

DOTHAN CITY BOE

HEARD ELEMENTARY SCHOOL
MANAGEMENT PLAN

FOR

ASBESTOS-CONTAINING
MATERIALS

Updated
June 2, 2026
By

 **RainCrow**

Environmental
752 Myrick Rd.
Deatsville, Alabama 36022

Alabama Asbestos Management Program

L1 **AHERA Management Plan School Cover Sheet** LEA: Dothan City Schools 1 3 0
Name Code #
L2 School: Heard Elementary School 0 8 0
Name Code #

L3 **Management Plan Submission** Original Resubmitted New Building

L4 **List of Documents Attached**

- | | |
|---|--|
| <input checked="" type="checkbox"/> List of School Buildings (Form 3) | <input checked="" type="checkbox"/> Follow-up Action Plan (Form 7) |
| <input checked="" type="checkbox"/> Homogeneous Areas (Form 4) | <input type="checkbox"/> Assessment Sheet(s) (Optional Form 8) |
| <input checked="" type="checkbox"/> Summary of Recommendations (Form 5) | <input checked="" type="checkbox"/> Sampling Form (Optional Form 9) |
| <input checked="" type="checkbox"/> Response Action Plan (Form 6 & 6A) | <input checked="" type="checkbox"/> Lab Report(s) (Optional Form 10) |

L5 **LEA AHERA DESIGNEE (School Asbestos Coordinator)**

Typed Name: Mrs. Sharla Godwin Name of Training Course: Managing Asbestos in Bldgs.
Mailing Address: 1665 Honeysuckle Rd. Year 21 Month 11 Day 10 Total Hours of Course 16
Dothan, AL 36305 Name of Training Agency: Safe State (Univ of Alabama)

L6 **MANAGEMENT PLANNER**

Typed Name: Mr. Stan Eller Agency: RainCrow Environmental
Accreditation Number: APL0625257655 Signature: Stan Eller Date: 6/2/2026

For persons who performed inspections, and recommend(ed) design, or carry out response actions (except for operations and maintenance) the local education agency used or will use persons who have been accredited by a state which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206(c) of Title II of the Act. In addition, the LEA has considered whether any conflict of interest may arise from the interrelationship among accredited personnel, such as abatement activities being performed by an inspector or management planner, and whether that should influence the selection of accredited personnel to perform activities under this AHERA program.

The signatories below certify that the general local education agency responsibilities, as stipulated by Part 763.84 have been met or will be met.

L7 Signature: _____ Signature: _____
LEA AHERA Designee *LEA Superintendent/ Owner*
Date: _____ Dr. Garrick Askew
Typed Name of Superintendent/Owner

For Reviewing Agency Use Only

- Accepted
 Returned for Reason Stated Below

Reviewers Signature: _____ Date: _____

Alabama Asbestos Management Program

School Listing of Buildings

L1 **LEA:** Dothan City Schools 1 3 0
Name Code #

L2 **School:** Heard Elementary School 0 8 0
Name Code #

L3 **Address:** 201 Daniel Circle
Dothan, Al 36303 **County** Houston

C1	C2	C3	C4		C5				
No.	Building Description Name (Address if different than school)	Total Ft. ²	Date of Inspection		Check Here for Presence of:				
			Present	Previous	ACBM		Suspect ACBM		No ACBM
					Friable	Non- Friable	Friable	Non- Friable	
01	Main Building	42,989	2/26/25	7/19/88		X		X	
02	Portable Classroom ES-14-50	700	2/26/25	7/19/88		X			
03	Activity Building	3,000	2/26/25	N/A				X	

L4 Inspector: Stan Eller Alabama Certification Number: AIN0624257655

Name

Signature

Date: 2/28/2025 Agency: RainCrow Environmental

Alabama Asbestos Management Program

Building Homogeneous Area

L1 **Code:** 1 3 0 - 0 8 0 - 0 1
LEA School Building

L2 **School:** Heard Elementary School
Name

L3 **Building:** Main Building
Name

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Homogeneous Area # (2-digit)	Functional Space # (2-digit)	Friable (Y/N)	Category (T, S, M)	Description	Sampling Sheet (s)	Lab Report (s)	ACM (Y/N)	Assumed ACM	Assessment Sheet	Assessment Category (1-7)
04		N	M	2' x 4' Cement Panels (Exterior Eaves of Original Building)-660sf covered				X		
05		N	M	12"VFT (1st Addition NW Hall & Teacher Work Room) green 550 sf	X	X	Y			
06	13	N	M	Cementitious Ceiling Tile (Kitchen) 160sf all removed				X		
07		N	M	Pebbled Facia Texture (Upper Exterior of Original Building)				X		
08		N	M	12" VFT/Mastic (CRs 1-6, 16-19, 23-26, Hall D & E) white speck	X	X	Y			
09		N	M	12" VFT/Mastic (West D Hall & CRs 20,21, and Media Center) tan/pink speckled- sf	X	X	Y			
10	08	N	M	Carpet Mastic (beneath blue/yellow/black/ gray line carpet in Hall A replaced w/ LVP				X		
11	10	N	M	Carpet Mastic (beneath blue/purple carpet in Hall A Office) replaced w/ LVP				X		
12	15	N	M	24" x 24" LVT/Mastic (Rm 20) gray with gray triangles				X		
13	01	N	S	Spray-on Ceiling (Halls B and C)				X		

L4 Inspector: Stan Eller Alabama Certification Number: AIN0624257655
Name

Signature Date: 2/26/2025 Agency: RainCrow Environmental

L5 Planner: Stan Eller Alabama Certification Number: APL0724257655
Name

Signature Date: 2/28/2025 Agency: RainCrow Environmental

Alabama Asbestos Management Program

Building Homogeneous Area

L1 **Code:** 1 3 0 - 0 8 0 - 0 1
LEA School Building

L2 **School:** Heard Elementary School
Name

L3 **Building:** Main Building
Name

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Homogeneous Area # (2-digit)	Functional Space # (2-digit)	Friable (Y/N)	Category (T, S, M)	Description	Sampling Sheet (s)	Lab Report (s)	ACM (Y/N)	Assumed ACM	Assessment Sheet	Assessment Category (1-7)
13	02	N	S	Spray-on Ceiling (Hall A)				X		
14	16	N	M	Fire Doors (Hall D) metal				X		
15	16	N	M	4" Vinyl Cove Base (Halls D, E) dark brown				X		
16	04	N	M	Ceramic Tile (Halls B, C RRs)				X		
17	04	N	M	Vinyl Floor Tile (Halls B, C RRs) white w/ blue speckles terrazzo non-ACBM			N			
18	17	N	M	2" Ceramic Floor Tile (Hall D RRs, Janitor Closet, and Water Fountain Area) brown				X		
20	11	N	M	2' x 2' Ceiling Tile (Kitchen) smooth				X		
21	18	N	S	1- Sink w/ white spray-on (Media Center Workroom)				X		
22	19	N	S	4- Sinks w/ white spray-on (Hall E CRs)				X		
23	20	N	M	2' x 2' Ceiling Tile (Hall E)				X		

L4 Inspector: Stan Eller Alabama Certification Number: AIN0624257655
Name

Signature Date: 2/26/2025 Agency: RainCrow Environmental

L5 Planner: Stan Eller Alabama Certification Number: APL0724257655
Name

Signature Date: 2/28/2025 Agency: RainCrow Environmental

Alabama Asbestos Management Program

Building Homogeneous Area

L1 **Code:** 1 3 0 - 0 8 0 - 0 1
LEA School Building

L2 **School:** Heard Elementary School
Name

L3 **Building:** Main Building
Name

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Homogeneous Area # (2-digit)	Functional Space # (2-digit)	Friable (Y/N)	Category (T, S, M)	Description	Sampling Sheet (s)	Lab Report (s)	ACM (Y/N)	Assumed ACM	Assessment Sheet	Assessment Category (1-7)
24	19	N	M	2" Ceramic Floor Tile (Hall E CR RRs) cream				X		
25	18	N	M	4" Vinyl Cove Base (Media Center) black				X		
26	07	N	M	Laminate Flooring (Offices) dark brown				X		
27	11	N	M	4' tall Vinyl Wall Wainscot (Behind appliances @ kitchen)				X		
28	12	N	M	2' x 4' Ceiling Tile (Cafeteria)				X		
29	01	N	M	10" Light Fixture Heat Shield (Kitchen Dry Storage)				X		

L4 Inspector: Stan Eller Alabama Certification Number: AIN0624257655
Name

Signature Date: 2/26/2025 Agency: RainCrow Environmental

L5 Planner: Stan Eller Alabama Certification Number: APL0724257655
Name

Signature Date: 2/28/2025 Agency: RainCrow Environmental

Alabama Asbestos Management Program

Building Homogeneous Area

L1 **Code:** 1 3 0 - 0 8 0 - 0 3
LEA School Building

L2 **School:** Heard Elementary School
Name

L3 **Building:** Activity Building
Name

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Homogeneous Area # (2-digit)	Functional Space # (2-digit)	Friable (Y/N)	Category (T, S, M)	Description	Sampling Sheet (s)	Lab Report (s)	ACM (Y/N)	Assumed ACM	Assessment Sheet	Assessment Category (1-7)
01	01	N	M	2' x 2' Ceiling Tile (RR and Office)				X		
02	01	N	M	Drywall/Joint Compound (determined to be plywood)			N			

L4 Inspector: Stan Eller Alabama Certification Number: AIN0624257655

Stan Eller
Signature Date: 2/26/2025 Agency: RainCrow Environmental

L5 Planner: Stan Eller Alabama Certification Number: APL0724257655

Stan Eller
Signature Date: 2/28/2025 Agency: RainCrow Environmental

Alabama Asbestos Management Program

L1 AHERA Management Plan School Cover Sheet LEA: Dothan City Schools 1 3 0
Name Code #

L2 School: Heard Elementary School 0 8 0
Name Code #

L3 Management Plan Submission Original Resubmitted New Building

L4 List of Documents Attached

<input checked="" type="checkbox"/> List of School Buildings (Form 3)	<input checked="" type="checkbox"/> Follow-up Action Plan (Form 7)
<input checked="" type="checkbox"/> Homogeneous Areas (Form 4)	<input type="checkbox"/> Assessment Sheet(s) (Optional Form 8)
<input checked="" type="checkbox"/> Summary of Recommendations (Form 5)	<input checked="" type="checkbox"/> Sampling Form (Optional Form 9)
<input checked="" type="checkbox"/> Response Action Plan (Form 6 & 6A)	<input checked="" type="checkbox"/> Lab Report(s) (Optional Form 10)

L5 LEA AHERA DESIGNEE (School Asbestos Coordinator) AHERA Inspector/AHERA
Typed Name: Ted Hall Name of Training Course Management Planner
Mailing Address: 500 Dusy Street Year 88 Month 7 Day 15 Total Hours of Course 40
Dothan, Alabama 36301 Name of Training Agency U of Alabama

L6 MANAGEMENT PLANNER
Typed Name: Ted Hall Agency: Dothan City Schools
Accreditation Number: PL0788H9506 Signature: Ted Hall Date: 4-17-89

For persons who performed inspections, and recommend(ed) design, or carry out response actions (except for operations and maintenance) the local education agency used or will use persons who have been accredited by a state which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206(c) of Title II of the Act. In addition, the LEA has considered whether any conflict of interest may arise from the interrelationship among accredited personnel, such as abatement activities being performed by an inspector or management planner, and whether that should influence the selection of accredited personnel to perform activities under this AHERA program.

The signatories below certify that the general local education agency responsibilities, as stipulated by Part 763.84 have been met or will be met.

L7 Signature: Ted Hall Signature: Gene J. Watson
LEA AHERA Designee LEA Superintendent/Owner
Date: 4-17-89 Gene J. Watson
Typed Name of Superintendent/Owner

Accepted For Reviewing Agency Use Only
 Returned for Reason Stated Below

Reviewers Signature: _____ Date: _____

Alabama Asbestos Management Program

School Listing of Buildings

L1 LEA: Dothan City Schools 1 3 0
Name Code #

L2 School: Heard Elemtary School 0 8 0
Name Code #

L3 Address: 201 Daniel Circle

Dothan, Alabama 36301 County Houston

C1	C2	C3	C4		C5				
No.	Building Description Name (Address if different than school)	Total Sq. Ft.	Date of Inspection		Check Here for Presence of:				
			Present	Previous	ACBM		Suspect ACBM		No ACBM
					Friable	Non- Friable	Friable	Non- Friable	
01	Main Building	42,989	7/19/88			X			
02	Portable Classroom E5-14-50	700	7/19/88			X			

L4 Inspector: Ted Hall Alabama Certification Number: IN0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Building Homogeneous Area

L1

Code: 1 3 0 - 0 8 0 - 0 1
LEA School Building

L2

School: Heard Elementary School
Name

L3

Building: Main Building
Name

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Homogeneous Area # (2-digit)	Functional Space # (2-digit)	Friable (Y/N)	Category (T, S, M)	Description	Sampling Sheet (s)	Lab Report (s)	ACM (Y/N)	Assumed ACM	Assessment Sheet	Assessment Category (1-7)
01		N	M	20,000 sq. ft. Acoustical Tile found throughout original building	X	X	N			
02		N	M	850 sq. ft. Acoustical Tile found as replacement tile in building	X	X	N			
03		N	M	720 sq. ft. Acoustical Tile found in front wing rest rooms	X	X	N			
04		N	M	660 sq. ft. Exterior transite panels around eaves of original building					X	
05		N	M	5,325 sq. ft. Vinyl Floor Tile found in 1st addition to building					X	
06		N	M	160 sq. ft. Transite panels used in some of kitchen as ceiling tiles					X	

