Wood Middle School
Building: Main
Address: 1105 SW Wilsonville Rd.
Date of Surveillance: Jan. 1996

Person Conducting Surveillance: Jeff Smith

Material Description: Vinyl Floor Tile
Homogeneous area(s): HK USA #97
Last Material Condition: Good **New Material Description:** Same
Change in material condition: No

Material Description: Transite Siding
Homogeneous area(s): HK USA #98
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 

170 E. Arlington Gladstone, Oregon 97027 (503) 656-4601

REINSPECTIONS

This section reflects requirements outlined in 40 CFR 763.85 (b) (l) 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

Inza R. Wood Primary School
11055 S.W. Wilsonville Rd.
Wilsonville, OR 97070

Project No. 1020-68

Prepared by:

THREE RIVERS
ENVIRONMENTAL, Inc.

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

AHERA Re-inspection

Material: **Vinyl floor tile, USA 97**

Description: Miscellaneous

Sampled or Assumed: Sampled

Friable or Non-Friable: Non-friable

Locations: All floors in building

Quantity: Approximately 100 sq. ft.

Potential for disturbance:

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

Overall condition: fair

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

AHERA Re-inspection

Material: **Transite siding, USA 98**

Description: Miscellaneous

Sampled or Assumed: Sampled

Friable or Non-Friable: Non-friable

Locations: Sub-basement

Quantity: Approximately 40 sq. ft.

Potential for disturbance:

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

Overall condition: fair

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

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 21,000 sq. ft.

Potential for disturbance:

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

Overall condition: fair

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

AHERA Re-inspection

Material: **Hard Fitting Mag**

Description: TSI

Sampled or Assumed: Assumed

Friable or Non-Friable: Friable

Locations: Mechanical room, S. end of cafeteria (in loft)

Quantity: Not quantified

Potential for disturbance:

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

Overall condition: fair

Change in condition from last inspection: yes
Assessment noted: 6 hard fittings damaged, with 10 sq. ft. of debris on both HVAC units

Previous AHERA category: ACBM with potential for damage

New AHERA category: Damaged or significantly damaged

Recommended response action: Isolate function space/repair and clean up debris, maintain in an intact and undamaged condition. Reassess quantity and locations.

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

Three Year Asbestos Reinspection

for

WEST LINN-WILSONVILLE SCHOOL DISTRICT 3JT

INZA R. WOOD MIDDLE SCHOOL
1105 SW Wilsonville Rd.
Wilsonville, OR

Project No. 1020-15

September 1998

Prepared by

THREE RIVERS ENVIRONMENTAL

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

AHERA Re-inspection

Material: Vinyl Floor Tile, USA 97

Description: Miscellaneous, Sampled, Non Friable

Locations: All Floors in Building

Quantity: Approximately 100 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 Re-inspection

Material: Transite Siding, USA 98

Description: Miscellaneous, Sampled, Non Friable

Locations: Sub-Basement

Quantity: Approximately 40 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 Re-inspection

Material: Vinyl Floor Tile, USA 99

Description: Miscellaneous, Sampled, Non Friable

Locations: All Floors in Building

Quantity: Approximately 21,000 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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN/WILSONVILLE SCHOOL DST. 3 JT DATE: 11-02-99

BUILDING: INZA R. WOOD SCHOOL PAGE: 1 of 6

Material: HARD FITTINGS

Description: (X TSI ___Sur. ___Misc.) (X Assumed ___Sampled) (___Friable ___Non Friable)

Locations: MECHANANICAL RM. (N. OF MAIN OFFICE ABOVE CONFERENCE RM.)

Quantity: 70 HF

Previous AHERA Category: ACBM WITH POTENTIAL FOR DAMAGE

Present Assessment:

___Unchanged (Stop Here) X Condition changed (Complete the remainder of the page)

Condition: Percent damaged: 1 % ___localized ___distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate X low

description: O & M - FILTERS HVAC.

Effect of vibration: ___high ___moderate X low

description:

Potential for air or water erosion: ___high ___moderate ___low

description:

Overall Condition: X good ___fair ___poor

New AHERA Category:

X Damaged or significantly damaged TSI
___Damaged friable surfacing
___Significantly damaged friable surfacing
___Damaged or significantly damaged friable miscellaneous
___ACBM with potential for damage
___ACBM with potential for significant damage
___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: Lin D Jones

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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN/WILSONVILLE SCHOOL DIST. 3JT DATE: 11-02-99

BUILDING: INZA R. WOOD PAGE: 2 of 6

Material: AIR CELL

Description: (X TSI ___Sur. ___Misc.) (X Assumed ___Sampled) (___Friable X Non Friable)

Locations: MECHANICAL ROOM (N. OF MAIN OFFICE ABOVE CONFERENCE OFFICE)

Quantity: 2 LN FT.

Previous AHERA Category: _____

Present Assessment:

X Unchanged (Stop Here) ___Condition changed (Complete the remainder of the page)

Condition: Percent damaged: ___% ___localized ___distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate ___low

description: _____

Effect of vibration: ___high ___moderate ___low

description: _____

Potential for air or water erosion: ___high ___moderate ___low

description: _____

Overall Condition: ___good ___fair ___poor

New AHERA Category:

___Damaged or significantly damaged TSI

___Damaged friable surfacing

___Significantly damaged friable surfacing

___Damaged or significantly damaged friable miscellaneous

___ACBM with potential for damage

___ACBM with potential for significant damage

___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: _____

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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN/WILSONVILLE SCHOOL DIST. 3JT DATE: 11-02-99

BUILDING: INZA R. WOOD PAGE: 3 of 6

Material: VIBRATION CLOTH

Description: (___TSI ___Sur. _X_Misc.) (_X_Assumed ___Sampled) (___Friable _X_Non Friable)

Locations: BOTH MECHANICAL ROOMS.

Quantity: APPROX. 260 L.F.

