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September 30, 2014

# Asbestos Re-Inspection Report

IRS Building 173 East 100 North Provo, Utah GSA Building No. UT0039ZZ

**Prepared For:** 

General Services Administration/Public Buildings Services Acquisition Management Group, 8P2PQ DFC Building 41 – Room 240 Denver, Colorado 80225

**Pinyon Project No.:** 

1/14-346-02.8002.5



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Prepared by:

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**Reviewed by:** 

Peter Becofske Pinyon Environmental Technical Services Manager - Asbestos

## **GENERAL BUILDING and CONSULTANT INFORMATION**

Client	General Services Administration/Public Buildings Services
Contact	Patrick Haze, Community Business Center Manager
Client Telephone #	303-236-2757
Facility Inspected	Provo IRS Building
Facility Address	Provo IRS Building 175 East 100 North, Provo, Utah
Date(s) of Re-Inspection	August 15, 2014
Building Number	UT0039ZZ
Consulting Firm Name	Wasatch Environmental
Consulting Firm Address	2410 West California Avenue, Salt Lake City, UT 84104
Consulting Firm Telephone #	801.972.8400
Laboratory Address	2235 Polvorosa Avenue, Suite 230 San Leandro, CA 94577
Laboratory Telephone #	510.895.3675

## **GENERAL BUILDING and CONSULTANT INFORMATION**

### IRS Building 175 East 100 North Provo, Utah GSA Building Location Code – UT0039ZZ

Date(s) of Construction	1971
Square Footage	6,346 Square Feet
Construction	Single-story slab-on-grade office building
Structural	Steel frame with a flat built up roof
Exterior	Concrete block, glass, and transite panels
Interior	Floors – 9"x9" vinyl tile, carpet, and concrete Walls – wallboard, concrete block, and ceramic tile Ceilings - Drop acoustic ceilings and wallboard
Entrances	Public entrance – On south side Employees only – On north side
HVAC System	Heat – one natural gas fired boiler Cooling – roof-mounted HVAC unit
Space Utilization	I <sup>st</sup> – lobby, offices, storage, restrooms, mechanical, and custodial

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## **EXECUTIVE SUMMARY**

Wasatch Environmental was retained by Pinyon Environmental, Inc. (Pinyon), who was retained by General Services Administration (GSA) to perform asbestos re-inspection services of the IRS Building located in Provo, Utah 84606.

The building was constructed in 1971. The facility inspected is a single-story slab-on-grade structure and is constructed of concrete block with a flat roofing system. It encompasses a total of 6,346 square feet of building space.

During this re-inspection, two previously un-sampled materials, interior and exterior block wall filler was sampled. No asbestos was identified in those samples collected.

### Abatement History

Abatement history records were not available for this facility.

#### **Asbestos Findings**

Wasatch Environmental conducted an asbestos re-inspection of the IRS Building on August 15, 2014. Materials assumed to contain asbestos were not sampled to protect structural integrity. The following suspect homogeneous materials were confirmed or assumed to contain asbestos:

Material Description	Material Number and Additional Comments
Roofing Materials	MI.I – Asphaltic built-up roof
Transite	M4.1 – Transite panels
Fire Door Insulation	M9.1 – Fire door insulation
Sink Undercoating	MI0.1 – Sink undercoating
Other	MI6.3 – Ceramic tile adhesive
Pipe Joint Insulation	T2.I – Mudded elbow
Pipe Joint Insulation	T2.2 – Mudded elbow on roof drain

#### Recommendations

Based on the results of laboratory analysis of bulk samples and visual and tactile assessment of building materials confirmed to contain asbestos, Pinyon recommends the following specific management actions:



Material Description	Material Number and Additional Comments	Management Recommendations
Roofing Materials	MI.I – Asphaltic built-up roof	O&M
Transite	M4.I – Transite panels	O&M
Fire Door Insulation	M9.1 – Fire door insulation	O&M
Sink Undercoating	M10.1 – Sink undercoating	O&M
Other	MI6.3 – Ceramic tile adhesive	O&M
Pipe Joint Insulation	T2.I – Mudded elbow	O&M
Pipe Joint Insulation	T2.2 – Mudded elbow on roof drain	O&M



## I. Introduction and Scope of Work

Pinyon Environmental was retained by General Services Administration to perform a re-inspection asbestos survey of the IRS Building located in Provo, Utah. The purpose of this survey was to identify friable and non-friable suspect asbestos-containing building materials (ACBM).