L4

Inspector: Ted Hall
Name

Alabama Certification Number: IN0788H9506

Ted Hall
Signature

Date: 4-17-89 Agency: Dothan City Schools

L5

Planner: Ted Hall
Name

Alabama Certification Number: PL0788H9506

Ted Hall
Signature

Date: 4-17-89 Agency: Dothan City Schools

Alabama Asbestos Management Program

School Summary of Recommendations

L1 LEA/School Code: 1 3 0 - 0 8 0
LEA School

L2 School: Heard Elementary School
Name

C1	C2											
Building Code (2-digit) Homogeneous Area Code (2-digit) Functional Space Code (2-digit)	Type of Recommendation (Check Each Column as Applicable)											
(Attach Form 6 & 6A for each column checked)	Removal	Encapsulations	Enclosure	Repair	Preventive	Cleaning	Work Practice (O&M)	Surveillance	Reinspection	Warnings	Training	Other (Specify)
0 1 - 0 4 -							X				X	
0 1 - 0 5 -							X				X	
0 1 - 0 6 -							X				X	
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												
- - - - -												

L3 Planner: Ted Hall Alabama Certification Number: PL0788H9506

Name

Signature

Date: 4-17-89 Agency: Dothan City Schools

Alabama Asbestos Management Program

Response Action Plan (Part 1)
(Form 6A must accompany this form)

L1 LEA: Dothan City Schools 1 3 0
Name Code #

L2 School: Heard Elementary School 0 8 0
Name Code #

L3 Response Action

- | | | | |
|-----------------------------------|--|--|---|
| <input type="checkbox"/> Removal | <input type="checkbox"/> Encapsulation | <input type="checkbox"/> Enclosure | <input type="checkbox"/> Work Practices (O&M) |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Isolation | <input type="checkbox"/> Preventive | <input type="checkbox"/> Cleaning (O&M) |
| <input type="checkbox"/> Warnings | <input checked="" type="checkbox"/> Training | <input type="checkbox"/> Other Specify _____ | |

L4 Description of the Recommended Response Action:

All maintenance employees at the school are to receive a minimum of 2 hours training in procedures necessary for the safe cleaning and maintenance of Vinyl Floor Tile and Transite panels. The LEA Maintenance Supervisor shall have responsibility for this training. All new maintenance employees to the school shall receive this training prior to performing any maintenance work on Vinyl Floor Tile, but in any case, no later than their 20th day of employment.

L5 Reasons for Selecting this Response Action:

Such training necessary in order to carry out other response actions.

L6 Resources Needed:

Training materials, sample equipment and supplies.

L7 Estimated Total Cost of the Response Action at This School:

Year 1 \$50 Year 2 \$25 Year 3 \$25

L8 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall
Signature

Date: 4-17-89 Agency: Dothan City Schools

Alabama Asbestos Management Program

Response Action Plan (Part 2)
(Form 6 must accompany this form)

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 **Response Action**

- | | | | |
|-----------------------------------|--|--|---|
| <input type="checkbox"/> Removal | <input type="checkbox"/> Encapsulation | <input type="checkbox"/> Enclosure | <input type="checkbox"/> Work Practices (O&M) |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Isolation | <input type="checkbox"/> Preventive | <input type="checkbox"/> Cleaning (O&M) |
| <input type="checkbox"/> Warnings | <input checked="" type="checkbox"/> Training | <input type="checkbox"/> Other Specify _____ | |

C1			C2	C3		C3	
Location Code Nos. 2 digits-per column			Comments	Schedule		LEA (Initial)	
Bldg.	HA	FS		Start Date	Completed Date	Accept	Reject*
01	04			5/1/89	Ongoing	<i>bjw</i>	
01	05			5/1/89	Ongoing	<i>bjw</i>	
01	06			5/1/89	Ongoing	<i>bjw</i>	

* LEA must attach detailed description of alternative action selected including rationale

L4 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Response Action Plan (Part 1)
(Form 6A must accompany this form)

L1 LEA: Dothan City Schools 1 3 0
Name Code #

L2 School: Heard Elementary School 0 8 0
Name Code #

L3 **Response Action**

- | | | | |
|-----------------------------------|--|--|---|
| <input type="checkbox"/> Removal | <input type="checkbox"/> Encapsulation | <input type="checkbox"/> Enclosure | <input type="checkbox"/> Work Practices (O&M) |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Isolation | <input type="checkbox"/> Preventive | <input type="checkbox"/> Cleaning (O&M) |
| <input type="checkbox"/> Warnings | <input checked="" type="checkbox"/> Training | <input type="checkbox"/> Other Specify _____ | |

L4 **Description of the Recommended Response Action:**

All maintenance workers employed at the Central Office level of the School System (except grounds crews) are to receive 14 hours of training regarding the history, dangers, and proper handling of asbestos and ACM. New employees are to receive this training as soon as practical and until successfully completing this training, are not to be given job assignments which might place them in the vicinity of ACM.

L5 **Reasons for Selecting this Response Action:**

Required by AHERA regulations.

L6 **Resources Needed:**

Services of qualified instructors, instructional and test materials.

L7 **Estimated Total Cost of the Response Action at This School:**

Year 1 \$100 Year 2 \$25 Year 3 \$25

L8 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall
Signature

Date: 4-17-89 Agency: Dothan City Schools

Alabama Asbestos Management Program

Response Action Plan (Part 2)
(Form 6 must accompany this form)

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 **Response Action**

- | | | | |
|-----------------------------------|--|--|---|
| <input type="checkbox"/> Removal | <input type="checkbox"/> Encapsulation | <input type="checkbox"/> Enclosure | <input type="checkbox"/> Work Practices (O&M) |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Isolation | <input type="checkbox"/> Preventive | <input type="checkbox"/> Cleaning (O&M) |
| <input type="checkbox"/> Warnings | <input checked="" type="checkbox"/> Training | <input type="checkbox"/> Other Specify _____ | |

C1			C2	C3		C3	
Location Code Nos. 2 digits-per column			Comments	Schedule		LEA (Initial)	
Bldg.	HA	FS		Start Date	Completed Date	Accept	Reject*
01	04			5/1/89	Ongoing	<i>DPW</i> <i>DPW</i> <i>DPW</i>	
01	05			5/1/89	Ongoing		
01	06			5/1/89	Ongoing		

* LEA must attach detailed description of alternative action selected including rationale

L4 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Response Action Plan (Part 1)
(Form 6A must accompany this form)

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 **Response Action**

- Removal Encapsulation Enclosure Work Practices (O&M)
 Repair Isolation Preventive Cleaning (O&M)
 Warnings Training Other Specify _____

L4 **Description of the Recommended Response Action:** Vinyl Floor Tile and Transite panels as they exist in this school are non-friable and are assumed ACBM. Local school maintenance staff are specifically forbidden to remove or repair any tile or transite panels. Routine cleaning of floor tile may be carried out provided the tile is kept wet during cleaning and cleaning machinery is not allowed to scratch or cut into tile surfaces. Transite panels require no routine maintenance. Maintenance personnel are to report to the LEA Maintenance Supervisor immediately any tile or panel which appears loose or fragmented.

L5 **Reasons for Selecting this Response Action:**

Vinyl Floor Tile and Transite panels do not present a hazard if left undisturbed. Purpose of plan is to insure that it remains undisturbed and to have any disturbances that may occur reported to the Maintenance Supervisor for handling by trained personnel.

L6 **Resources Needed:**

Machinery and supplies for safe cleaning of tile.

L7 **Estimated Total Cost of the Response Action at This School:**

Year 1 \$240 Year 2 \$240 Year 3 \$240

L8 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Response Action Plan (Part 2)
(Form 6 must accompany this form)

L1 **LEA:** Dothan City Schools 1 3 0
Name *Code #*

L2 **School:** Heard Elementary School 0 8 0
Name *Code #*

L3 **Response Action**

- | | | | |
|-----------------------------------|--|--|--|
| <input type="checkbox"/> Removal | <input type="checkbox"/> Encapsulation | <input type="checkbox"/> Enclosure | <input checked="" type="checkbox"/> Work Practices (O&M) |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Isolation | <input type="checkbox"/> Preventive | <input type="checkbox"/> Cleaning (O&M) |
| <input type="checkbox"/> Warnings | <input type="checkbox"/> Training | <input type="checkbox"/> Other Specify _____ | |

C1			C2	C3		C3	
Location Code Nos. 2 digits-per column			Comments	Schedule		LEA (Initial)	
Bldg.	HA	FS		Start Date	Completed Date	Accept	Reject*
01	04			5/1/89	Ongoing	<i>[Signature]</i>	
01	05			5/1/89	Ongoing	<i>[Signature]</i>	
01	06			5/1/89	Ongoing	<i>[Signature]</i>	

* LEA must attach detailed description of alternative action selected including rationale

L4 **Planner:** Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Follow-Up Action

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 Follow-Up Action

Reinspection

Periodic Surveillance

Notification/Recordkeeping

Other Specify _____

L4 Description of the Follow-Up Action:

School will be reinspected every 6 months by a certified AHERA inspector.

L5 Resources Needed:

Services of an inspector.

L6 Estimated Total Cost of the Response Action at This School:

Year 1 \$567 Year 2 \$567 Year 3 \$567

L7 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Follow-Up Action

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 Follow-Up Action

- Reinspection Periodic Surveillance
 Notification/Recordkeeping Other Specify _____

L4 Description of the Follow-Up Action:

Local school maintenance personnel shall be instructed to report any change in the condition of vinyl floor tiles to the LEA Maintenance Supervisor, including broken, chipped, cracked, or loose tile. Personnel shall also report any change in the condition of transite panels to the LEA Maintenance Supervisor.

L5 Resources Needed:

None

L6 Estimated Total Cost of the Response Action at This School:

Year 1 \$0 Year 2 \$0 Year 3 \$0

L7 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Follow-Up Action

L1 LEA: Dothan City Schools 1 3 0
Name *Code #*

L2 School: Heard Elementary School 0 8 0
Name *Code #*

L3 Follow-Up Action

- Reinspection Periodic Surveillance
 Notification/Recordkeeping Other Specify _____

L4 Description of the Follow-Up Action:

Notification:

Parents and employees were notified of the LEA's intent to file this management plan.

Recordkeeping:

The LEA AHEARA Designee shall keep all records relative to inspection of the school.

The LEA Maintenance Supervisor shall keep all records relative to repairs and other operations not within the scope of local school maintenance employees' routine duties.

L5 Resources Needed:

Filing cabinets, office supplies, etc.

L6 Estimated Total Cost of the Response Action at This School:

Year 1 \$50 Year 2 \$50 Year 3 \$50

L7 Planner: Ted Hall Alabama Certification Number: PL0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature

Alabama Asbestos Management Program

Sampling Form

L1 Homogeneous/Sampling Area: 1 3 0 0 8 0 0 1 0 1
LEA School Building HA

L2 Type: Thermal Surfacing Misc.

L3 Square Footage: 20,000 or Linear Footage: _____

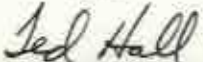
L4 Friable (Y/N): N Number of Bulk Samples Taken: 7

L5 Describe or sketch physical configurations of sampling area, indicate sampling points on sketches, provide attachments as necessary.

Acoustical tiles found throughout the main building. Sample locations indicated on attached building sketch as points 1-1 through 1-7.

L6 Describe methods used to assure random and/or representative sampling:
 Samples taken according to methods described in the "Draft Curriculum for Training Building Inspectors", Student Notebook, section 1, pages 3-4 and 13-16.

Sample	Date	Sample	Date	Sample	Date	Sample	Date
<u>0 1</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 2</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 3</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 4</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 5</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 6</u>	<u>7/19/88</u>	___	___	___	___	___	___
<u>0 7</u>	<u>7/19/88</u>	___	___	___	___	___	___

L8 Inspector: Ted Hall Alabama Certification Number: IN0788H9506
Name

Signature Date: 4-17-89 Agency: Dothan City Schools

Alabama Asbestos Management Program

Sampling Form

L1 Homogeneous/Sampling Area: 1 3 0 - 0 8 0 - 0 1 - 0 2
LEA School Building HA

L2 Type: Thermal Surfacing Misc.

L3 Square Footage: 850 or Linear Footage: _____

L4 Friable (Y/N): N Number of Bulk Samples Taken: 3

L5 Describe or sketch physical configurations of sampling area, indicate sampling points on sketches, provide attachments as necessary.

Acoustical tiles found scattered throughout the main building used as replacement tiles. Sample locations indicated on attached building sketch as points 2-1 through 2-3.

L6 Describe methods used to assure random and/or representative sampling:

Samples taken according to methods described in the "Draft Curriculum for Training Building Inspectors", Student Notebook, section 1, pages 3-4 and 13-16.

Sample	Date	Sample	Date	Sample	Date	Sample	Date
<u>0 1</u>	<u>7/19/88</u>	_____	_____	_____	_____	_____	_____
<u>0 2</u>	<u>7/19/88</u>	_____	_____	_____	_____	_____	_____
<u>0 3</u>	<u>7/19/88</u>	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

L8 Inspector: Ted Hall Alabama Certification Number: IN0788H9506

Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools

Signature

Alabama Asbestos Management Program

Sampling Form

L1 Homogeneous/Sampling Area: 1 3 0 0 8 0 0 1 0 3
LEA School Building HA

L2 Type: Thermal Surfacing Misc.

L3 Square Footage: 720 or Linear Footage: _____

L4 Friable (Y/N): N Number of Bulk Samples Taken: 3

L5 Describe or sketch physical configurations of sampling area, indicate sampling points on sketches, provide attachments as necessary.

Acoustical tiles found in the rest rooms in the front wing of the building.
 Sample locations indicated on attached building sketch as points 3-1 through 3-3.

L6 Describe methods used to assure random and/or representative sampling:

Samples taken according to methods described in the "Draft Curriculum for Training Building Inspectors", Student Notebook, section I, pages 3-4 and 13-16.