Previous AHERA Category: _____

Present Assessment:

_X_Unchanged (Stop Here) ___Condition changed (Complete the remainder of the page)

Condition: Percent damaged:___% ___localized ___distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate ___low

description: _____

Effect of vibration: ___high ___moderate ___low

description: _____

Potential for air or water erosion: ___high ___moderate ___low

description: _____

Overall Condition: ___good ___fair ___poor

New AHERA Category:

___Damaged or significantly damaged TSI

___Damaged friable surfacing

___Significantly damaged friable surfacing

___Damaged or significantly damaged friable miscellaneous

___ACBM with potential for damage

___ACBM with potential for significant damage

___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: _____

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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN / WILSONVILLE SCHOOL DIST. 3JT DATE: 11-03-99

BUILDING: ENZA R. WOOD PAGE: 4 of 6

Material: HF

Description: (X TSI ___Sur. ___Misc.) (X Assumed ___Sampled) (___Friable ___Non Friable)

Locations: MECHANICAL ROOM UP STAIRS S. OF CAFETERIA.

Quantity: APPROX. 68 HF

Previous AHERA Category: _____

Present Assessment:

___Unchanged (Stop Here) X Condition changed (Complete the remainder of the page)

Condition: Percent damaged: 3 % ___localized X distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate X low

description: O & M.

Effect of vibration: ___high ___moderate X low

description: _____

Potential for air or water erosion: ___high ___moderate ___low

description: _____

Overall Condition: ___good X fair ___poor

New AHERA Category:

X Damaged or significantly damaged TSI

___Damaged friable surfacing

___Significantly damaged friable surfacing

___Damaged or significantly damaged friable miscellaneous

___ACBM with potential for damage

___ACBM with potential for significant damage

___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: _____

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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN/WILSONVILLE School Dist. 3JT DATE: 11-02-99

BUILDING: Inza R. Wood School PAGE: 5 of 6

Material: AIR CELL

Description: (X TSI ___Sur. ___Misc.) (___Assumed ___Sampled) (___Friable ___Non Friable)

Locations: MECHANICAL Room UP STAIRS S. OF CAFETERIA

Quantity: APPROX. 60 LN FT.

Previous AHERA Category: _____

Present Assessment:

X Unchanged (Stop Here) ___Condition changed (Complete the remainder of the page)

Condition: Percent damaged: ___% ___localized ___distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate ___low

description: _____

Effect of vibration: ___high ___moderate ___low

description: _____

Potential for air or water erosion: ___high ___moderate ___low

description: _____

Overall Condition: ___good ___fair ___poor

New AHERA Category:

___Damaged or significantly damaged TSI

___Damaged friable surfacing

___Significantly damaged friable surfacing

___Damaged or significantly damaged friable miscellaneous

___ACBM with potential for damage

___ACBM with potential for significant damage

___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: _____

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

THREE RIVERS ENVIRONMENTAL

AHERA Inspection Report

CLIENT: WEST LINN/WILSONVILLE SCHOOL DIST 3JT DATE: 11-02-99

BUILDING: INTAR WOOD PAGE: 6 of 6

Material: HARD FITTINGS

Description: (X TSI ___Sur. ___Misc.) (X Assumed ___Sampled) (___Friable X Non Friable)

Locations: ATTIC. ACCESS IN P.E. OFFICE E. SIDE OF GYM.

Quantity: 15

Previous AHERA Category: _____

Present Assessment:

X Unchanged (Stop Here) ___Condition changed (Complete the remainder of the page)

Condition: Percent damaged:____% ___localized ___distributed

Potential For Disturbance:

Potential for contact: ___high ___moderate ___low

description: _____

Effect of vibration: ___high ___moderate ___low

description: _____

Potential for air or water erosion: ___high ___moderate ___low

description: _____

Overall Condition: ___good ___fair ___poor

New AHERA Category:

___Damaged or significantly damaged TSI

___Damaged friable surfacing

___Significantly damaged friable surfacing

___Damaged or significantly damaged friable miscellaneous

___ACBM with potential for damage

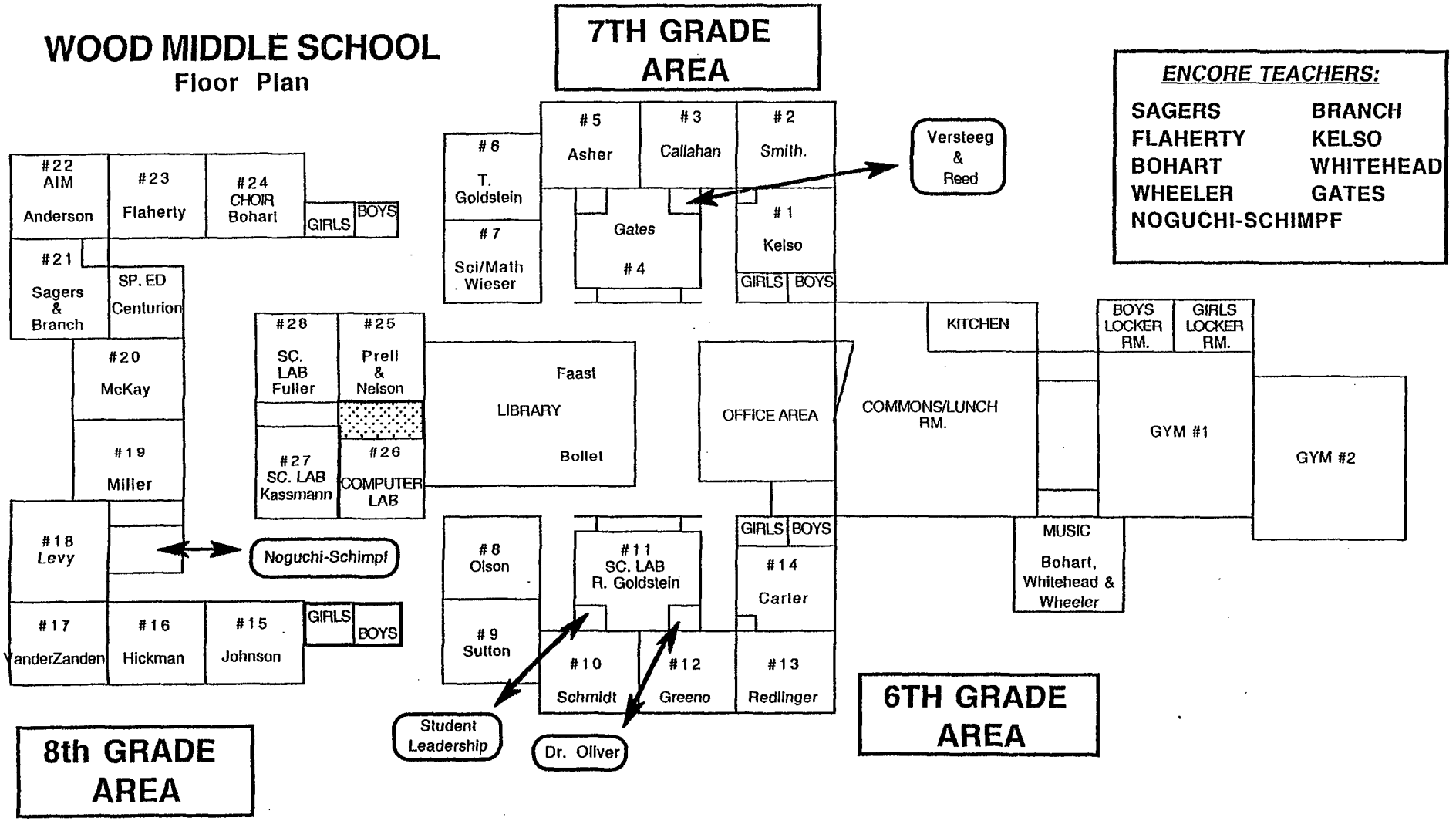
___ACBM with potential for significant damage