The scope of this inspection included the following activities:

- Surveying, identifying, and sampling suspect friable and non-friable ACBM.
- Preparing this comprehensive report documenting the sampling procedures and results of the ACBM survey.

To accomplish this survey, all accessible areas of the building were identified by name and a room number assigned. A summary of identified functional spaces is presented in Table 3-1.

Within each space, suspect asbestos-containing building materials were identified. Pinyon uses a standardized numbering format to identify suspect building materials, and to identify bulk samples.

The report contains six sections. The six sections are: introduction and scope of work; inspection procedures; survey findings; conclusions and recommendations; removal cost estimate; and limitations sections. The report also contains seven appendices. Appendix A contains figures, Appendix B contains tables, Appendix C contains the laboratory analysis report and chain of custody, Appendix D contains photographs, Appendix E contains abatement documents (if there are any), Appendix F contains general inspection information, and Appendix G contains inspector and laboratory certification.



## 2. Inspection Procedures

The asbestos survey was performed using the applicable portions of the currently recognized standard protocol developed for schools under AHERA, as promulgated in Title 40, Code of Federal Regulations (40 CFR), Part 763 and as amended in the Federal Register (EPA, 2011). Since the primary concern for this investigation was to identify potential asbestos hazards in the entire building, Pinyon or its representatives visually inspected existing conditions within the entire facility. An overview of asbestos and current regulations and a glossary of common terms is presented in Appendix F.

### 2.1 Inspection and Sampling

The inspection was conducted by a Utah State certified and AHERA accredited asbestos inspector, and consisted of a detailed visual survey of surfacing materials, thermal system insulation, and miscellaneous materials throughout the building. Suspect ACBM was then grouped into homogeneous materials and sampling plans developed. Components of the inspection included:

- Identification of homogeneous suspect materials on a room by room basis (Appendices A and B).
- An assessment of known or assumed ACBM, generally classifying the materials using categories defined in the AHERA and National Emission Standards of Hazardous Air Pollutants (NESHAP). A description of NESHAP categories is presented in the Section 3 Room-By-Room Table Key.
- Homogeneous suspect ACBM's were, for the purpose of this study, placed into the following four materials type categories: Thermal System Insulation (TSI), surfacing materials, miscellaneous materials, and floor covering. AHERA sampling protocol specifies sampling procedures for each material type (Appendix F).

Sample locations for this survey were chosen in a non-random fashion, with emphasis placed on obtaining samples of each type of accessible, suspect material and minimizing damage to the material being sampled (Appendix A Figure 1. Samples were collected by carefully removing small portions of the suspect material in a non-abrasive manner. If possible, samples from existing damaged areas or loose pieces of material were collected. Samples were obtained by using techniques such as wet slicing, wet boring or similar methods designed to limit contamination of the area during sampling. The sampled area was sealed using patching compounds, duct tape, or spray encapsulates as appropriate to the material being sampled.

Immediately after collection, samples were placed in pre-labeled plastic containers. Containers with samples were then placed in a large re-sealable plastic bag for transportation to the laboratory.

Photographs of each suspect ACBM were taken during the inspection (Appendix D).

### 2.2 Laboratory Analysis

Bulk samples obtained during the inspection were assigned bulk sample numbers and entered on sample summary/chain-of-custody forms. The analysis was performed in accordance with EPA Interim Method 600/M4-82-020, which employs polarized light microscopy (PLM) with dispersion staining for identification of mineral forms of asbestos. The quantification of asbestos in the sample is intended to be an estimate only and the limit of detection for this method is approximately 1% by volume.