L7	Sample	Date	Sample	Date	Sample	Date	Sample	Date
	<u>0 1</u>	<u>7/19/88</u>	— —	— —	— —	— —	— —	— —
	<u>0 2</u>	<u>7/19/88</u>	— —	— —	— —	— —	— —	— —
	<u>0 3</u>	<u>7/19/88</u>	— —	— —	— —	— —	— —	— —
	— —	— —	— —	— —	— —	— —	— —	— —
	— —	— —	— —	— —	— —	— —	— —	— —
	— —	— —	— —	— —	— —	— —	— —	— —
	— —	— —	— —	— —	— —	— —	— —	— —

L8 Inspector: Ted Hall Alabama Certification Number: IN0788H9506
Name

Ted Hall Date: 4-17-89 Agency: Dothan City Schools
Signature



SOUTHERN EARTH SCIENCES, INC.

CONSULTING GEOTECHNICAL ENGINEERS
762 DOWNTOWNER LOOP WEST, SUITE 101 • P.O. BOX 160745
MOBILE, ALABAMA 36616
AREA CODE: 205 PHONE 344-7711

BULK SAMPLE ANALYSIS

SHT. 28 OF 31

CLIENT Dothan City Schools DATE TESTED 9/9 Method; PLM with Dispersion Staining
PROJECT 130-080-01 JOB NO. 88-160 LABORATORY NO. 795

SAMPLE ID NO.		01	01	01	01	01	01	01	02	02
		01	02	03	04	05	06	07	01	02
SAMPLE DESCRIPTION										
ASBESTOS MINERALS PRESENT	AMOSITE									
	CHRYSTOTLE									
	CROCIDOLITE									
	PERCENT ASBESTOS IN SAMPLE	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
OTHER FIBROUS MATERIALS NOTED	MINERAL WOOL	X	X	X	X	X	X	X	X	X
	FIBER GLASS									
	CELLULOSE	X	X	X	X	X	X	X	X	X
OTHER NON-FIBROUS MATERIALS NOTED	CARBONATES	X	X	X	X	X	X	X	X	X
	GYPSUM									
	MICA									
	CLAY									
	QUARTZ									

COMMENTS: N/D indicates asbestos fibers were not detected using PLM Methods

SAMPLES: SOUTHERN EARTH SCIENCES, INC. WILL RETAIN SAMPLES FOR A PERIOD OF 30 DAYS IF NO INSTRUCTIONS ARE RECEIVED, THEY WILL BE DISPOSED OF AT THAT TIME.

It is certified by the signature below that the laboratory identified above has received interim accreditation for polarized light microscope (PLM) analysis under the EPA Interim Asbestos Bulk Sample Analysis Quality Assurance Program.

ANALYST Navem Pachu REVIEWED BY Donald W. Smith DATE September 20, 1988



SOUTHERN EARTH SCIENCES, INC.
 CONSULTING GEOTECHNICAL ENGINEERS
 762 DOWNTOWNER LOOP WEST, SUITE 101 • P.O. BOX 160745
 MOBILE, ALABAMA 36616
 AREA CODE: 205 PHONE 344-7711

BULK SAMPLE ANALYSIS

SHT. 29 OF 31

CLIENT Dothan City Schools DATE TESTED 9/9 Method; PLM with Dispersion Staining
 PROJECT 130-080-01 JOB NO. 88-160 LABORATORY NO. 795

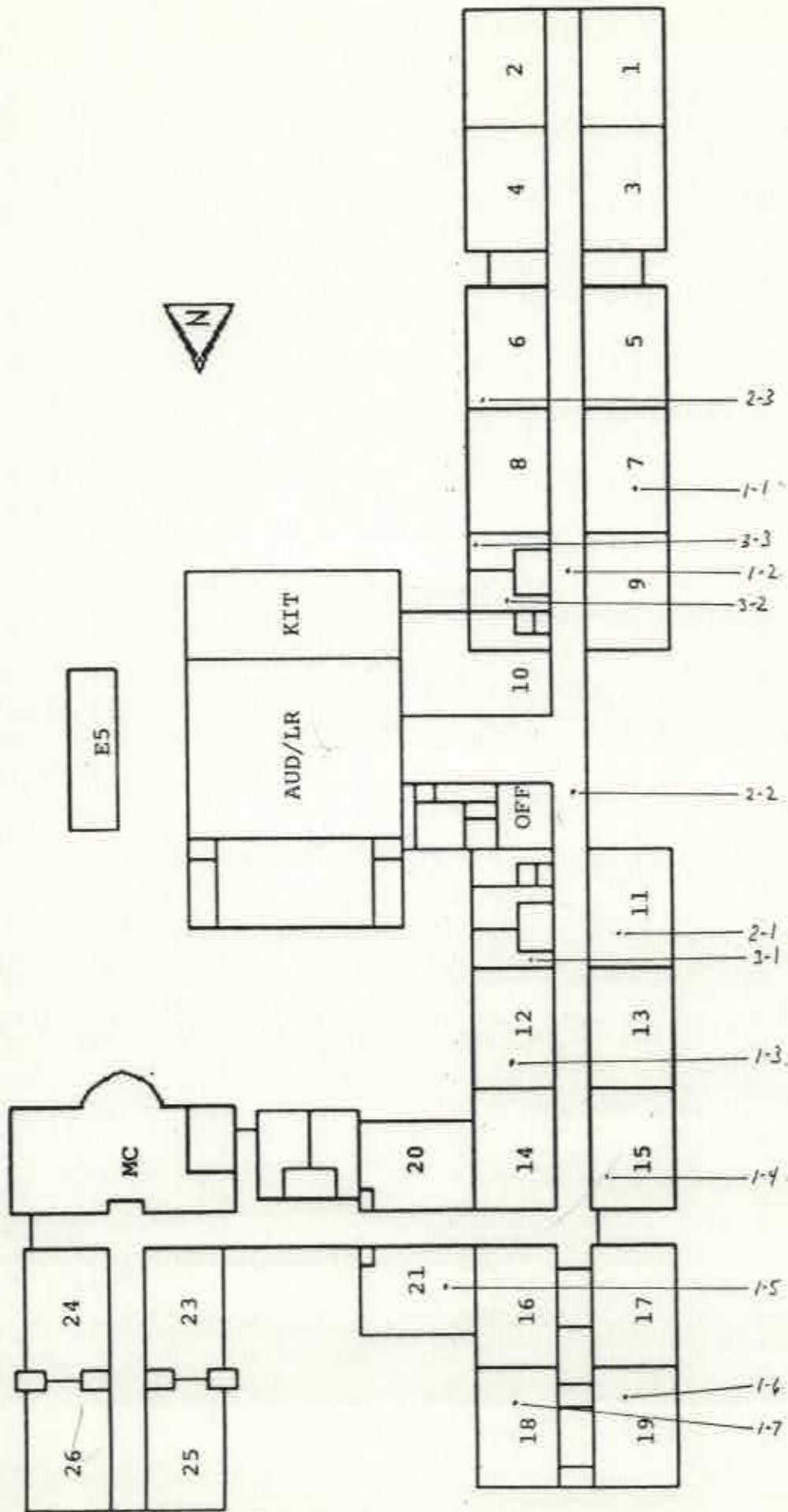
SAMPLE ID NO.		02	03	03	03				
		03	01	02	03				
SAMPLE DESCRIPTION									
ASBESTOS MINERALS PRESENT	AMOSITE								
	CHRYSOTILE								
	CROCIDOLITE								
	PERCENT ASBESTOS IN SAMPLE	N/D	N/D	N/D	N/D				
OTHER FIBROUS MATERIALS NOTED	MINERAL WOOL	X	X	X	X				
	FIBER GLASS								
	CELLULOSE	X	X	X	X				
OTHER NON-FIBROUS MATERIALS NOTED	CARBONATES	X	X	X	X				
	GYPSUM								
	MICA								
	CLAY								
	QUARTZ								



COMMENTS: N/D indicates asbestos fibers were not detected using PLM Methods

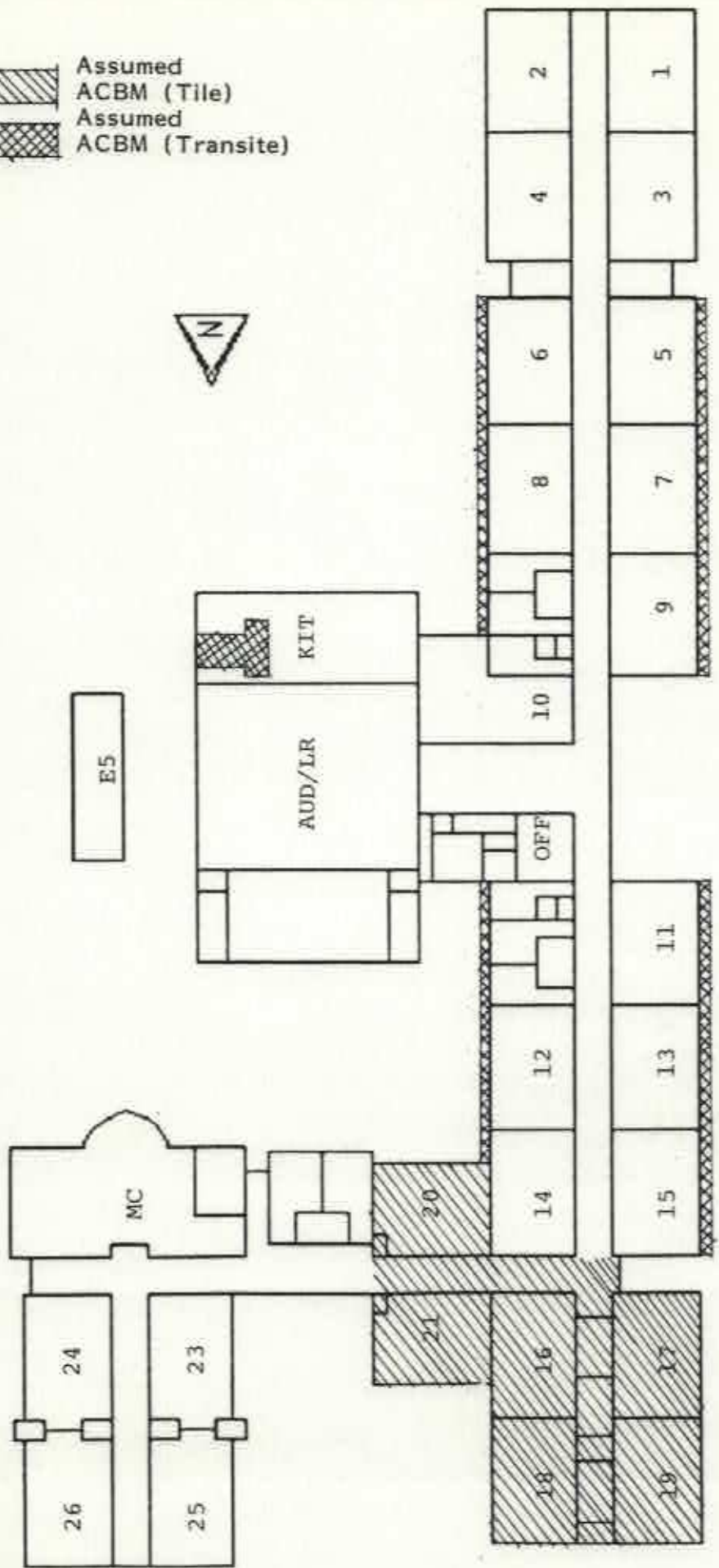
SAMPLES: SOUTHERN EARTH SCIENCES, INC. WILL RETAIN SAMPLES FOR A PERIOD OF 30 DAYS IF NO INSTRUCTIONS ARE RECEIVED, THEY WILL BE DISPOSED OF AT THAT TIME.

It is certified by the signature below that the laboratory identified above has received interim accreditation for polarized light microscope (PLM) analysis under the EPA Interim Asbestos Bulk Sample Analysis Quality Assurance Program.

ANALYST Warren Parker REVIEWED BY Charles W. Smith DATE September 20, 1988



 Assumed
 ACBM (Tile)
 Assumed
 ACBM (Transite)



LEA: Dothan City Schools (130)

School: Heard Elementary School (080)

Building: Portable E2 (03)

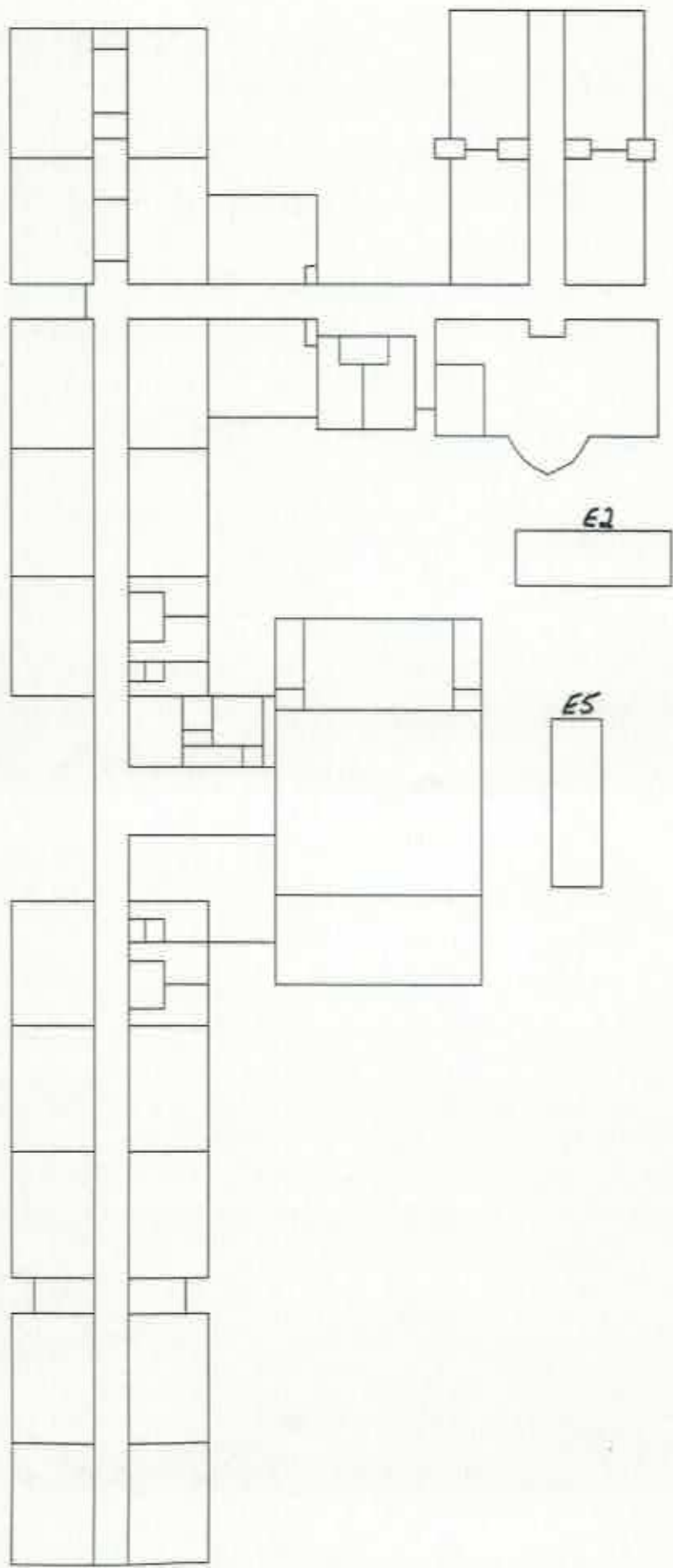
This building has been moved onto this campus.