___Any remaining friable ACBM or friable suspect ACBM

Inspectors Signature: _____

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

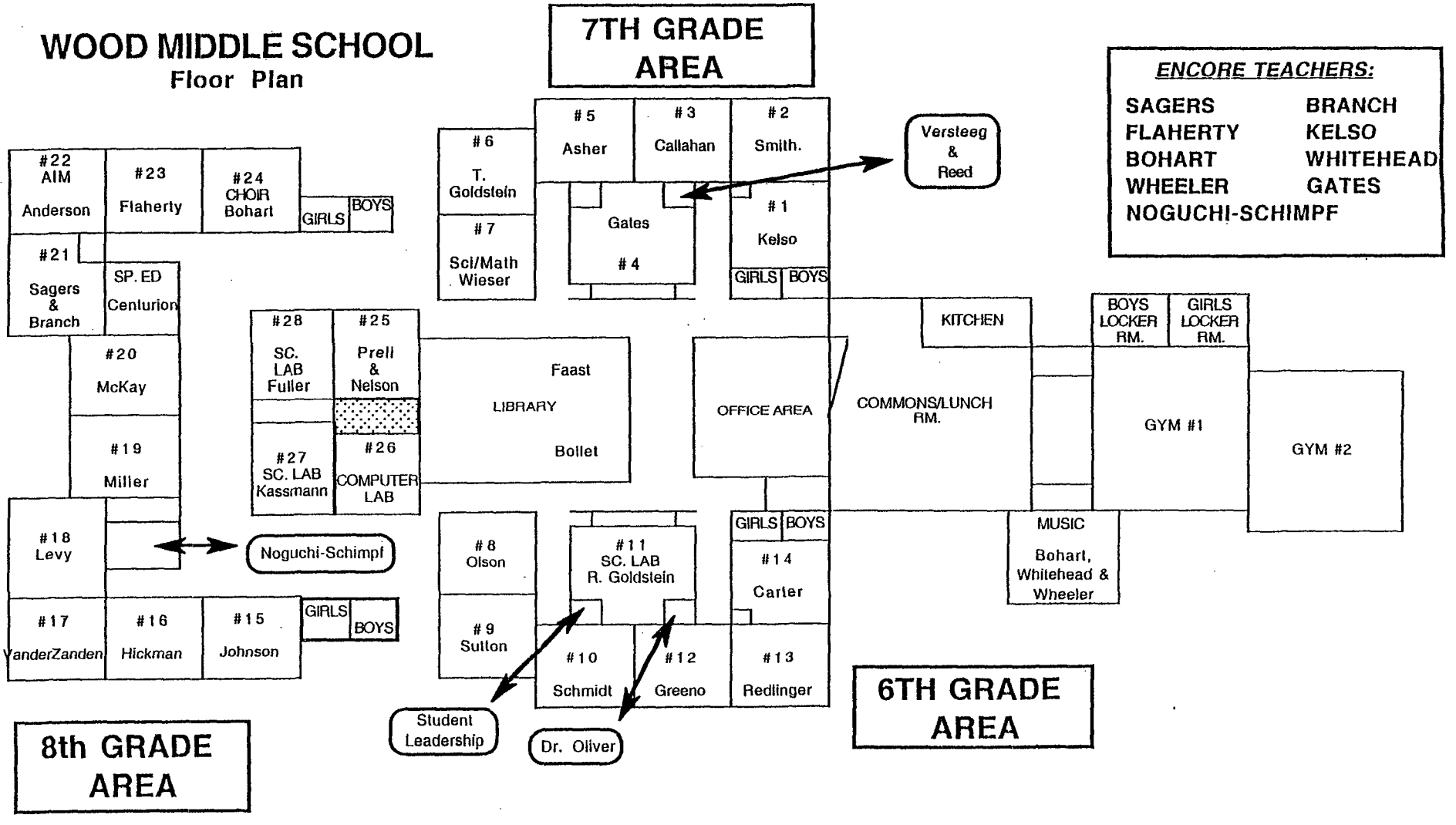
WOOD MIDDLE SCHOOL
Floor Plan



ENCORE TEACHERS:

SAGERS	BRANCH
FLAHERTY	KELSO
BOHART	WHITEHEAD
WHEELER	GATES
NOGUCHI-SCHIMPF	

WOOD MIDDLE SCHOOL
Floor Plan



ENCORE TEACHERS:

SAGERS	BRANCH
FLAHERTY	KELSO
BOHART	WHITEHEAD
WHEELER	GATES
NOGUCHI-SCHIMPF	

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) (l)

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.

Memo

To: Gary Haugen

From: Darren Lee, District Environmental Safety & Health Manager

CC: Tim Woodley, Pat McGough

Date: 10/30/01

Re: Asbestos Abatement Notification to Building Occupants.

The U.S. Environmental Protection Agency Asbestos Hazard Emergency Response Act (AHERA) regulations require our School district to notify all Building Occupants and Employees prior to the removal of asbestos containing building materials in all district facilities.