### 2.3 Quality Assurance and Quality Control

Quality Assurance and Quality Control (QA/QC) measures adopted by Pinyon involved field and office components. Key parameters are summarized below:

Field QA/QC

- Review inspection forms for completeness
- Check homogeneous materials listing for sufficient number of collected samples
- Verify locations of major mechanical components

Office QA/QC

- Review lab results for completeness
- Ensure appropriate cross-referencing of results and forms for given ACBM
- Ensure drawings are updated as necessary following field QC
- Verify approximate quantities of ACBM based on drawing review
- Review recorded field comments for meaning, incorporate as necessary into report



## 3. Survey Findings

### 3.1 Building Description

The IRS Building was constructed in 1971, and is approximately 6,395 square feet of usable space distributed over a single story. The facility is a slab-on-grade concrete block building. The roof is membrane asphaltic built-up with gravel ballast.

Heat for the building is supplied by a natural gas-fired boiler. The building is cooled by a roof-mounted HVAC unit. Building thermal systems insulation includes domestic, heating and cooling system lines insulated with asbestos containing material or fiberglass, and joints and elbows which are insulated with asbestos containing mudded material or fiberglass.

### 3.2 Findings

Wasatch Environmental conducted an asbestos re-inspection of the IRS Building on August 15, 2014. Materials assumed to contain asbestos were not sampled to protect structural integrity. The following suspect homogeneous materials were confirmed (Appendix C) or assumed to contain asbestos:

Material Description	Material Number and Additional Comments
Roofing Materials	MI.I – Asphaltic built-up roof
Transite	M4.I – Transite panels
Fire Door Insulation	M9.1 – Fire door insulation
Sink Undercoating	M10.1 – Sink undercoating
Other	MI6.3 – Ceramic tile adhesive
Pipe Joint Insulation	T2.I – Mudded elbow
Pipe Joint Insulation	T2.2 – Mudded elbow on roof drain

September 30, 2014



### **TABLE 3-1: Functional Space Summary**

Floor	Room	Functional Space	Comments
I	100	Vestibule	Public Entrance
	101	Lobby	Reception
	102	Office	Front Desk
I	102A	Office	Тур.
	103	Office	Тур.
	104	Office	Тур.
I	105	Office	Storage
	106	Telephone Room	Telephone
l	107	Office	Тур.
l	108	Storage	Storage
	109	Break Room	Break Room
I	110	Vestibule	Entry to 111
I	111	Restroom	Women's
I	112	Restroom	Men's
I	113	Office	Тур.
I	114	Custodial	Custodial
I	115	Boiler Room	Maintenance
I	116	Restroom	Men's
I	7	Restroom	Women's
I	118	Office	Тур.
I	119	Office	Typ.
I	120	Hallway	Main
I	121	Storage	Тур.
I	122	Office	Typ.
I	123	Other	ADP
I	124	Office	Тур.
I	125	Office	Тур.
I	126	Pipe Chase	Pipe Chase
I	127	Pipe Chase	Pipe Chase
	128	Vestibule	Employee Entrance
Roof	Roof	Roof	Тур.

Notes: The functional spaces list was derived from information and maps provided in prior reports.

Typ. – Typical of similar spaces throughout the building;



## Table B Key

The following is an explanation of each column listed in Table B:

### Floor No.

The floor level of the building.

### Room No.

A list of all spaces in numeric order. Due to the need for each inspected space to have a unique identifying number, the room numbers in this column may differ from the actual room numbers used in the building. The drawings in Appendix A are annotated with the assigned numbers from the inspection and can be used to resolve any questions.

### Room Description

A general description for the use of the room at the time of the inspection.

### Homogeneous Material Number and Description

This column provides a number and description of all suspect ACBM in each functional space/room. A summary of homogeneous ACBM types can be found in Appendix B, Table I. A list of non-asbestos containing homogeneous materials can be found in Appendix B, Table 2.