() It does not contain any ACBM (asbestos).

() It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8/11/89
Ted Hall, AHERA Inspector/Management Planner

PORTABLES CHANGED
SUMMER 1989



LEA: Dothan City Schools (130)

School: Heard Elementary School (080)

Building: Portable D8 (04)

This building has been moved onto this campus.

It does not contain any ACBM (asbestos).

It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8/10/90
Ted Hall, AHERA Inspector/Management Planner

LEA: Dothan City Schools (130)

School: Head Elementary School (080)

Building: Portable D12 (05)

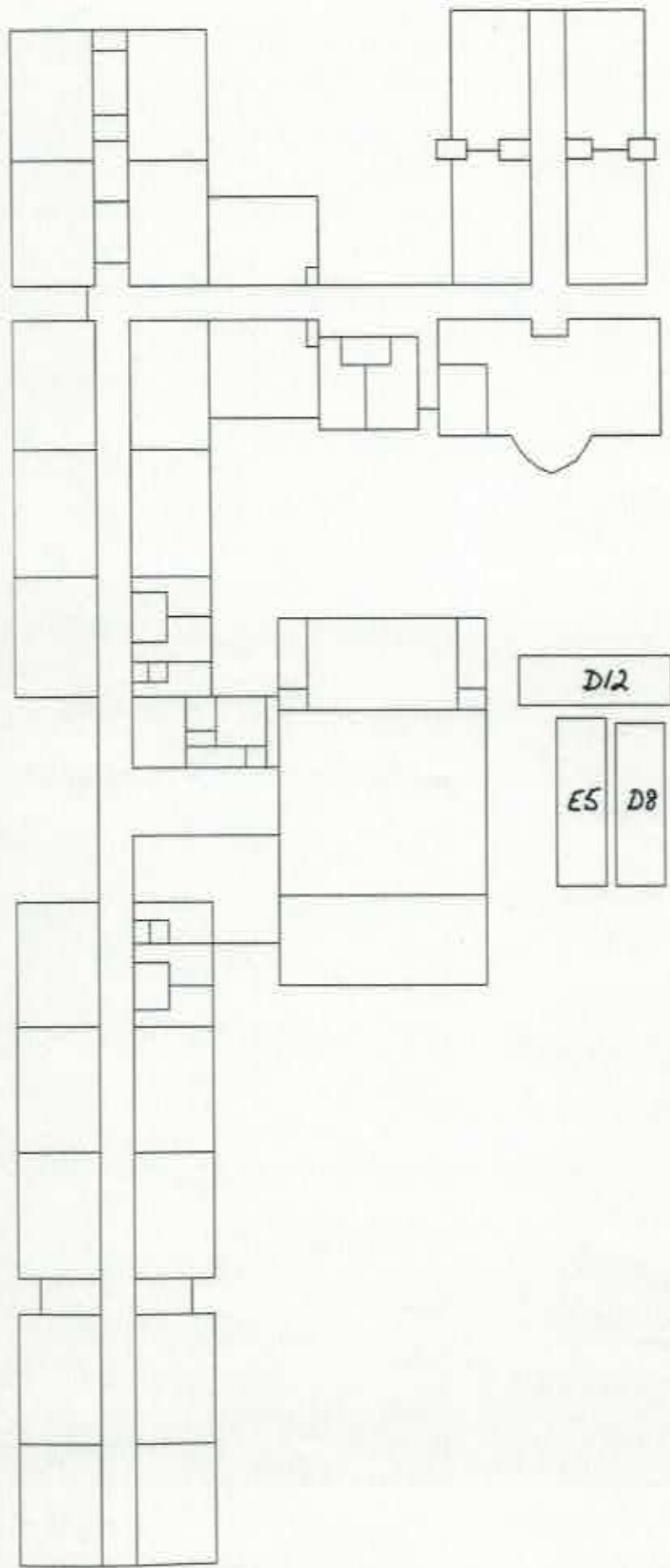
This building has been moved onto this campus.

It does not contain any ACBM (asbestos).

It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8/10/90
Ted Hall, AHERA Inspector/Management Planner

PORTABLES CHANGED
SUMMER 1990



LEA: Dothan City Schools (130)

School: Hear Elementary School (080)

Building: Portable D10 (06)

This building has been moved onto this campus.

It does not contain any ACBM (asbestos).

It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8-9-91
Ted Hall, AHERA Inspector/Management Planner

LEA: Dothan City Schools (130)

School: Head Elementary School (080)

Building: Portable F1 (07)

This building has been moved onto this campus.

It does not contain any ACBM (asbestos).

It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8-9-91
Ted Hall, AHERA Inspector/Management Planner

LEA: Dothan City Schools (130)

School: Head Elementary School (080)

Building: Portable C3 (08)

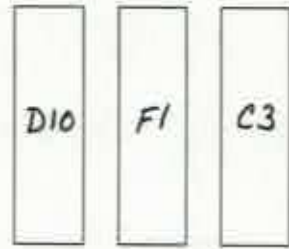
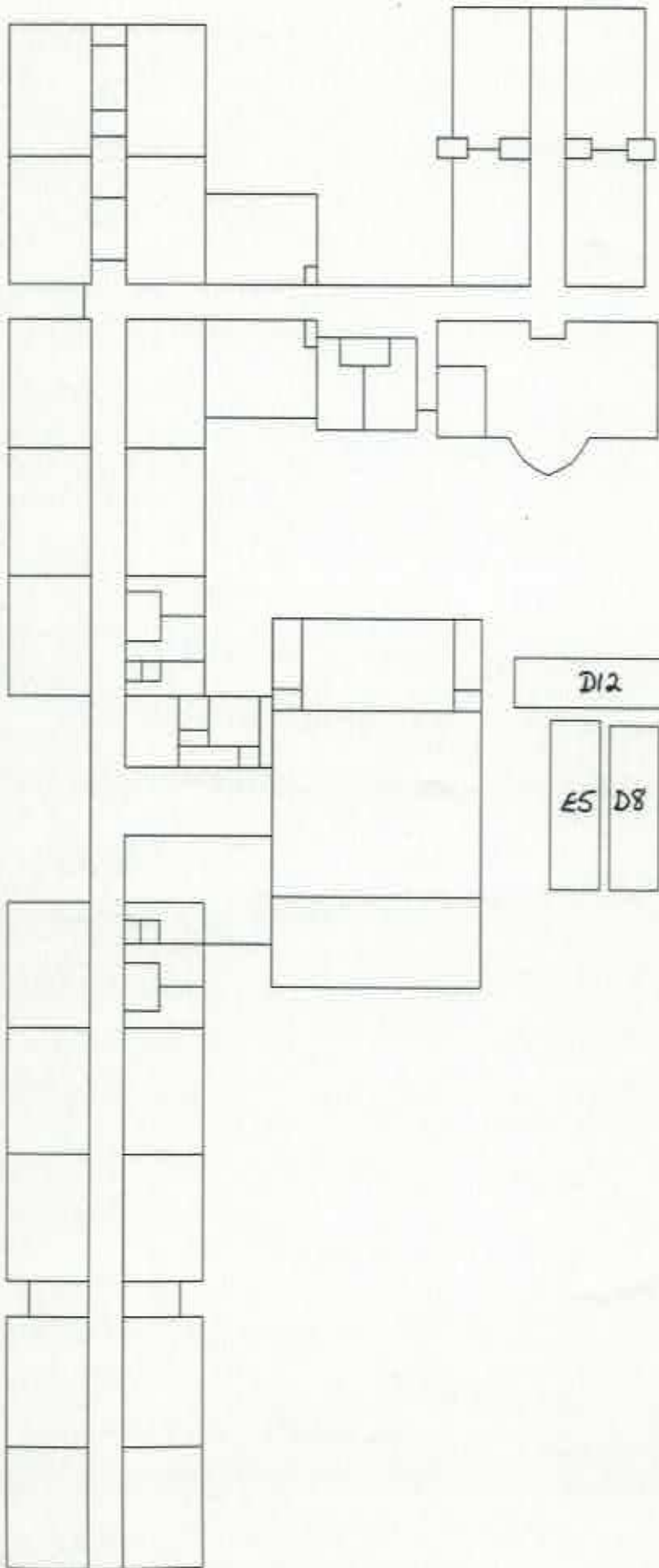
This building has been moved onto this campus.

It does not contain any ACBM (asbestos).

It contains ACBM (asbestos). Procedures to be implemented are attached.

Ted Hall 8-9-91
Ted Hall, AHERA Inspector/Management Planner

PORTABLES CHANGED
SUMMER 1991





WIREGRASS
ENVIRONMENTAL

Mold Free Solutions

Environmental Strategic Plan

Capital Improvement 2019

Heard Elementary School





Summer 2019
LED Lighting
Retrofit

March 1, 2019

Ms. Sharla Godwin
 Dothan Board of Education
 2999 Ross Clark Circle
 Dothan, AL 36301

ATC

200 Wellington Manor Court
 Suite 100
 Birmingham, AL 35007

Phone +1 205 733 8775
 Fax +1 205 733 8954
www.ATCGroupServices.com

Subject: 3-year AHERA Re-inspection Addendum
 Heard Magnet School
 201 Daniel Circle
 Dothan, Alabama 36301
 ATC Project No. Z003000643

Dear Ms. Godwin:

ATC is pleased to submit the Addendum to the AHERA 3-year Re-Inspection Report with updated maps of the asbestos-containing building materials (ACBMs) within the Heard Magnet School located in Dothan, Alabama. The re-inspection is a requirement of the Asbestos-Containing Materials in Schools; Final Rule and Notice, 40 CFR part 763, and must be completed every three years from the date your school system's management plan was implemented.

The 3 year re-inspection was performed by Mr. Zander Cordan (Inspector I.D. No. AIN0518678077) on February 2, 2019. The hand-written inspection forms, along with a copy of Mr. Cordan's Certificate of Accreditation, were submitted on December 3, 2018. The re-inspection forms identified multiple building materials that were assumed to contain asbestos. Dothan City Schools retained ATC Group Services to conduct an asbestos survey of the materials identified as assumed during the course of the re-inspection.

Attached to this letter, you will find a map indicating the sample location of each material sampled, the laboratory analytical report and updated 3 year re-inspection maps. Below is a table of all confirmed asbestos containing materials detected within the building.

ACBM BULK SAMPLING RESULTS Heard Magnet School (HMS) 201 Daniel Circle Dothan, Alabama 36301					
Material (Classification)	Sample Number	Location of Material	Friable Yes/No	Condition	Asbestos Content
Green (12"x12") FL Tile w/ Black Mastic	HMS-1-Floor Tile	North Hallway	No	Good	6% Chrysotile
Green (12"x12") FL Tile w/ Black Mastic	HMS-1-Mastic	North Hallway	No	Good	7% Chrysotile
Green (12"x12") FL Tile w/ Black Mastic	HMS-2-Floor Tile	By Room 17 in North Hallway	No	Good	6% Chrysotile


ACBM BULK SAMPLING RESULTS
Heard Magnet School (HMS)
201 Daniel Circle
Dothan, Alabama 36301

Material (Classification)	Sample Number	Location of Material	Friable Yes/No	Condition	Asbestos Content
Green (12"x12") FL Tile w/ Black Mastic	HMS-2-Mastic	By Room 17 in North DHallway	No	Good	7% Chrysotile
Green (12"x12") FL Tile w/ Black Mastic	HMS-3-Floor Tile	Teacher Work Room in North D Hallway	No	Good	8% Chrysotile
Green (12"x12") FC Tile w/ Black Mastic	HMS-3-Mastic	Teacher Work Room in North D Hallway	No	Good	7% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-4-Floor Tile	Room 21	No	Good	2% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-4-Mastic	Room 21	No	Good	4% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-5-Floor Tile	West D Hallway Outside Room 20	No	Good	2% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-5-Mastic	West D Hallway Outside Room 20	No	Good	6% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-6-Floor Tile	West D Hallway outside Room 21	No	Good	2% Chrysotile
Tan/Pink Speckled (12"x12") FL Tile w/ Black Mastic	HMS-6-Mastic	West D Hallway outside Room 21	No	Good	4% Chrysotile
White Speckled (12"x12") Floor Tile W/ Black Mastic	HMS-8-Adhesive/ Leveler/ Mastic	West D Hall Outside Media Center	No	Good	2% Chrysotile

Thank you for the opportunity to offer our services to The Dothan City School System. Please feel free to contact us with questions or concerns you may have regarding this letter.