On October 30, 2001 at 3:00pm a certified asbestos removal contractor will be performing the removal of approximately 80 square feet of floor tile with asbestos containing mastic or "glue" in your facility. The floor tile removal will take place inside the cafeteria construction zone. All current regulatory guidelines will be followed during the proper removal and disposal of these materials. Air sampling will be performed in the immediate area of the removal and the results posted in the facility AHERA Management Plan, located at the Employee Right to Know Center.

Please post a copy of this memo at your facilities' Employee Right to Know Center as soon as feasible. If you have any questions pertaining to this removal project please contact me at (503) 673-7042.

DEPARTMENT OF OPERATIONS
PO BOX 35
WEST LINN, OR 97068

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)

FULL SCALE
(>40 ln. feet or 80 sq. feet)

(ADMIN Copy)

ASBESTOS ABATEMENT SUMMARY for WLWSD

Project #: _____

Project Location: INZA R. WOOD MIDDLE SCHOOL **Specific Area:** CAFETERIA, & OLD MAIN OFFICE AREA.

Facility Asbestos Program Manager: Tim Woodley **Phone:** (503) 673-7041

Project Description: REMOVAL of 800 sq. ft. of FLOOR TILE + ASBESTOS CONTAINING MASTIC.

Start Date: JUNE 8, 2001 **Completion Date:** JUNE 8, 2001.

For Pipe Insulation or (TSI): Total linear feet: _____ Size: _____

Other Materials: (MASTIC) Total square feet: 800

Type of Asbestos being repaired or removed: FLOOR TILE MASTIC, & NEGATIVE FLOOR TILE, BY USE of MASTIC REMOVER, NO CONTAINMENT

Project Size:

- _____ O&M (Less than 3 linear / 3 square feet)
- _____ Small Scale Project
- ✓ Large Scale Project

Clearance Sampling Required?

- ✓ (No) (Small Scale) (NON FRIABLE NO CONTAINMENT)
- _____ PCM (<160 ln. 260 sq. ft.)
- _____ TEM (>160 ln. 260 sq. ft.)
- _____ NVLAP Accredited Lab.

Air Monitoring Analysis Laboratory: THREE RIVERS ENVIRONMENTAL

Phone: (503) 557-2396 Contact: DARIN WORTH

Name of contractor or subcontractor performing work:

Company: IRS ENVIRONMENTAL

Address: 755 SW DENNIS AVE

City: HILLSBORO State: OR 97123

Phone: (503) 693-6388 Contact: BRUCE KORUM

Supervisor in charge of project: VINCENT CHAVEZ

OR Supervisor Certification #: S09208 Exp. Date: JUNE 6, 2002

Waste Disposal Site: HILLSBORO GARBAGE DISPOSAL, LANDFILL

Attach all air sample clearance analysis results to this Abatement Summary and post in AHERA Management Plan.

THREE RIVERS
ENVIRONMENTAL, Inc.

Asbestos Project Close Out Documents

for

Inza R. Woods Middle School
Project No. 1020-123G

Summer 2001

Prepared For:

West Linn-Wilsonville School District 3JT
Mr. Darren Lee
PO Box 35
West Linn, Oregon 97068

Prepared By:

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

Project Summary

Three Rivers Environmental, Inc. (TRE) has prepared this report as an overview of the asbestos abatement work performed over the summer of 2001. Three Rivers Environmental was retained by West Linn-Wilsonville School District 3JT, as the Project Management Company for asbestos removal projects located at Inza R. Woods Middle School. Shawn Olson of Three Rivers Environmental was the TRE Project Manager on site. IRS Environmental of Portland, Oregon was the contractor selected and responsible for the asbestos abatement portion of this project. The contractor was responsible for all notifications, personal air monitoring, OSHA safety requirements, and material disposal.

The purpose of this project was to remove the following materials:

- Approximately eight hundred (800) square feet of non-friable asbestos-containing floor tile mastic from the cafeteria and the copy room. This project was started on June 8, 2001 and was completed on June 8, 2001.

This project book contains documentation from Three Rivers Environmental to assist in the record keeping requirements maintained by the School District. The following documentation is presented within this report.

- Daily Project Logs - detail of daily activities
- Air Monitoring Data Reports
- Certification, Insurance and License
- Waste Disposal Receipt

This project was completed with out accident or injury.

Air Sample Analysis Report

THREE RIVERS ENVIRONMENTAL, Inc.

CLIENT: West Linn-Wilsonville School District **TRE JOB NO:** 1020-123g

ATTN: Tim Woodley **P.O. NO:** Verbal

CONTRACTOR: IRS Environmental, Inc. **REPORT NO:** 1

PROJECT: Inza R. Wood Cafeteria, 450 sq. ft. **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	2	3	4
Laboratory No:	SO01-0573	SO01-0574	SO01-0575	SO01-0576
Sample Location:	20' N. of offices, cafeteria AD	Oscar Galindo 543-35-9115 EL	Oscar Galindo 543-35-9115 P	Office area, 5' from mens restroom AD
Work Performed:	N/A	Floor tile 1/2 face	Floor tile 1/2 face	N/A
Date Sampled:	6/8/01	6/8/01	6/8/01	6/8/01
Sampled by:	S. Olson	S. Olson	S. Olson	S. Olson
Pump No:	HV-23	LV-05	LV-05	HV-23
Start Time:	16:30	16:30	17:00	18:30
Stop Time:	18:30	17:00	19:00	21:30
Minutes Sampled:	120	30	120	120
Start Flow Rate: (LPM)	10	2	2	10
Stop Flow Rate: (LPM)	10	2	2	10
Average Flow Rate: (LPM)	10	2	2	10
Volume:	1200 L	60 L	240 L	1200 L
Date Analyzed:	6/8/01	6/8/01	6/8/01	6/8/01
Graticule Field Area:	0.00817	0.00817	0.00817	0.00817
Total Fibers:	5/100	3.5/100	7/100	6/100
Coefficient of Variation:	LOQ	LOD	LOQ	LOQ
Fibers/cc:	<0.0039 f/cc	0.027 f/cc	0.014 f/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, 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: Shawn Olson

P.O. Box 216 Gladstone Oregon, 97027 Office:(503)557-2396 Fax:557-3025

Air Sample Analysis Report

THREE RIVERS ENVIRONMENTAL, Inc.