### Bulk Sample No.

Bulk samples collected during this current inspection are listed in this column. Sample location within the room and sample analysis can be found in Appendix B, Table 3.

### <u>ACBM</u>

This column either lists "Yes" for suspect materials determined to be an ACBM or "No" if analysis of the suspect material is negative for the presence of asbestos.

### <u>Friable</u>

If a suspect material can be reduced to powder with hand pressure, "Yes" will be typed into this column. Otherwise, "No" will be typed into the column.

### ACBM Quantity

The quantity of a specific ACBM located within a room will be listed in this column.

### <u>Units</u>

This column lists how the ACBM was measured (SF = square feet; EA = each; LF = linear feet).



### Table B Key (continued)

### Hazard Rank and Removal Priority

Per AHERA regulations, each known and/or assumed friable asbestos-containing material is assessed for condition and is assigned a Hazard Rank number and Removal Priority number which is listed in these two columns. The Hazard Rank and Removal Priority for Friable ACBM table is located on the following page as a supplement to Table B and details the procedure for assigning AHERA Hazard Ranking and Removal Priorities for materials based on the degree of damage observed.



## Supplement to Table B: Room by Room Summary of Suspect and Confirmed ACBMs Response Actions Based on Hazard Ranking

Hazard Rank	Removal Priority	AHERA Categories	Response Actions Required by AHERA
7	I	Significantly Damaged	Evacuate or restrict the area if needed. Remove the ACBM (or enclose or encapsulate it if sufficient to contain fibers). Repair of TSI allowed if feasible and safe. O&M required for all ACBM.
6	2	Damaged with Potential for Significant Damage	Evacuate or restrict the area if needed. Remove, enclose, encapsulate, or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all ACBM.
5	3	Damaged with Potential for Damage	Remove, enclose, encapsulate, or repair to correct damage. O&M required for all ACBM.
4	4	Damaged with Low Potential for Damage	Same as Hazard Rank 5
3	5	Good with Potential for Significant Damage	Evacuate or restrict the area if needed. Take steps to reduce potential for disturbance. O&M required for all ACBM.
2	6	Good with Potential for Damage	O&M required for all ACBM. Take steps to reduce potential for damage.
I	7	Good with Low Potential for Disturbance	O&M required for all ACBM

Notes:

O&M Operations and Maintenance

ACBM Asbestos Containing Building Materials

TSI Thermal System Insulation

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>ı</sup>	Removal Priority <sup>2</sup>
I	100	Vestibule	T2.1 - Pipe joint, mudded elbow	None	Yes	Yes	10	EA	2	6
I	100	Vestibule	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	100	Vestibule	MI6.1* - Other - joint compound	None	Yes	No	16	SF	2	6
I	100	Vestibule	MI2.1 - Baseboard and mastic-gray with yellow/brown mastic	WC3-23 (2004)	No	No	NA	NA	NA	NA
I	100	Vestibule	F2.1 – Floor tile - 12"x12" gray speckled vinyl floor tile	FT1-24 (2004)	No	No	NA	NA	NA	NA
I	100	Vestibule	F5.I – Mastic under floor tile - black	None	No	No	NA	NA	NA	NA
I	101	Lobby	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	101	Lobby	M6.1 - Ceiling panel - two square look	CT1-01 (2004)	No	No	NA	NA	NA	NA
I	101	Reception	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	101	Reception	MI6.I* - Other - joint compound	UT0039ZZ- 04 (2007) WB2-09, 10 (2004)	Yes	Yes	500	SF	2	6
I	101	Reception	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	102	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
I	102	Office	MI6.I* - Other - joint compound	None	Yes	Yes	300	SF	2	6
I	102	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	102	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	102	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	102A	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	102A	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	102A	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
Ι	102A	Office	MI6.I* - Other - joint compound	None	Yes	Yes	200	SF	2	6
Ι	102A	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	103	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	103	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	103	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	103	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
Ι	103	Office	MI6.I* - Other - joint compound	None	Yes	Yes	1000	SF	2	6
Ι	104	Office	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	2	EA	2	6
I	104	Office	T2.2 - Pipe joint - mudded elbow on roof drain	None	Yes	Yes	I	EA	2	6