Respectfully submitted,

ATC



Zander Cordan
 Staff Geologist
 AHERA Inspector # AIN0518678077



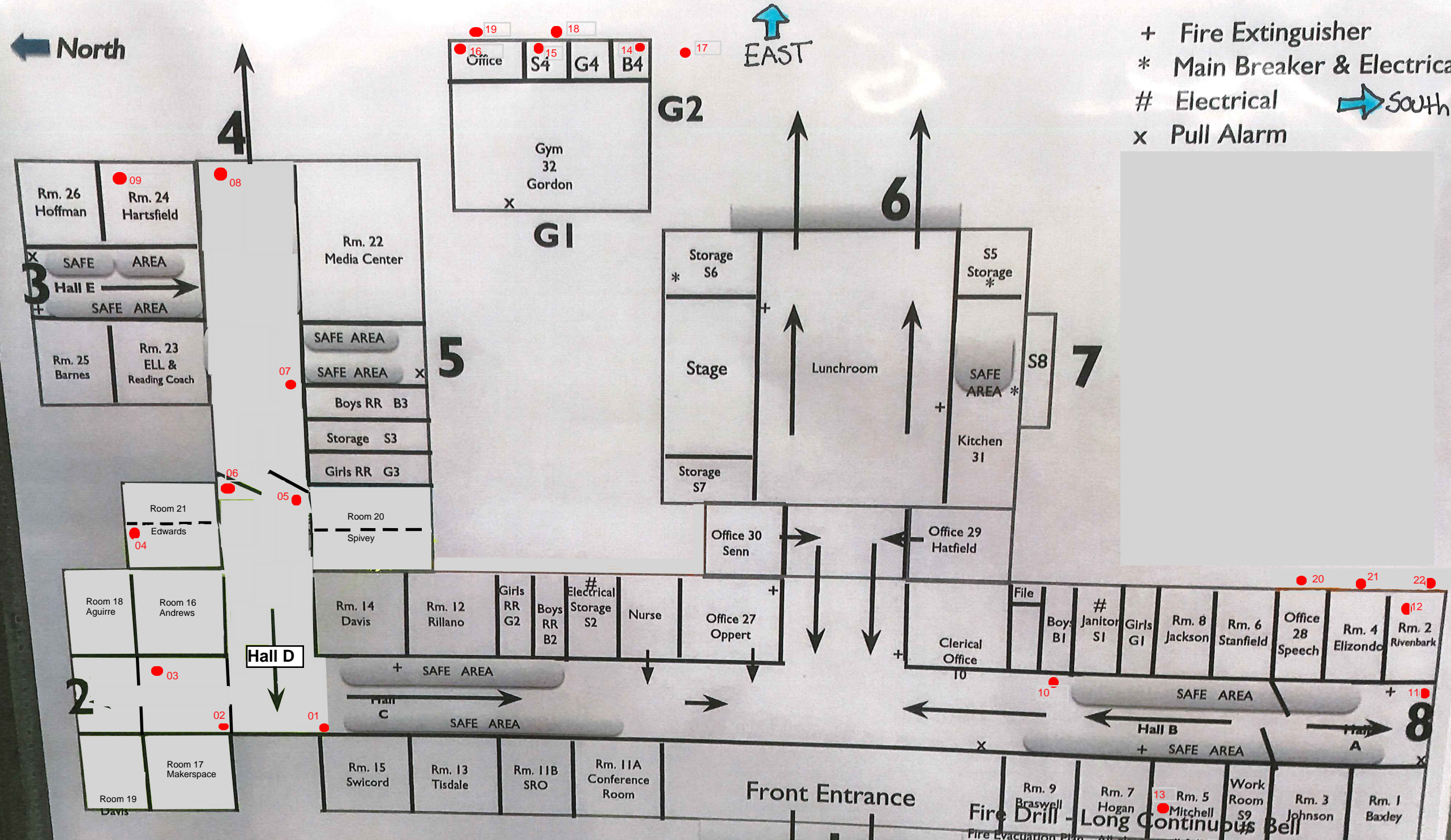
Stephanie Pryor, P.E.
 Senior Project Manager
 AHERA Inspector AIN1018644018

SAMPLE LOCATION MAP

← North

↑ EAST

- + Fire Extinguisher
- * Main Breaker & Electrical
- # Electrical
- x Pull Alarm



Heard Magnet School

201 Daniel Circle
 Dothan, AL 36301
 334-794-1471 phone
 334-792-6971 fax

↓ West

Fire Drill - Long Continuous Bell
 Fire Evacuation Plan - All classes will follow arrows to back fence designated area.

Tornado Drill - Series of Short Bells
 Tornado Plan - Students will sit facing wall in designated safe areas. P.E. students will come in from the gym to the lunchroom stage.

Bomb Drill - By Word of Mouth

LABORATORY ANALYTICAL REPORT



EMSL Analytical, Inc.

15111 Northville Rd Plymouth, MI 48170

Tel/Fax: (734) 668-6810 / (734) 668-8532

<http://www.EMSL.com> / annarborlab@emsl.com

EMSL Order: 081900348

Customer ID: ATCI25

Customer PO:

Project ID:

Attention: Zander Cordan
ATC Group Services LLC
200 Wellington Manor Court
Suite 100
Alabaster, AL 35007

Phone: (205) 733-8775

Fax: (205) 733-8954

Received Date: 02/05/2019 9:05 AM

Analysis Date: 02/09/2019 - 02/11/2019

Collected Date:

Project: Z003000643 / Heard Magnet School

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HMS-1-Floor Tile <i>081900348-0001</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken North Hallway	Green Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
HMS-1-Mastic <i>081900348-0001A</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken North Hallway	Black Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HMS-2-Floor Tile <i>081900348-0002</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken By Rm 16 in North Hallway	Green Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
HMS-2-Mastic <i>081900348-0002A</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken By Rm 16 in North Hallway	Black Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HMS-3-Floor Tile <i>081900348-0003</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken In Teacher Work Rm - North Hallway	Gray/Green Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
HMS-3-Mastic <i>081900348-0003A</i>	Green (12"x12") FC Tile w/ Black Mastic - Taken In Teacher Work Rm - North Hallway	Black Non-Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
HMS-4-Adhesive <i>081900348-0004</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken in Rm 21	Clear Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
HMS-4-Floor Tile <i>081900348-0004A</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken in Rm 21	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
HMS-4-Mastic <i>081900348-0004B</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken in Rm 21	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
HMS-5-Adhesive <i>081900348-0005</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken West Hallway by Rm 20	Clear Non-Fibrous Homogeneous	4% Cellulose	96% Non-fibrous (Other)	None Detected
HMS-5-Floor Tile <i>081900348-0005A</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken West Hallway by Rm 20	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
HMS-5-Mastic <i>081900348-0005B</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Taken West Hallway by Rm 20	Black Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
HMS-6-Floor Tile <i>081900348-0006</i>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Rm 20	Brown/Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile

Initial report from: 02/11/2019 15:52:29



EMSL Analytical, Inc.

15111 Northville Rd Plymouth, MI 48170

Tel/Fax: (734) 668-6810 / (734) 668-8532

<http://www.EMSL.com> / annarborlab@emsl.com

EMSL Order: 081900348

Customer ID: ATCI25

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HMS-6-Mastic <small>081900348-0006A</small>	Tan/Pink ? (12"x12") FI Tile w/ Black Mastic - Rm 20	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
HMS-7-Floor Tile <small>081900348-0007</small>	White Speckled (12"x12") FI Tile w/Black Mastic - West Hall	Gray/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-7-Adhesive/Leveler <small>081900348-0007A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - West Hall	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
HMS-8-Floor Tile <small>081900348-0008</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken West Hall by R.R.	Gray/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-8-Adhesive/Leveler/Mastic <small>081900348-0008A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken West Hall by R.R.	Gray/Black Non-Fibrous Heterogeneous		2% Quartz 96% Non-fibrous (Other)	2% Chrysotile
HMS-9-Floor Tile <small>081900348-0009</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 24	Gray/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-9-Adhesive <small>081900348-0009A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 24	Tan Non-Fibrous Homogeneous	3% Cellulose	<1% Quartz 97% Non-fibrous (Other)	None Detected
HMS-10-Floor Tile <small>081900348-0010</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Hall B by R.R.	Gray/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-10-Adhesive/Leveler <small>081900348-0010A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Hall B by R.R.	Gray/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
HMS-11-Floor Tile <small>081900348-0011</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Hall B by Exit Door	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-11-Adhesive <small>081900348-0011A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Hall B by Exit Door	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-12-Floor Tile <small>081900348-0012</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 2	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-12-Adhesive <small>081900348-0012A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 2	Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-13-Floor Tile <small>081900348-0013</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 5	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 02/11/2019 15:52:29



EMSL Analytical, Inc.

15111 Northville Rd Plymouth, MI 48170

Tel/Fax: (734) 668-6810 / (734) 668-8532

<http://www.EMSL.com> / annarborlab@emsl.com

EMSL Order: 081900348
Customer ID: ATCI25
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HMS-13-Adhesive <small>081900348-0013A</small>	White Speckled (12"x12") FI Tile w/Black Mastic - Taken Rm. 5	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HMS-14 <small>081900348-0014</small>	White (2'x2') Ceiling Tile w/ Pinholes - Gym Bathroom	Gray/White Fibrous Homogeneous	35% Cellulose 20% Min. Wool	35% Perlite 10% Non-fibrous (Other)	None Detected
HMS-15 <small>081900348-0015</small>	White (2'x2') Ceiling Tile w/ Pinholes - Girls Bathroom (G+M)	Gray/White Fibrous Homogeneous	40% Cellulose 20% Min. Wool	30% Perlite 10% Non-fibrous (Other)	None Detected
HMS-16 <small>081900348-0016</small>	White (2'x2') Ceiling Tile w/ Pinholes - Coach Office	Gray Fibrous Homogeneous	50% Cellulose 10% Min. Wool	30% Perlite 10% Non-fibrous (Other)	None Detected
HMS-17 <small>081900348-0017</small>	Yellow Ceiling Insulation - Boys RR in Gym	Yellow Fibrous Homogeneous	98% Glass	2% Non-fibrous (Other)	None Detected
HMS-18 <small>081900348-0018</small>	Yellow Ceiling Insulation - Girls RR in Gym	Yellow Fibrous Homogeneous	98% Glass	2% Non-fibrous (Other)	None Detected
HMS-19 <small>081900348-0019</small>	Yellow Ceiling Insulation - Coaches Office In Gym	Yellow Fibrous Homogeneous	<1% Cellulose 98% Glass	2% Non-fibrous (Other)	None Detected
HMS-20 <small>081900348-0020</small>	White Fibrous Exterior Ceiling Panels - South Side of Bldg.	Brown/Gray/White Fibrous Heterogeneous	4% Cellulose <1% Glass	96% Non-fibrous (Other)	None Detected
HMS-21 <small>081900348-0021</small>	White Fibrous Exterior Ceiling Panels - South Side of Bldg.	Brown/Gray/White Fibrous Heterogeneous	4% Cellulose <1% Glass	96% Non-fibrous (Other)	None Detected
HMS-22 <small>081900348-0022</small>	White Fibrous Exterior Ceiling Panels - South Side of Bldg.	Brown/White Fibrous Heterogeneous	9% Cellulose <1% Glass	91% Non-fibrous (Other)	None Detected

Analyst(s)

Rebecca Newman (24)

Ryan Shannon (13)



 Ryan Shannon, Laboratory Manager
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Plymouth, MI NVLAP Lab Code 101048-4

Initial report from: 02/11/2019 15:52:29

UPDATED 3 YEAR RE-INSPECTION MAP

INSPECTOR ACCREDITATION CERTIFICATE

THE UNIVERSITY OF ALABAMA®

UA SafeState

has examined the documentation of asbestos training and qualifications of the
person named below and confers this

Certificate of Accreditation

For the Asbestos Contractor Discipline

INSPECTOR
Alexander J Cordan

Alabama Accreditation Number
AIN0518678077

Certificate Expiration Date
May 3, 2019

This certificate has been issued pursuant to the authority granted to The University of Alabama SafeState Program by the Alabama Asbestos Contractor Accreditation Act, Alabama Act No. 89-517, May, 1989 and Alabama Act No. 97-626, May, 1997.



Executive Director



Associate Director for Environmental Programs

**STANDARD OPERATING PROCEDURES
FOR ASBESTOS CONTAINING
MATERIALS & ASSUMED ASBESTOS
CONTAINING MATERIALS**

**DOTHAN CITY SCHOOLS
PROJECT No.: 19-230918.02-3**

Presented By:

WIREGRASS ENVIRONMENTAL
812 UNIVERSITY AVENUE
TROY, AL 36081

APRIL 11, 2019

PREPARED BY:

HIGHLAND TECHNICAL SERVICES, INC.
528 MINERAL TRACE
BIRMINGHAM, ALABAMA 35244
PHONE: (205) 985-4874 FAX: (205) 987-6080

CERTIFICATION

These standard operating procedures has been prepared by a registered and certified Alabama Asbestos-Related and Lead-Based Paint Activity discipline Project Designer. These SOPs are intended for use as a part of the project specifications prepared for the City of Dothan schools in Dothan, Alabama. This plan is limited to asbestos and lead based paint and does not include mold or other environmental contaminants.



Judith A. Pike, P.E.