CLIENT: West Linn-Wilsonville School District **TRE JOB NO:** 1020-123g

ATTN: Tim Woodley **P.O. NO:** Verbal

CONTRACTOR: IRS Environmental, Inc. **REPORT NO:** 1

PROJECT: Inza R. Wood Cafeteria, 450 sq. ft. **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	6	7	8
Laboratory No:	SO01-0577	SO01-0578	SO01-0579	SO01-0580
Sample Location:	Oscar Galindo 543-35-9115 P	Cafeteria, 20' N. of offices AD	Oscar Galindo 543-35-9115 P	Negative air exhaust 2,000 CFM NAE
Work Performed:	Floor tile/mastic 1/2 face	N/A	Floor tile/mastic 1/2 face	N/A
Date Sampled:	6/8/01	6/8/01	6/8/01	6/8/01
Sampled by:	S. Olson	S. Olson	S. Olson	S. Olson
Pump No:	LV-05	HV-16	LV-05	HV-16
Start Time:	19:00	20:45	21:00	22:45
Stop Time:	21:00	22:45	23:00	00:45
Minutes Sampled:	120	120	120	120
Start Flow Rate: (LPM)	2	10	2	10
Stop Flow Rate: (LPM)	2	10	2	10
Average Flow Rate: (LPM)	2	10	2	10
Volume:	240 L	1200 L	240 L	1200 L
Date Analyzed:	6/8/01	6/8/01	6/8/01	6/8/01
Graticule Field Area:	0.00817	0.00817	0.00817	0.00817
Total Fibers:	4/100	4/100	2.5/100	8/100
Coefficient of Variation:	LOD	LOD	LOD	LOQ
Fibers/cc:	0.0079 f/cc	<0.0039 f/cc	0.0050 f/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, 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: Shawn Olson

P.O. Box 216 Gladstone Oregon, 97027 Office:(503)557-2396 Fax:557-3025

Air Sample Analysis Report

THREE RIVERS ENVIRONMENTAL, Inc.

CLIENT: West Linn-Wilsonville School District **TRE JOB NO:** 1020-123g

ATTN: Tim Woodley **P.O. NO:** Verbal

CONTRACTOR: IRS Environmental, Inc. **REPORT NO:** 1

PROJECT: Inza R. Wood Cafeteria, 450 sq. ft. **PAGE NO:** 3 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:	B1	B2		
Laboratory No:	SO01-0581	SO01-0582		
Sample Location:	Blank	Blank		
Work Performed:	N/A	N/A		
Date Sampled:	6/8/01	6/8/01		
Sampled by:	S. Olson	S. Olson		
Pump No:	N/A	N/A		
Start Time:	N/A	N/A		
Stop Time:	N/A	N/A		
Minutes Sampled:	N/A	N/A		
Start Flow Rate: (LPM)	N/A	N/A		
Stop Flow Rate: (LPM)	N/A	N/A		
Average Flow Rate: (LPM)	N/A	N/A		
Volume:	N/A L	N/A L	L	L
Date Analyzed:	6/8/01	6/8/01		
Graticule Field Area:	0.00817	0.00817		
Total Fibers:	0/100	0/100		
Coefficient of Variation:	N/A	N/A		
Fibers/cc:	N/A f/cc	N/A f/cc	f/cc	f/cc

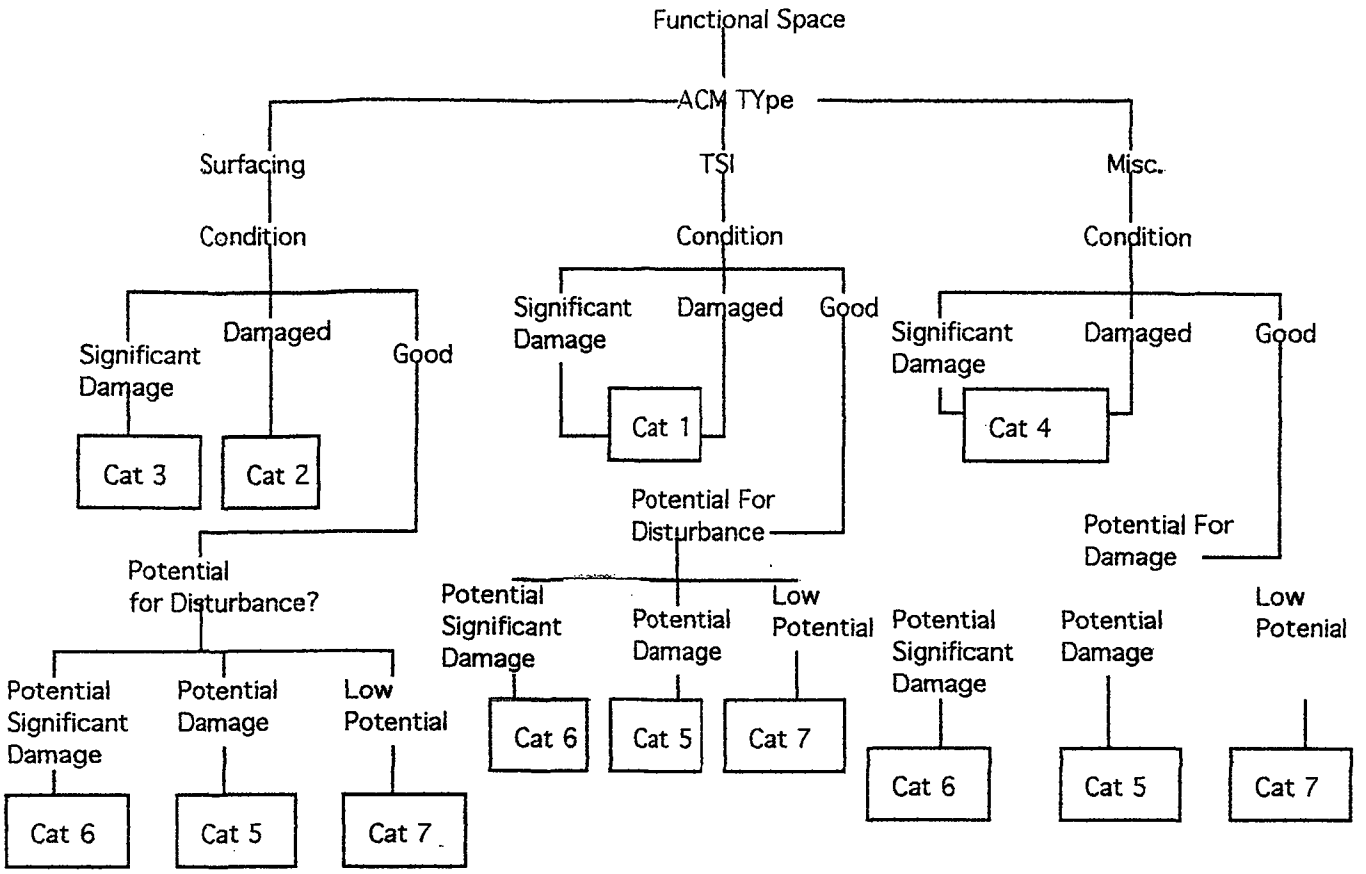
Abbreviations: AP-Area sample prior to abatement, AD-Area sample during abatement, C-Clearance, P-Personal sample from breathing zone, EL-Excursion limit, NAE-Negative air exhaust, PA-post abatement area sample, BG-Background, LOQ-Limit of Quantification, LOD-Limit of Detection