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
I	104	Office	M6.1 - Ceiling panel - two square look	CT1-02 (2004)	No	No	NA	NA	NA	NA
I	104	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	104	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	104	Office	MI6.I* - Other - joint compound	None	Yes	Yes	500	SF	2	6
Ι	104	Office	MI6.2 – Other - Pipe sealant - white	PS1-25 (2004)	No	No	NA	NA	NA	NA
I	104	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	105	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	105	Office	M12.3 - Baseboard and mastic - dark brown with white mastic	None	No	No	NA	NA	NA	NA
Ι	105	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	105	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	105	Office	MI6.I* - Other - joint compound	None	Yes	Yes	500	SF	2	6
I	106	Telephone Room	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	106	Telephone Room	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	106	Telephone Room	MI6.I* - Other - joint compound	None	Yes	Yes	250	SF	2	6
I	106	Telephone	F2.2 - Floor tile - I2"xI2" tan mottled	FT2-27 (2004)	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>ı</sup>	Removal Priority <sup>2</sup>
I	106	Telephone Room	F5.3 – Mastic under floor tile - yellow	FT2-27 (2004)	No	No	NA	NA	NA	NA
I	106	Telephone Room	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
Ι	107	Office	T2.I - Pipe joint - mudded elbow	None	Yes	Yes	I	EA	2	6
I	107	Office	M3.I – Wallboard system	WB2-11 (2004)	No	No	NA	NA	NA	NA
Ι	107	Office	MI6.I* - Other - joint compound	WB2-11 (2004)	Yes	Yes	500	SF	2	6
I	107	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	107	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	107	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	107	Office	F5.4 - Remnant mastic - black	RM1-26 (2004)	No	No	NA	NA	NA	NA
I	108	Storage	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	I	EA	2	6
I	108	Storage	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	108	Storage	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	108	Storage	M3.I – Wallboard system	JCI-07 (2004)	No	No	NA	NA	NA	NA
Ι	108	Storage	MI6.1* - Other - joint compound	JCI-07 (2004)	Yes	Yes	500	SF	2	6
I	109	Break Room	T2.I - Pipe joint - mudded elbow	None	Yes	Yes	2	EA	2	6
I	109	Break Room	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
I	109	Break Room	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	109	Break Room	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	109	Break Room	MI6.1* - Other - joint compound	None	Yes	Yes	500	SF	2	6
I	109	Break Room	M10.1 - Sink undercoating	WC3-31 (2004)	No	No	NA	NA	NA	NA
I	110	Vestibule	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	6	EA	2	6
I	110	Vestibule	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	110	Vestibule	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	110	Vestibule	MI6.1* - Other - joint compound	None	Yes	Yes	500	SF	2	6
I	110	Vestibule	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	111	Restroom	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	6	EA	2	6
I	111	Restroom	M16.3 – Other - ceramic tile adhesive (assumed)	None	Yes	No	125	SF	I	7
I	111	Restroom	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	111	Restroom	MI6.1* - Other - joint compound	None	Yes	Yes	444	SF	2	6
Ι	111	Restroom	MI6.4 – Other - block wall filler	AS-1 AS-2	No	No	NA	NA	NA	NA
I	112	Restroom	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	6	EA	2	6
Ι	112	Restroom	MI6.3 – Other -	None	No	No	130	SF	I	7