AL Asbestos Project Designer No. APD0113288237 AL Lead-Based Paint Designer No.
LPD1218288237

TABLE OF CONTENTS

APPLICABLE PUBLICATIONS:	i
1.0. PROJECT INFORMATION	6
2.0. ASBESTOS PROJECT NOTIFICATION	6
3.0. SUBMITTALS	6
PART 2 – EXECUTION	
4.0. GENERAL	10
5.0. EQUIPMENT	11
6.0. SAMPLING	14
7.0. DISPOSAL	16
8.0. STANDARD OPERATING PROCEDURES	17
9.0. ANCHORING PROTOCOL	18

PART 1 – GENERAL

APPLICABLE PUBLICATIONS:

The publications listed below form a part of this specification to the extent referenced.

General Publications:

U.S. Environmental Protection Agency. "*Measuring Airborne Asbestos Following an Abatement Action*" USEPA 600/4-85-049 "Silver Book"

U.S. Environmental Protection Agency. "*Asbestos in Buildings: Simplified Sampling Scheme for Surfacing Materials.*" USEPA 560/5-85-030

U.S. Environmental Protection Agency. "*Guidance for Controlling Asbestos Containing Materials in Buildings.*" USEPA 560/5-85-024 "Purple Book"

U.S. Environmental Protection Agency. "*Abatement of Asbestos Containing Pipe Insulation.*" USEPA Technical Bulletin No. 1986-2

U.S. Environmental Protection Agency. "*A Guide to Respiratory Protection for the Asbestos Abatement Industry.*" USEPA 560/OPTS-86-001

Federal Standard:

Fed. Std. 595 Colors & Notice 4

Code of Federal Regulations (CFR) Publications:

29 CFR 1910.1001	Asbestos - General Industry
29 CFR 1926.62	Lead Exposure in Construction, Interim Rule
29 CFR 1926.1101	Asbestos – Construction Industry
29 CFR 1910.134	Respiratory Protection
29 CFR 1910.145	Specifications for Accident Prevention Signs and Tags
29 CFR 1926.50	Medical Services and First Aid
29 CFR 1926.59	Hazard Communication
29 CFR 1926.100	Head Protection
29 CFR 1926.101	Eye and Face Protection
29 CFR 1926.150	Fire Protection
29 CFR 1926.515	Fire Prevention Plan
29 CFR 1926.301	Hand Tools
29 CFR 1926.30	Power Operated Hand Tools
29 CFR 1926.404	Electrical Wiring Design and Protection
29 CFR 1926.405	Temporary Electrical Wiring
29 CFR 1926.450	Ladders
29 CFR 1926.451	Scaffolding

29 CFR 1926.1200	Hazard Communications
29 CFR 1910.147	Control of Hazardous Energy (Lockout- Tagout)
29 CFR 1910.146	Confined Space Entry
29 CFR 1910.1030	Bloodborne Pathogens
29 CFR 1910.141	Sanitation For Construction
40 CFR 61,	General Provisions, Subpart A
40 CFR 61,	National Emission Standard for Asbestos,
Subpart B 40 CFR PART 763	Asbestos Containing Materials in Schools

American National Standard Institute (ANSI) Publications:

Z9.2-79 Fundamentals Governing The Design and Operation of Local Exhaust System

Z88.2-80 Practices for Respiratory Protection

State of Alabama Act No. 97-553, The Lead Reduction Act of 1997

Alabama Department of Public Health Chapter 420-3-27 Lead Hazard Reduction Contractor Certification

ADEM Admin Code R 335-13-9 Solid Waste ADEM Division 14 Hazardous Waste Program

All state, county and city codes and ordinances as applicable. Make available for review at the site one copy of EPA, OSHA, state, county and city regulations.

1.0. PROJECT INFORMATION

The buildings identified in the scope of work have been determined to have asbestos containing materials (ACMs) or have assumed ACMs. Based on the construction dates, it should be assumed that paint films both within and without the buildings be considered as lead containing. It also should be assumed that additional regulated materials are present such as mercury and PCBs. Light fixtures, fluorescent bulbs, LED bulbs, ballasts, thermostats and any additional items that may be regulated under the Resource Conservation and Recovery Act (RCRA) shall be separated from other waste streams and disposed in accordance with State & Federal.

Contractors will be responsible for the removal of any school equipment or other property that remains in the designated work areas. All items shall be cleaned at a minimum with a HEPA vacuum and stored in a contractor supplied locked storage container that is weathertight.

2.0. ASBESTOS PROJECT NOTIFICATION

The Alabama Department of Environmental Management (ADEM) requires notification using ADEM Form 496 at least ten (10) weekdays not including holidays prior to disturbing any regulated asbestos containing material (RACM). Forms shall be submitted to the following:

Mr. Don Barron ADEM- Air Division
P.O. Box 301463 Montgomery, AL 36130-1463
Email: asbestosmail@adem.state.al.us

3.0. SUBMITTALS

The following items shall be submitted to and approved by the Project Professional prior to commencing work involving asbestos materials.

3.1 Asbestos/LBP Plan:

Submit a detailed plan of the work procedures to be used in the removal and demolition of materials containing asbestos and/or lead based paint. Such plan shall include location of asbestos control areas, layout of any change rooms, interface of trades involved in the sequencing of asbestos work, disposal plan, type of wetting agent to be used, air monitoring, and a detailed description of the methods to be employed in order to control contamination to surrounding areas, and exposure to airborne asbestos fibers. This plan must be submitted and approved prior to the start of any asbestos/LBP work.

3.2 Air Monitor:

Submit the name, address, and telephone number of the Air Monitor selected for performing required air sampling for this project which includes: background, inside work area, outside work area, and personnel monitoring. The Air Monitor shall produce reports of air sampling that include concentrations of asbestos fibers from each sample as well as the collection and analytical methods utilized. The Air Monitor analyzing samples shall provide written proof that they have been evaluated and judged proficient by successful participation in an accredited Proficiency Analytical Testing (PAT) Program.

3.3 Notification:

Notify the ADEM a minimum of ten (10) working days prior to the start of asbestos work. Notify the local fire and police departments a minimum of five (5) days prior to removing any asbestos containing material from buildings.

3.4 Landfill:

Submit written evidence that the landfill for disposal is approved for asbestos disposal by the ADEM prior to beginning removal.

3.5 Local Exhaust System (Where Applicable):

The local exhaust system, which maintains negative pressure, for the Work Area shall be

operated continuously 24 hours a day until removal and final cleaning is complete. The work area containment shall have a measurable pressure differential of at least 0.02 inches of water. At least eight (8) air changes per hour must be supplied by the local exhaust ventilation system. The local exhaust ventilation system must be equipped with HEPA filtration.

The number and type of LEV equipment to be utilized, CFM ratings, and placement location should be included in the Asbestos Plan submittal.

The Project Professional, may require pressure differential recordings for each work day. If required, the Asbestos/LBP Contractor (ALC) shall provide pressure differential monitoring equipment.

Pressure differential monitoring, when required, shall be reviewed by the Air Monitor each work day. The Air Monitor shall notify the ALC and the Project Professional immediately of any pressure increase above the minimal requirements, which could cause exposure of adjacent unsealed areas to asbestos fiber concentrations.

3.6 Daily Log:

Within ten (10) days of completion of all abatement activities, submit copies of daily work area logs showing the following at a minimum: ALC name, Supervisor name, Air Monitor name, Date, entry time and exit time for each person who enters the work area. Should multiple work areas be utilized simultaneously, the ALC shall provide a daily log for each work area.

3.7 Landfill Receipts:

Within ten (10) days of completion of all abatement activities, submit receipts from landfill operator which acknowledge the Contractor's delivery(s) of waste material. Receipts shall include date, quantity of material delivered, structure identifications, and signature of authorized representative of landfill.

3.8 Respirator Program:

The ALC shall provide a copy of their written respiratory protection program. This program shall be compliant with standards and regulations set forth 29 CFR 1910.134.

3.9 Certificate of Visual Inspection:

This Certification is to be completed by the ALC and certified by the Air Monitor. Submit completed certificate with application of final payment. Final payment will not be made until this certificate is executed.

3.10 Insurance:

The ALC shall provide written Certification from the insurance company acknowledging and agreeing that the coverage under that policy shall specifically include all operations of asbestos abatement required in the performance of the work, and be True Occurrence Insurance. The limits of insurance shall be in the amounts required by State Statues and by the General Conditions of this specification. The Owner, Architect and Asbestos Abatement Consultant (Project Professional) are to be shown as certificate holders and are to be named as additional insured for coverage under this policy.

3.11 State Licenses/Certificates:

Submit current copies of State of Alabama Asbestos Certificates for the following:

- Contractor (including any subcontractors performing asbestos work)
- Supervisor (all utilized during the project)
- Air Monitor- NIOSH 582 or equivalent training (all utilized during the project)
- Workers (all utilized during the project)

PART 2 – EXECUTION

4.0. GENERAL

4.1 Title to Materials:

All materials resulting from demolition work, except as specified otherwise, shall become the property of the ALC and shall be disposed of as specified here in.

4.2 Protection of Existing Work to Remain:

Perform demolition work without damage to underlying substrates or equipment or contamination of adjacent areas. Should substrates, equipment, or adjacent areas become damaged or contaminated, the ALC shall restore the substrate, equipment, or adjacent area to its pre-damaged or pre-contaminated condition.

4.3 Medical Requirements:

The ALC shall comply with the medical examination requirements and medical record retention requirements set forth in 29 CFR 1926.1101 and 29 CFR 1926.134.

4.4 Training:

Prior to assignment to asbestos and/or lead based paint work, instruct each employee with regard to the hazards of asbestos, safety and health precautions, and the use and requirements for protective clothing and equipment including respirators. Fully cover engineering and go over hazard control techniques and procedures.

4.5 Permits and Notifications:

Secure necessary permits in conjunction with asbestos removal, hauling, and disposal and provide timely notification of such actions as may be required by federal, state, regional, and local authorities regarding handling, storing, transporting, and disposing of asbestos waste materials. Comply with the applicable requirements of the current issue of

29 CFR 1910.1001, 29 CFR 1926.1101 and 40 CFR 61, Subparts A and B. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification and referenced documents vary, the most stringent requirement shall apply.

5.0. EQUIPMENT

5.1. General Personal Protective Equipment:

During all preparation work, all removal work, and final cleaning work, the ALC shall require that all persons who enter the work area wear at a minimum: a half mask respirator equipped with P100 cartridges, gloves, safety glasses, and disposable protective clothing equipped with head and foot coverings. Additional PPE may be necessary based on project conditions.

If the ALC feels these PPE requirements are not necessary, the ALC shall submit negative exposure assessments documenting asbestos air concentrations for like work to the Project Professional for consideration.

5.2. Respirators:

The ALC shall select and provide respirators from those rated by the National Institute for Occupational Safety and Health (NIOSH) and fulfill the requirements of OSHA 1910.134. Respirator selection and use for this project must be in accordance with the Contractor's Respiratory Protection Plan and the level of respiratory protection provide must be based upon project specific conditions.

5.3. Special Clothing:

Provide personnel exposed to airborne concentrations of asbestos fibers with fire retardant disposable protective whole-body clothing, head coverings, gloves, and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort, but shall not be used alone. Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape.

5.4. Change Rooms (where necessary):

Provide a temporary unit with separate decontamination locker room and a clean locker room for personnel required to wear whole body protective clothing. Provide two separate lockers for each asbestos worker, one in each locker room. Keep street clothing and street shoes in the clean locker. Vacuum and remove asbestos contaminated disposal suit with a HEPA vacuum, protective clothing while still wearing respirators at the boundary of the asbestos work area and seal in

impermeable bags or containers for disposal. Do not remove disposable protective clothing in the decontamination locker room. Remove cloth work clothing in the decontamination room. Tag and bag cloth work clothes for laundering and keep work shoes in the decontamination locker. Do not wear work clothing between home and work. Locate showers between the decontamination locker room and the clean locker room and require that all employees shower before changing into street clothes. Clean asbestos contaminated work clothing in accordance with 29 CFR 1926.1101. Change rooms shall be physically attached to the asbestos control area.

5.5. Caution Signs and Labels:

Provide caution signs at all approaches to asbestos/lead control areas containing concentrations of airborne asbestos fibers and/or lead. Bilingual signs shall be utilized when workers or others in the vicinity of the work area have a primary language other than English. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area.

Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos. Provide labels and affix to all lead materials, scrap, waste, debris, and other products contaminated with lead paint.

5.6. Caution Sign:

Vertical format conforming to 29 CFR 1926.1101 (K) (6) (ii), minimum 20 by 14 inches



displaying the following legend in the lower panel: The signs shall bear the following information:

DANGER ASBESTOS
MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS
WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA
AUTHORIZED PERSONNEL ONLY

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

6.0. SAMPLING

6.1. Monitoring During Asbestos Work:

The Air Monitor shall provide area air monitoring daily throughout the removal and cleaning process to document fiber concentrations from inside the work areas and outside the work areas. The Air Monitor shall also conduct personnel air monitoring for ALC workers performing removal and cleaning work within the work areas.

The Air Monitor shall collect and analyze air samples daily. The sample numbers required will depend on the sequence of work but in general shall include a minimum two (2) inside work area samples, two (2) samples outside the building, and two (2) samples outside each barrier separating work areas from other building spaces.

Where negative air enclosures and decontamination units are required by project conditions, air samples shall be collected at negative air discharges, and the clean room of the decon unit.

Air samples shall be collected continuously during occupied work shifts. All sample analysis reports shall be reported within twenty-four (24) hours to the ALC and to the Project Professional.

If monitoring outside the asbestos control area shows airborne concentrations have reached 0.01 fibers/cc, stop all work, correct the conditions causing the increase and notify the Project Professional immediately.