Comments:

Analyzed by: Shawn Olson

P.O. Box 216 Gladstone Oregon, 97027 Office:(503)557-2396 Fax:557-3025

Decision Tree for Determination of Physical Assement Categories



Physical Assement Categories

Cat 1 : Damaged or Significatly damaged thermal system insulation ACBM

Cat 2 : Damaged friable surface ACBM

Cat 3 : Significantly damaged friable surfacing ACBM

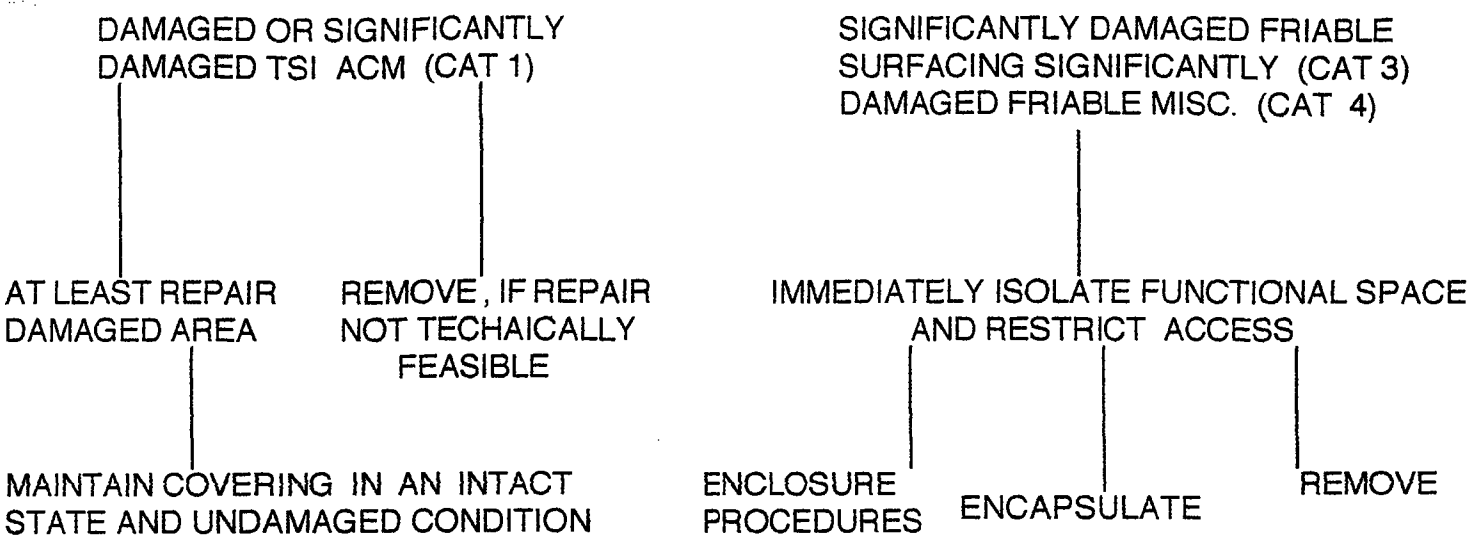
Cat 4 : Damaged or significantly damaged friable miscellaneous ACBM