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
			Ceramic tile adhesive (assumed)							
Ι	112	Restroom	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
Ι	112	Restroom	MI6.I* - Other - joint compound	None	Yes	Yes	200	SF	2	6
Ι	112	Restroom	MI6.4 – Other - Block wall filler	AS-3	No	No	NA	NA	NA	NA
Ι	113	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	113	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
I	113	Office	M3.I – Wallboard system	UT0039ZZ- 03 (2007) JC1-32 (2004)	No	No	NA	NA	NA	NA
Ι	113	Office	MI6.1* - Other - joint compound	UT0039ZZ- 03 (2007) JC1-32 (2004)	Yes	Yes	380	SF	2	6
Ι	114	Custodial	T2.I - Pipe joint - mudded elbow	TSII-17 (2004)	Yes	Yes	11	EA	2	6
Ι	114	Custodial	M3.I – Wallboard system	WB1-04 (2004)	No	No	NA	NA	NA	NA
Ι	114	Custodial	MI6.I* - Other - joint compound	WB1-04 (2004)	Yes	Yes	100	SF	2	6
I	115	Boiler Room	T2.1 - Pipe joint - mudded elbow	TSII-18, 19 (2004)	Yes	Yes	14	EA	2	6
Ι	115	Boiler Room	M9.1 - Fire door - insulation (assumed)	None	Yes	No	2	EA	I	7
Ι	115	Boiler Room	M3.I – Wallboard system	WB1-05 (2004)	No	No	NA	NA	NA	NA
Ι	115	Boiler Room	MI6.1* - Other - joint compound	WB1-05 (2004)	Yes	Yes	209	SF	2	6
I	115	Boiler	MI6.2 – Other - pipe	PSI-20 (2004)	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
		Room	sealant - white							
Ι	115	Boiler Room	MI6.4 – Other - block wall filler	AS-5	No	No	NA	NA	NA	NA
I	116	Restroom	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	9	EA	2	6
I	116	Restroom	T2.2 - Pipe joint - mudded elbow on roof drain	None	Yes	Yes	2	EA	2	6
I	116	Restroom	M12.4 - Baseboard and mastic - tan with yellow mastic	WC2-21 (2004)	No	No	NA	NA	NA	NA
I	116	Restroom	M16.3 – Other - ceramic tile adhesive (assumed)	None	Yes	No	130	SF	I	7
I	116	Restroom	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	116	Restroom	MI6.1* - Other - joint compound	None	Yes	Yes	130	SF	2	6
I	117	Restroom	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	4	EA	2	6
Ι	117	Restroom	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
Ι	117	Restroom	MI6.1* - Other - joint compound	None	Yes	Yes	100	SF	2	6
I	117	Restroom	CMU - Non-suspect	None	No	No	NA	NA	NA	NA
I	117	Restroom	M16.3 – Other – ceramic tile adhesive (assumed)	None	Yes	No	90	SF	I	7
I	117	Restroom	MI6.4 – Other - block wall filler	AS-4	No	No	NA	NA	NA	NA
Ι	118	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
Ι	118	Office	MI6.1* - Other - joint compound	None	Yes	Yes	500	SF	2	6
I	118	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	118	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	118	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
Ι	119	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	119	Office	MI6.1* - Other - joint compound	None	Yes	Yes	500	SF	2	6
I	119	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	119	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	119	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	120	Hallway	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	120	Hallway	M6.1 - Ceiling panel - two square look	CT1-03 (2004)	No	No	NA	NA	NA	NA
I	120	Hallway	F5.2 – Mastic under carpet - tan/yellow	F5.2	No	No	NA	NA	NA	NA
Ι	120	Hallway	M3.I – Wallboard system	JCI-08 (2004)	No	No	NA	NA	NA	NA
Ι	120	Hallway	MI6.1* - Other - joint compound	JCI-08 (2004)	Yes	Yes	1000	SF	2	6
Ι	121	Storage	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	121	Storage	MI6.1* - Other - joint compound	None	Yes	Yes	500	SF	2	6