The Air Monitor shall provide an Air Monitoring Report at the conclusion of the project. The report shall include a typed sheet for each sample including the sample location, the sample number, the sampling date, the pump number, the sampling duration, the sample flow rate in liters per minute, the total volume in liters, the total fibers counted total fields counted, the total fibers counted in the field blank, the total fields counted in the field blank, the filter area in millimeters squared, the Graticule field area, the fiber concentration standard in fibers/cc, the fibers/cc, the limit of quantification, the 95% upper confidence limit, and the name of the person performing the Phase Contrast Microscopy.

6.2. Clearance Monitoring After Final Clean-Up:

Asbestos

The Air Monitor shall provide clearance air monitoring for each work area after the final clean up and visual inspection is completed. Each work area must pass the final visual inspection before clearance air samples can be collected. None of the samples collected from within the work area may equal or exceed 0.01 fibers/cc, in order for the work area to meet clearance criteria.

The fiber counts from all clearance samples from a work area shall be less than 0.01 fibers/cc in order to meet clearance criteria. Should any of the final samples indicate a higher value, the Contractor shall take appropriate action to reclean the area and shall be responsible for additional compensation for air monitoring from that point forward.

All clearance sampling should be done "aggressively" as described in Section M.1.5 of the EPA Purple Book. The ALC shall furnish required fans and leaf-blower for "aggressive" sampling.

Lead (Child occupied buildings only)

Lead Abatement Clearance criteria shall be as follows:

<u>Surface</u>	<u>Leaded Dust Loading ($\mu\text{g}/\text{ft}^2$)</u>
Floors	<u>Wipe Only</u> 40
Interior Window Sills (Stools)	250
Window Troughs	800
Exterior	400

All costs associated with clearances including re-tests shall be borne by the contractor. Should laboratory results indicate that the wipe test clearance level is exceeded, re-clean the affected area, at no additional cost to Owner, utilizing the methods specified above.

Wipe samples will be collected from location selected by an Alabama licensed Inspector/Risk Assessor.

7.0. DISPOSAL

Collect asbestos waste, scrap, debris, bags, containers, equipment, and lead/asbestos contaminated clothing which may produce airborne concentrations of asbestos fibers or lead and place in sealed impermeable bags. All materials shall be doubled bagged. Affix a caution label and a generator identification label to each bag in accordance with 1990 NESHAPS requirements. All asbestos waste will, after decontamination of container, be transferred from containment area to truck at hours approved by the Project Professional. As a minimum, the employees making this transfer will wear a half mask respirator equipped with HEPA filters, and disposable coveralls of a different color than those worn in the containment area. Dispose of waste asbestos material (by burial under at least 6 inches of daily compacted cover of non-asbestos materials and by final cover of at least two feet (2 FT) of compacted earth) at a landfill permitted to receive asbestos. Procedure for hauling and disposal shall comply with 40 CFR 61 (Subpart B) state, regional, and local standards. Sealed plastic bags may be dumped from drums into the burial site unless the bags have been broken or damaged. Damaged bags shall remain in the drum and the entire contaminated drum shall be buried. Uncontaminated drums may be recycled. Workers unloading the sealed drums shall wear appropriate respirators and personal protective equipment when handling asbestos materials at the disposal site. A manifest of each trip to the landfill must be obtained and a copy furnished to the Project Professional. This manifest should show the number

of barrels or bags received, and state that they were disposed of properly.

8.0. STANDARD OPERATING PROCEDURES

Standard Operation Procedures (SOPs) have been developed for most instances of handling ACMs or assumed ACMs following this section. In the event that additional ACMs or suspects ACMs are discovered the ALC shall contact the Project Professional prior to disturbing any additional areas so that a determination can be made of the material and its regulatory status.

9.0. Anchoring Protocol

Summary

This Standard Operating Procedure covers work, which is required to remove asbestos- containing floor tile and/or mastic.

Examples

1. Removal of several floor tiles that are loose or can be removed by hand methods with minimal or no breakage, and tile and/or mastic does not become friable.
2. Remove a small area of well-adhered tile and/or mastic that is not likely to become friable.
3. Remove several floor tiles and mastic to drill hole(s) in sub floor to attach object to floor or install a pipe or conduit. (Anchoring Protocol)
4. Remove broken tiles after removal of a wall (framed, block, brick, masonry or CMU) with minimal or no breakage, and tile and/or mastic does not become friable.

Related Work Practices

1. Transporting, Storing, and Disposing
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendations

One worker is required but more may be needed to increase the safety and efficiency considerations. An air-monitor with NIOSH 582 is required. This person cannot be a worker.

Notes

Air monitoring is required unless a Negative Exposure Assessment (NEA) has previously been made by the ALC. If material breaks/crumbles up into small pieces, air monitoring will be performed regardless.

Warning: Do not sand resilient flooring.

Work Practices

1. Secure the work area, limiting entry to certified personnel only. Verify that a negative exposure assessment (NEA) has been established.
1. If an NEA cannot be verified, stop work and call air monitor to perform air monitoring.
2. Use the following procedure to remove resilient tile floor covering: Floor tiles must be wetted with amended water (misted with a garden sprayer) before actual removal begins unless heat will be used to remove tiles.
3. Start removal by carefully wedging a wall scraper in the seam of two adjoining tiles and gradually forcing the edge of one of the tiles up and away from the floor. Continue to force the balance of the tile up by working the scraper beneath the tile. Exert both a forward pressure and a twisting action on the blade to promote release of the tile from the adhesive and the floor.
5. When the tile is removed, place it in a disposal bag without breaking it into smaller pieces.
6. If it is necessary to remove more tiles to accomplish the work, after the first tile is removed and accessibility to other tiles is improved, force the scraper under the exposed edge of another tile. Continue to exert a prying/twisting force to the scraper as it is moved under the tile until the tile releases from the floor. Again, dispose of the tile by placing in a waste bag or waste container without additional breaking. Continue in this manner until enough tiles are removed to accomplish the work.
7. Force the scraper through tightly-adhered areas by striking the scraper handle with a hammer using blows of moderate force while maintaining the scraper at a 25 to 30 degree angle to the floor. The resilient floor covering manufacturers' work practices recommend the use of safety goggles during this work.
8. Place loosened adhesive residues into a waste bag or waste container.
9. Wipe remainder of residue with absorbent towels and dispose of in appropriate container.
10. Continue the above steps until what remains of the residual asphaltic mastic is gone.
11. Within the work area, seal the disposal bag when the work is complete.

Remove or Replace a Component/Object Attached to Surfacing Material

SUMMARY

This Standard Operating Procedure covers work required to perform removal of objects that are attached to surfacing material such as spray on fireproofing on structures or acoustical ceilings.

Examples

The following are examples of work that is performed using this procedure. If job conditions vary from the examples or if more than three square feet of material has to be removed stop work and notify the Environmental Compliance Branch.

1. Remove exit light or ceiling mounted fixtures that are attached to asbestos-containing material (ACM) acoustical ceiling.
2. Remove fire/security detectors attached to acoustical ceiling.
3. Remove pipe hanger embedded in fireproofing.
4. Installing additional components.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Major Fiber Release Episode

Summary

This standard operating procedure covers work, which is required in the event of the falling or dislodging of friable asbestos-containing material (ACM) that is more than 3 ft² or linear feet.

Examples

The following are examples of work that is performed using this procedure. If job conditions vary from the examples stop work and notify the Environmental Professional.

1. Clean up of more than 3 ft² of delaminating friable surfacing material.
2. Clean up of more than 3 linear feet of friable Thermal System Insulation or ACM mudded fittings on pipes.
3. Clean up of more than 3 ft² of damaged friable ACM ceiling tile.

Related Work Practices

1. Transporting, Storing, and Manifesting
2. Personal Air Monitoring
3. Area Air Monitoring

Worker Recommendations

One worker is required but more may be needed to increase the safety and efficiency considerations. An air monitor with NIOSH 58 is required. This person cannot be utilized as a worker.

Notes

Air monitoring is required unless a Negative Exposure Assessment (NEA) has previously been made by the ALC. Major fiber release episodes are required to be designed by a project designer.

Work Practice

1. Isolate the area and post signs to prevent entry of persons other than those necessary to perform the response action.
2. Thoroughly saturate the debris using wet methods.
3. Place the asbestos debris in a sealed leak tight container.
4. HEPA vacuum or wet clean the floor and all horizontal surfaces.
5. Repair the area with non- asbestos materials or encapsulate.
6. Remove suit. Wet and wipe hands, face, and respirator.
7. Double bag all asbestos waste.
8. Place asbestos waste in designated asbestos waste containers.
9. Fill out waste manifest.

Install Wiring in a Plenum Space Where Exposed Surfacing is Present

Summary

This standard operating procedure covers work required to perform installation of various wiring and conduit in the ceiling plenum which contains asbestos-containing material (ACM) spray on surfacing/fireproofing.

Examples

The following are examples of work that can be performed using this procedure when there is a small amount of dust or debris from the ACM surfacing treatment or other ACM on top of the ceiling tiles or if the ACM surfacing is close enough to the work that it could be disturbed.

1. Installing electrical wiring and conduits that will lie on top of the ceiling.
2. Installing new plenum rated computer or telephone cables.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendations

Two or more workers may facilitate pulling wires between two locations. A third person eases installation by being outside containment feeding and marking/numbering wire spools. An air monitor with NIOSH 582 is required. The air monitoring person cannot be utilized as a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of the air monitoring.

Work Practices

1. Isolate the work area limiting entry to authorized personnel only.
2. Post warning signs.
3. Erect a containment area if there is a potential for a spill of friable fireproofing spray on. If tile is presumed or known to be clean above a secondary containment barrier can be used.
4. Use the HEPA vacuum and/or negative pressure system for local exhaust system.
5. Put on a suit and respirator before lifting a ceiling tile.
6. HEPA vacuum ceiling grid and the top of the tile all visible debris.
7. Wet wipe any wire system components that come in contact with ACM. Place wet wipes and any debris into disposal bags.
8. After task has been performed wet wipe and HEPA vacuum the inside of the containment if used. Place cleaning materials in a disposal bag. HEPA vacuum suit. Remove the suit and place in a disposal bag.
9. Wet wipe hands and face. Then remove respirator.
10. Double bag and return asbestos waste materials to the designated asbestos waste container
11. Complete waste manifest forms.

Glove Bag Asbestos Containing Insulation or Mudded Pipe Fittings on Exposed Pipe for Maintenance Work

Summary

This standard operating procedure covers work, which is required for removing a small amount (≤ 3 ft² or 3 linear feet) of asbestos-containing insulation on an exposed pipe or asbestos-containing material (ACM) pipe fittings by glove bag methods.

Examples

The following example relies on careful glove bag installation and a combination of handling, wetting, and use of the HEPA vacuum.

Remove a pipe fitting in a mechanical room.

Related Work Practices

1. Transportation of Asbestos Materials
2. Storage and Disposal of Asbestos Materials
3. Personal Air Monitoring

Worker Recommendation

Two workers wearing personal protective equipment are required. An air-monito with NIOSH 582 is required. The air monitoring person cannot be a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of the air monitoring.

Work Practice

1. Isolate the work area limiting entry to authorized personnel only.
2. Post warning signs.
3. Place necessary tools into the glove bag.
4. Glove bags should be 6mil. polyurethane and taped or otherwise sealed around material to be removed. The bottom of the glove bag must be reinforced with duct tape. Glove bags shall be smoke tested for leaks. Glove bags may be used only once and may not be moved.
5. Attach HEPA vacuum and spray nozzle to bag.
6. Adequately wet insulation to be removed.
7. If present, cut the bands holding insulation in place.
8. Slice lagging with a razor knife at joints between sections of insulation and lengthwise at joints between clamshell halves.
9. Open insulation clamshell and place intact into an asbestos disposal bag. Do not drop.
10. Scrub pipe and fitting with plastic brushes and Scotchbrite pad. Wet wipe surfaces to remove any ACM residue.
11. Encapsulate exposed edges of pipe insulation.
12. Use HEPA vacuum to evacuate the bag then seal the holes with duct tape where the vac and spray nozzle were.
13. Double bag all asbestos waste materials and place in the designated asbestos waste container.
14. Fill out waste manifest forms.

Remove Asbestos Floor Tile

Summary

This Standard Operating Procedure covers work, which is required to remove asbestos- containing floor tile and/or mastic.

Examples

1. Removal of several floor tiles that are loose or can be removed by hand methods with minimal or no breakage, and tile and/or mastic does not become friable.
2. Remove a small area of well-adhered tile and/or mastic that is not likely to become friable.
3. Remove several floor tiles and mastic to drill hole(s) in sub floor to attach object to floor or install a pipe or conduit.

Related Work Practices

1. Transporting, Storing, and Disposing
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendations

One worker is required but more may be needed to increase the safety and efficiency considerations. An air-monitor with NIOSH 582 is required. This person cannot be a worker.

Notes

Air monitoring is required unless a Negative Exposure Assessment (NEA) has previously been made by the ALC. If material breaks/crumbles up into small pieces, air monitoring will be performed regardless.

Warning: Do not sand resilient flooring.