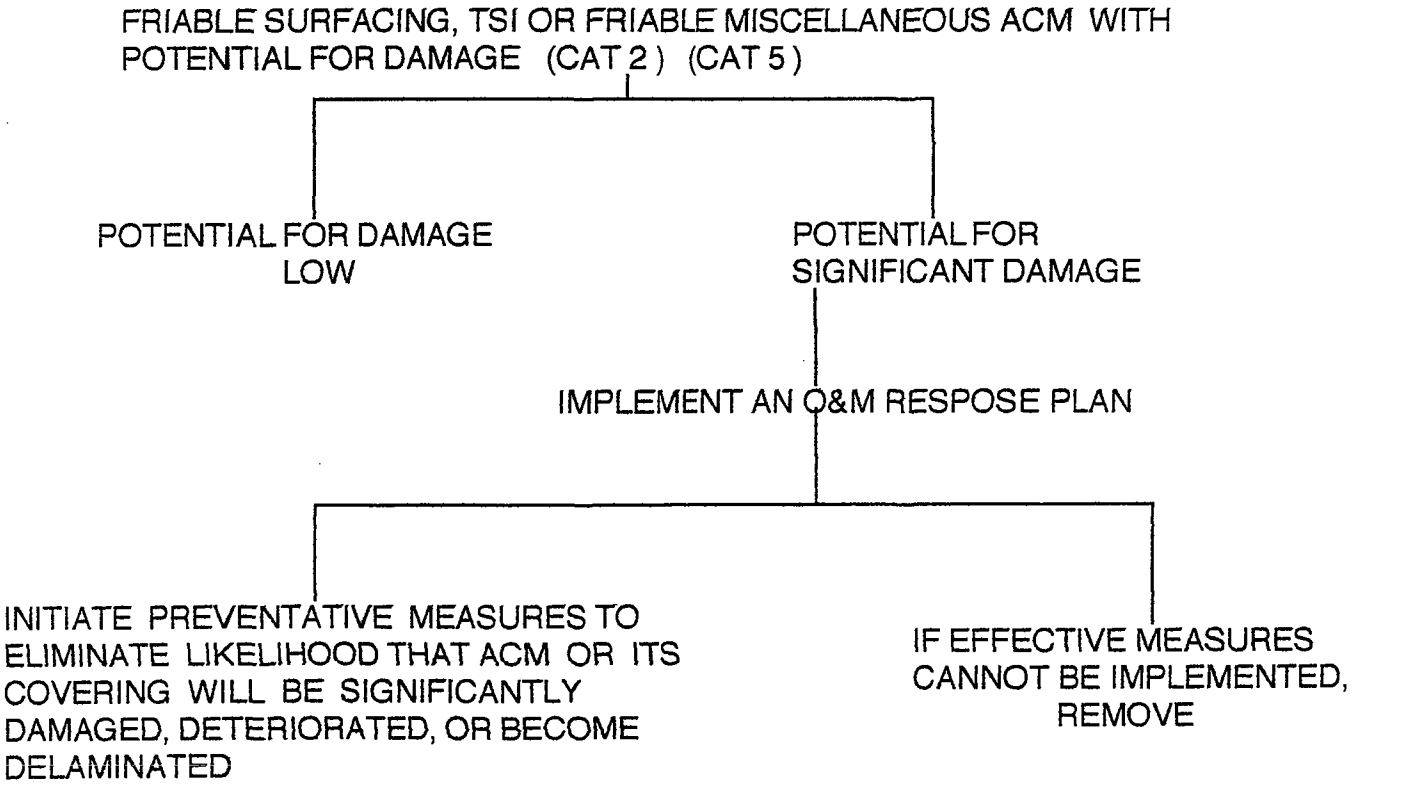
Cat 5 : ACBM with potenial for damage

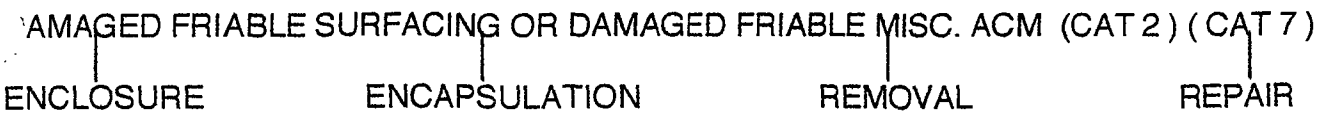
Cat 6 : ACBM with potential for significant damage

Cat 7 : Any remaining friable ACBM or friable suspected ACBM

POSSIBLE RESPONSE ACTIONS







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 tie.

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 then 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

TABLE OF CONTENTS

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 ACBM.

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 cut 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
Disposable 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^3) over 8-hours for abatement project workers and an action level of 0.1 f/cm^3 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^3, 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 ACBM and non-friable ACBM 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 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.

_X_ 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 Nutt

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: _____

Building Name	Abatement Location	Abatement Method	Extent of Abatement	Abatement Contractor	Date of Abatement	Abatement Cost	All ACM Removed

* 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: ______________________

Name	Date of Hire	Training Received	Location	EPA Accred.	Duration (hours)	Dates Taken	Refresher Courses		
							Date	Date	Date

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: _____

start stop

Location: _____ Date: _____/_____

Time: _____/_____

Maintenance Activity

Description of Activity: _____

_____

_____

ACM Removed: YES / NO Quantity: _____ Removal Method: _____

Disposal/Storage Site: _____ Site Supvr: _____

Address: _____ Phone: _____

Equipment/Preventive Measures

☐ Area Isolated	☐ Signs Posted	☐ HEPA Vacuum	☐ Isolate Air Handlers
☐ Tyvek Suits	☐ Respirators	☐ Goggles	☐ Poly sheeting
☐ Disposal Bags	☐ Disposal Drums	☐ Duct Tape	☐ Tools(detail below)
☐ Encapsulant-Bridging	☐ Encapsulant-penetr.	☐ Minienclosure	☐ Change Room
☐ Enclosure	☐ Glove Bag	☐ Amended Water	☐ Repair Materials(detail below)

Tools and Repair Materials-List All

_____ _____ _____

_____ _____ _____

_____ _____ _____

Staff Assigned

Name	Title	Duties	Date/Time start	finish

Further Action Necessary: _____

_____

Comments: _____

_____

Supvr Signature: Date:

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

☐ Area Isolated	☐ Signs Posted	☐ HEPA Vacuum	☐ Isolate Air Handlers
☐ Tyvek Suits	☐ Respirators	☐ Goggles	☐ Poly sheeting
☐ Disposal Bags	☐ Disposal Drums	☐ Duct Tape	☐ Tools(detail below)
☐ Encapsulant-Bridging	☐ Encapsulant-penetr.	☐ Minienclosure	☐ Change Room
☐ Enclosure	☐ Glove Bag	☐ Amended Water	☐ Repair Materials(detail below)

☐ Gross Removal(attach info on contractor, and all activity details) ☐ Notify Asbestos Coordinator

Tools and Repair Materials-List All _____ _____ _____

_____ _____ _____

_____ _____ _____

Staff Assigned

Name	Title	Accreditation(if applic.) State	Accreditation(if applic.) Number	Duties	Date/Time start	Date/Time finish

Further Action Necessary: _____

_____

Comments: _____

_____

Supvr Signature: Date:

MAJOR O & M ACTIVITY REPORT

Campus: _____ Building: _____

start stop

Location: _____ 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

☐ Area Isolated	☐ Signs Posted	☐ HEPA Vacuum	☐ Isolate Air Handlers
☐ Tyvek Suits	☐ Respirators	☐ Goggles	☐ Poly sheeting
☐ Disposal Bags	☐ Disposal Drums	☐ Duct Tape	☐ Tools(detail below)
☐ Encapsulant-Bridging	☐ Encapsulant-penetr.	☐ Minienclosure	☐ Change Room
☐ Enclosure	☐ Glove Bag	☐ Amended Water	☐ Repair Materials(detail below)

☐ Gross Removal(attach info on contractor, and all activity details)

Tools and Repair Mate als-List All _____ _____ _____

_____ _____ _____

_____ _____ _____

Staff Assigned

Name	Title	Accreditation		Duties	Date/Time	
		State	Number		start	finish

Further Action Necessary: _____

_____

Comments: _____

_____

Supvr Signature: _____ Date: _____

AIR MONITORING DATA AND LOG

This air monitoring log and all appropriate paperwork must be attached to all Operations and Maintenance reports filed in the O & M Records file. A separate data sheet should be completed for each independant activity regardless of size and duration