Work Practices

1. Secure the work area, limiting entry to certified personnel only. Verify that a negative exposure assessment (NEA) has been established.
2. If an NEA cannot be verified, stop work and call air monitor to perform air monitoring.
3. Use the following procedure to remove resilient tile floor covering: Floor tiles must be wetted with amended water (misted with a garden sprayer) before actual removal begins unless heat will be used to remove tiles.
4. Start removal by carefully wedging a wall scraper in the seam of two adjoining tiles and gradually forcing the edge of one of the tiles up and away from the floor. Continue to force the balance of the tile up by working the scraper beneath the tile. Exert both a forward pressure and a twisting action on the blade to promote release of the tile from the adhesive and the floor.
5. When the tile is removed, place it in a disposal bag without breaking it into smaller pieces.
6. If it is necessary to remove more tiles to accomplish the work, after the first tile is removed and accessibility to other tiles is improved, force the scraper under the exposed edge of another tile. Continue to exert a prying/twisting force to the scraper as it is moved under the tile until the tile releases from the floor. Again, dispose of the tile by placing in a waste bag or waste container without additional breaking. Continue in this manner until enough tiles are removed to accomplish the work.
7. Force the scraper through tightly-adhered areas by striking the scraper handle with a hammer using blows of moderate force while maintaining the scraper at a 25 to 30 degree angle to the floor. The resilient floor covering manufacturers' work practices recommend the use of safety goggles during this work.
8. Place loosened adhesive residues into a waste bag or waste container.
9. Wipe remainder of residue with absorbent towels and dispose of in appropriate container.
10. Continue the above steps until what remains of the residual asphaltic mastic is gone.
11. Within the work area, seal the disposal bag when the work is complete.

Remove a Non - Damaged Fire Door and/or Door Hardware

SUMMARY

This work practice covers the procedure for removal of asbestos-containing fire door or door hardware in an asbestos containing fire door. This procedure does not cover cutting or drilling into asbestos containing fire doors.

Examples

The following are examples of work that can be performed using this procedure. If job conditions vary from the examples stop work and notify the Environmental Professional

1. Remove an asbestos-containing fire door that is in good condition for replacement.
2. Replace a lockset or closer on asbestos-containing fire door in good condition.

Related Work Practices

1. Transportation, Storage, and Manifesting.

Worker Recommendation

Two workers are required for this procedure to facilitate handling of heavy doors during removal and disposal preparation.

Notes

Not applicable

Work Practice

1. Secure the work area limiting entry to certified personal only and materials needed in work area.
2. Tape damaged areas with duct tape to prevent a fiber release.
3. Place tools, equipment, and materials needed in work area.
4. If door is equipped with a closer, detach closer arm from doorframe. Remove screws attaching closer to door. HEPA vacuum or wet clean screws, closer, and area where closer was attached to door. Thoroughly clean closer and parts if they will be re-used. If closer will not be re-used, dispose of it as asbestos-containing materials (ACM) waste.
5. HEPA or wet wipe vacuum lockset if it will be re-used or disposed of as ACM waste.
6. Lay two layers of 6 mil. polyethylene sheet plastic on floor for wrapping door.
7. Remove hinge pins or screws attaching hinges to doorframe. Lay door on the sheet plastic.
8. If hinges are to be re-used, remove from door following procedures used for closer. If hinges are to be disposed of, leave hinges attached to door.
9. Wrap door with the sheet plastic and seal using duct tape.
Note: Wrapped door must have warning label, DOT hazard class, identification number, packing class, and generator label on it.
10. Place door in designated asbestos waste container.

Complete the waste manifest forms.

Minor Fiber Release

Summary

This standard operating procedure covers work which is required to perform actions in the event of falling or dislodging of 3 ft² or linear feet or less of friable asbestos-containing material (ACM).

Examples

The following are examples of work that is performed using this procedure. If the amount of friable ACM exceeds 3 ft² or linear feet notify Environmental Professional and different actions will be taken as it becomes a Major fiber release.

1. Action of small amount ≤ 3 ft² of Surfacing material (acoustical ceiling) delaminating from substrate.
2. Action of small amount ≤ 3 ft² of damaged Thermal System Insulation or ACM mudded fittings on pipes.
3. Action of damaged ACM ceiling tile that is < 3 ft².

Related Work Practices

1. Any action involving a possible fiber release from performing a project that consist of ≤ 3 ft² of falling or dislodged friable ACM.

Notes

Perform air monitoring. A Negative Exposure Assessment may be used if previously established.

Work Practice

1. Perform air monitoring (area and personal).
2. Thoroughly saturate the debris using wet methods.
3. Place the asbestos debris in a sealed, leak-tight container.
4. HEPA vacuum or wet clean the floor and all horizontal surfaces
5. Repair the area with non-asbestos materials or encapsulate.
6. Remove the disposal bag and place the bag into the transportation vehicle. The waste must be handled to prevent breakage, rupture, or leakage during loading. If the disposal bag breaks, ruptures, or leaks during handling:

7.
 - A. Stop immediately and isolate the area if necessary. Follow the appropriate fiber release episode response (either minor or major).
 - B. Repair/Replace the disposal bag.
 - C. Thoroughly clean the area.
8. Place the disposal bag(s) in the designated the asbestos waste storage container. Disposal bag(s) should be placed in the asbestos waste storage container no later than the end of the next work shift.
9. The manifest and recordkeeping must be completed immediately following the completion of the project/task.

Cutting or Drilling Asbestos-Containing Drywall, Plaster, or Drywall Compound

SUMMARY

This work practice covers the procedures for cutting or drilling asbestos-containing drywall, plaster, or drywall compound.

Examples

The following are examples of work that can be performed using this procedure. If job conditions vary from the examples stop work and notify the Environmental Professional.

1. Cut a hole into drywall, plaster, drywall compound where there is less than three ft² of material.
2. Drill a hole to attach an object in drywall, plaster, or drywall compound.
3. Drill a hole in asbestos-containing joint compound where the drywall is non-asbestos.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendation

Two workers are required for this procedure. A certified air-monitor NIOSH 582 is required. The air monitoring person cannot be a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of air monitoring.

Removal of a Non-Asbestos Ceiling Tile When Friable Material is Located Above (Asbestos Material Will Not Be Disturbed)

SUMMARY

This Standard Operating Procedure covers work required for removing a non-asbestos ceiling tile in a lay-in ceiling system, such as a suspended ceiling when there is friable asbestos-containing material located above the ceiling tile. This work practice assumes that asbestos-containing material above the ceiling tile will not be disturbed.

Examples

The following are examples of work that can be performed using this procedure. If job conditions vary from the examples, stop work and notify the Environmental Professional.

1. Performing work above the non-asbestos ceiling tile that will not disturb asbestos material above.
2. Replace a damaged, broken, or soiled non-asbestos ceiling tile without disturbing asbestos material.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendation

Two workers are required for this procedure. A certified air-monitor NIOSH 582 is required. The air monitoring person cannot be a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by ALC for this work procedure, it may be used instead of air monitoring.

Removal of a Non- Asbestos Ceiling Tile When Friable Asbestos Material is Located Above (Asbestos Material Will Be Disturbed)

SUMMARY

This Standard Operating Procedure covers work required for removing a non-asbestos ceiling tile in a lay-in ceiling system, such as a 2' x 4' or 2' x 2' suspended ceiling for O&M work when there is friable asbestos-containing material (ACM) located above the ceiling tile. This work practice assumes that asbestos-containing material (ACM) above the ceiling tile will be disturbed.

Examples

The following are examples of work that can be performed using this procedure. If job conditions vary from the example, stop work and notify the Environmental Professional.

1. Performing work above the non-asbestos ceiling tile that will disturb a small amount of asbestos material above.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendation

Two workers are required for this procedure. An air-monitor with NIOSH 582. The air monitoring person cannot be a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of air monitoring.

Removal of Asbestos Ceiling Tile

SUMMARY

This work practice covers the procedure for removing an asbestos-containing ceiling panel in a lay-in ceiling system/suspended ceiling. The practices assume that surfacing asbestos-containing material (ACM) is not present above the ceiling.

Examples

The following are examples of work that can be performed using this procedure. If job conditions vary from the examples, stop work and notify the Project Professional.

1. Remove an asbestos-containing ceiling panel.
2. Remove a damaged, broken, or soiled asbestos-containing ceiling panel alone or in conjunction with work above ceiling.

Related Work Practices

1. Transportation, Storage, and Manifesting.
2. Area Air Monitoring
3. Personal Air Monitoring

Worker Recommendation

Two workers are required for this procedure. An air-monitor with NIOSH 582 training is required. The air monitoring person cannot be a worker.

Notes

Air monitoring is required for this procedure. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of air monitoring.

Work Practice

1. Post warning signs on all entries to the area.
2. Erect a mini enclosure. Care must be taken not to disturb the surrounding ceiling if it is asbestos containing.
3. Use the HEPA vacuum and/or negative pressure system for local exhaust system.
4. Place the amended water spray wand, tools and equipment in the enclosure.
5. Put on suit and respirator before entering the enclosure.
6. Adequately wet ceiling panel(s), remove and place in disposal bag..
7. HEPA vacuum and wet wipe any grid/suspension system components exposed where panel(s) were removed. Place wet wipes and any debris into disposal bags.
8. Install new non-ACM ceiling panel.
9. Wet wipe and HEPA vacuum the inside of the mini-enclosure. Place cleaning materials in a disposal bag.
10. HEPA vacuum suit. Remove the suit and place in a disposal bag. Wet wipe hands, face, and respirator. Place towels in a disposal bag.
11. Exit the enclosure.
12. Double bag all waste materials.
13. Dismantle the mini enclosure and dispose in two layers of 6 mil. sheet polyurethane.
14. Place asbestos waste materials in designated ACM waste storage area
15. Fill out the waste manifest. Return them to the Environmental Professional.

Remove Carpet Over ACM Floor Tile

Summary

This Standard Operating Procedure covers work, which is required for removing carpet that has been installed over asbestos-containing material (ACM) floor tile. Depending on how well the carpet was adhered when installed, if it was in a high traffic area, and the amount of moisture the area has received will determine how many tiles will delaminate from the floor substrate in the carpet removal.

Examples

The following are examples of work that can be performed using this procedure:

1. Remove carpet that is adhered to ACM floor tile for remodeling.
2. Remove carpet for floor tile abatement.

Related Work Practices

1. Transporting, Storing, and Disposing
2. Personal Air Monitoring

Worker Recommendation

Two workers are required. An air-monitor with NIOSH 582 air monitoring is required. The air monitoring person cannot be a worker.

Notes

Air Monitoring may be required for this procedure if material is rendered friable. If a Negative Exposure Assessment (NEA) has been established by the ALC for this work procedure, the NEA may be used instead of the air monitoring.

Personal Air Monitoring

SUMMARY

This standard operating procedure covers work, which is required to perform worker exposure air monitoring.

Examples

The following are examples of work that is performed using this procedure. If job conditions vary from the examples stop work and notify the Environmental Professional.

1. Controlled work areas where asbestos materials are present.
2. Controlled work areas where asbestos materials are suspected.
3. Any area where an employee wears a respirator because of a potential asbestos exposure.

Worker Recommendation

One worker is required for this procedure. The worker must be NIOSH 582 equivalent. The air monitoring person cannot be a worker.

Notes

If approved by the Environmental Professional, earlier air monitoring data (negative exposure assessment) can be used instead of personal monitoring. Pumps should be calibrated on site when possible. If a Negative Exposure Assessment (NEA) has been conducted by the ALC for this action, air monitoring is not required.

Area Air Monitoring

SUMMARY

This standard operating procedure covers work which is required to perform area air monitoring to determine background fiber concentration in an area, monitor the air inside containment and measure the levels of fibers outside a containment area.

Examples

The following are examples of work that is performed using this procedure. If job conditions change from a small fiber release to a major fiber release stop work and notify the Environmental Professional.

1. Controlled work areas where asbestos materials are present.
2. Controlled work areas where asbestos materials are suspected.
3. Any area where an employee wears a respirator because of a potential asbestos exposure.

Worker Recommendation

One worker is required for this procedure. The worker must be NIOSH 582. The air monitoring person cannot be utilized as a worker.

Notes

NIOSH 7400 is the PCM method approved by the EPA accepted under AHERA regulations for the monitoring and determination of fibers in the air. It is not specific to asbestos fibers. It has been applied to asbestos because of the fibrous nature and the fact that occupational exposure is usually to one specific fiber. Therefore, specificity to a particular fiber is not important when sampling in a mixed environment such as a school building.

Work Practices

Using the Gilibrator or other approved equipment, calibrate the area air monitoring **high volume** pump flow rate to between 0.5 and 16 liters/min. for PCM and 1.0 to 10.0 liters/min for TEM. The pump is calibrated depending on the length of time for the task monitored. During the calibration step, the pump must be calibrated using a representative cassette (manufacturer, pore size, medium type) and sampling line size that will be used during the area monitoring.

1. On the Air Monitoring Worksheet, write the pump number and pre-calibration volume in the appropriate columns.
2. Complete the upper section of the Air Monitoring Work Sheet.
3. Label the cassettes. See the Air Monitoring Work Sheet for examples. The cassette should have only the ID number on it. All other information is written on the work sheet.

Note: For PCM, a minimum of 2 field blanks or 10% (which ever is greater) is required. For TEM clearance, 2 field blanks and 1 lab blank are required. The field blank cassette caps must be removed during the sampling period. The field blank cassettes and caps must be stored in a clean area. Lab blank cassette caps are not removed.

The suggested loading for specific environments is: removal operations with visible dust-100 liters; removal operations with little dust-240 liters; office environments 400 to 2400 liters.

Remove the cassette caps and start the pump. Write the cassette start time on the Air Monitoring Work Sheet.

1. Attach the appropriate cassette to a tripod at the breathing zone height pointing down at a 45-degree angle at least one foot away from walls. Write on the Air Monitoring Work Sheet the location where the pump was placed, for **example:** In room 21, set the pump at 4' from the West wall and 12' from the South wall 36" above finished floor (AFF).
2. At the conclusion of the sampling period for each cassette, remove the cassette from the pump, replace the cap, and write the stop time on the Air Monitoring Work Sheet.
3. At the conclusion of the project, post-calibrate the area air-monitoring pump. Write the post calibration in the appropriate column on the Air Monitoring Work Sheet. Replace the caps on the field blank cassettes.
4. Complete the Air Monitoring Worksheet.
5. Print the chain of custody report for the samples and complete report. Send the samples to an approved laboratory.
6. Report laboratory results to the Environmental Professional.