Sample Number	Sample Type*	Sample Location	Time		Total Time(min)	Flow (L/min)**	Collected Volume(L)	Fibers Counted***	Conc. Fibers/cc
			Start	Finish					

* Personal, Area, Ceiling, or other

** Attach all calibration data to this form

*** Attach all laboratory analytical data to this form

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

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 285 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 for:

BULK ASBESTOS FIBER ANALYSIS

December 31, 1999
Effective through

For the National Institute of Standards and Technology

NVLAP Lab Code: 101882-0

American Association for Laboratory Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC GUIDE 25-1990

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.
7469 White Pine Road
Richmond, VA 23237
Irma Faszewski Phone: 804 275 4788

ENVIRONMENTAL

Valid To: August 31, 2000 Certificate Number: 0716-01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform recognized EPA methods using the following testing technologies and in the analyte categories identified below:

Testing Technologies: Atomic Absorption/ICP-AES Spectrometry, Atomic Absorption-Flame, Hazardous Waste Characteristics Tests

Nonpotable Water

Metals: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Se, Ag, Na, Tl, Sn, Ti, V, Zn-

per EPA test methods SW 6010, 7420, 7470

Solid/Hazardous Waste

Metals: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Se, Ag, Na, Tl, Sn, Ti, V, Zn

per EPA test methods SW 6010, 7420, 7470

Hazardous Waste Characteristics Test: TCLP

per EPA test method SW 1311

Environmental Lead: soil, paint chips (residue), dust, air, building debris

sample preparation
per EPA test methods SW3050A (soils, building debris); 3050A modified (paints, wipes)
per NIOSH test method 7082 (air)
per EPA test method 600/R-93/200 (sonification – air, paint, soil)

sample analysis
per EPA test methods SW 6010A, 7420
per NIOSH methods 7082, 7300

Certificate of Completion

This is to certify that

Darren Lee

has satisfactorily completed

4 hours of refresher training as a

Management Planner

in compliance with TSCA Title II

AHERA Accredited

THE NORTHWEST'S LEADING TRAINING ORGANIZATION

Sep 23, 1999

Training Coordinator

Exp. Date: Sep 22, 2000

Prezant

Cert. # 99-1933

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

Jeffrey Smith

has satisfactorily completed
One half-day refresher training as a

Building Inspector

in compliance with TSCA Title II
AHERA Accredited

Sep 15, 1997

Training Administrator

Exp. Date: Sep 15, 1998

Prezant

Cert. # 97-3959
Conducted at:
Pac Pro Safety
Holiday Inn / Portand, 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

Management Planner

in compliance with TSCA Title II
AHERA Accredited

THE NORTHWEST'S LEADING TRAINING ORGANIZATION

Sep 23, 1999

Training Coordinator

Exp. Date: Sep 22, 2000

Prezant

Cert. #99-1934
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

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

Glenn R. Bryant

has satisfactorily completed
4 hours of refresher training as a

Building Inspector

in compliance with TSCA Title II
AHERA Accredited

Oct 21, 1999

Training Coordinator

Exp. Date: Oct 20, 2000

Prezant

Cert. #99-2209
Conducted at:
Pac Pro Portland, OR

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

Certificate of Completion

Med-Tox Northwest
certifies that

Glenn Bryant

has successfully completed 32 hours of

Sampling and Evaluating Airborne Asbestos Dust
NIOSH 582 Equivalent
on this 22nd day of March 1996

Carol Evans
Instructor

Ken Kaufmann
Training Director

Certificate No. 960339N

LITHO.IN U.S.A.

CERTIFICATE OF COMPLETION

PRESENTED BY

COLE & ASSOCIATES, TRAINING & CONSULTING, INC.

ROBERT C. MONTGOMERY

HAS SUCCESSFULLY COMPLETED THE

SAMPLING AND EVALUATING AIRBORNE ASBESTOS DUST (NIOSH 582 EQUIVALENT COURSE) TRAINING COURSE

HELD ON THE 19TH THROUGH THE 22ND OF JANUARY 1999,
IN BELLEVUE WASHINGTON.
EXAM DATE: JANUARY 22, 1999

Joan Cole	
TRAINING ADMINISTRATOR	INSTRUCTOR
3514-99-01-02	January 22, 2000
CERTIFICATION NUMBER	DATE OF EXPIRATION

COLE & ASSOCIATES, INC. TRAINING AND CONSULTING

Certificate of Completion

This is to certify that

Robert C. Montgomery

has satisfactorily completed

24 hours training as a

Building Inspector

in compliance with TSCA Title II/AHERA Accredited

Dec 16 - 18, 1998

Conducted at: PacPro - Portland, OR

Lynn Pedone

Training Administrator

Exp. Date: Dec 18, 1999

Prezant

THE NORTHWEST LEARNING TRAINING ORGANIZATION

Cert. # 98-09212

Exam Date: Dec 18, 1998

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

Certificate of Completion

Presented by

PAC PRO *Safety & Health Services*

Irvin D. Jones

has successfully completed a 32-Hour
Sampling and Evaluating Airborne Asbestos Dust
NIOSH 582 Equivalent Course.

June 21-23, 1999
Portland, Oregon
Certification Number: PP699-582-02
Examination Date: June 23, 1999

Harvey McGill
Training Administrator

Marilyn Bull
Harvey McGill
Instructor

PAC PRO *Safety & Health Services* 660 NW Bella Vista Drive Gresham, Oregon 97030 (503)-666-6693

Certificate of Completion

Irvin D. Jones

has successfully completed the requisite training and examination for
accreditation under TSCA Title II
EPA AHERA (Asbestos Hazard Emergency Response Act),
and ASHARA Model Accreditation Program requirements

as presented by
Clayton Environmental Consultants

Garry Rossing
INSTRUCTOR

Course Date: **09/21/99** through **09/23/99**
Certification # **244-88-8571** Examination Date: **09/23/99**
Certificate Expiration Date: **09/22/00**

Clayton
ENVIRONMENTAL
CONSULTANTS

Clayton Environmental Consultants is a Division of Clayton Group Services, Inc.
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