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
Ι	121	Storage	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
Ι	121	Storage	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	121	Storage	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	122	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
Ι	122	Office	MI6.1* - Other - joint compound	None	Yes	Yes	400	SF	2	6
I	122	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
I	122	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	122	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	123	Other	F2.2 - Floor tile - I 2"xI 2" tan mottled	UT0039ZZ- 02 (2007) FT2-28 (2004)	No	No	NA	NA	NA	NA
Ι	123	Other	F5.3 – Mastic under floor tile - yellow	UT0039ZZ- 02 (2007) FT2-28 (2004)	No	No	NA	NA	NA	NA
Ι	123	Other	M3.I – Wallboard system	JC2-13 (2004)	No	No	NA	NA	NA	NA
Ι	123	Other	MI6.I* - Other - joint compound	JC2-13 (2004)	Yes	Yes	400	SF	2	6
Ι	123	Other	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
Ι	123	Other	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	124	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	124	Office	MI2.2 - Baseboard	None	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	ACBM	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
			and mastic - 3" Black							
Ι	124	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	124	Office	MI6.1* - Other - joint compound	None	Yes	Yes	400	SF	2	6
Ι	124	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
Ι	125	Office	M3.I – Wallboard system	None	No	No	NA	NA	NA	NA
I	125	Office	MI6.1* - Other - joint compound	None	Yes	Yes	400	SF	2	6
Ι	125	Office	M6.1 - Ceiling panel - two square look	None	No	No	NA	NA	NA	NA
I	125	Office	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Ι	125	Office	F5.2 – Mastic under carpet - tan/yellow	None	No	No	NA	NA	NA	NA
Ι	126	Pipe Chase	T2.1 - Pipe joint - mudded elbow	TSI1-22 (2004)	Yes	Yes	5	EA	2	6
Ι	126	Pipe Chase	T2.1 - Pipe joint - mudded elbow	TSI1-22 (2004)	Yes	Yes	I	EA	6	2
Ι	127	Pipe Chase	T2.1 - Pipe joint - mudded elbow	None	Yes	Yes	4	EA	2	6
Ι	128	Vestibule	M3.I – Wallboard system	WB1-06 (2004)	No	No	NA	NA	NA	NA
I	128	Vestibule	MI6.1* - Other - joint compound	WB1-06 (2004)	Yes	Yes	168	SF	2	6
I	128	Vestibule	F2.3 - Floor tile - 12"x12" red, white and blue splotches	F2.3 (2011) UT0039ZZ- 01 (2007) FT1-29 (2004)	No	No	NA	NA	NA	NA

Floor No.	Room No.	Room Descripti on	Homogeneous Material Number and Description	Bulk Sample No.	АСВМ	Friable	ACBM Quantity	Units	Hazard Rank <sup>i</sup>	Removal Priority <sup>2</sup>
I	128	Vestibule	MI2.2 - Baseboard and mastic - 3" Black	None	No	No	NA	NA	NA	NA
Roof	Roof	Roof	MI.I - Roofing materials (assumed)	None	Yes	No	6395	SF	I	7
Exterior	Exterior	Exterior	MI6.4 – Other - block wall filler	AS-6, AS-7, AS-8	No	No	NA	NA	NA	NA
Exterior	Exterior	Exterior	M4.1 – Transite panels (assumed)	None	Yes	No	120	SF	I	7

Notes:

\* M16.1 – Joint compound contains 1% - 4% Chrysotile. Given that the joint compound is considered part of the wall system, only OSHA regulations would apply.

Description of Hazard Rank can be found in the Supplement to Table B

<sup>2</sup> Description of Removal Priority can be found in the Supplement to Table B

Room No.	Material	Homogeneous Material Number and Description	ACBM Quantity	Units	Estimated Response Action Cost	Schedule of Response Action - Start Date	Schedule of Response Action - Finish Date
126	Pipe Joint Insulation	T2.I – Mudded elbow	I	EA	\$25.00		
	No.	No. Material	No.MaterialNumber and Description126Pipe Joint InsulationT2.1 – Mudded elbow	No.Material Number and DescriptionQuantity126Pipe Joint InsulationT2.1 – Mudded elbowI	No.     Material     Number and Description     Quantity     Units       126     Pipe Joint     T2 L – Mudded elbow     L     EA	No.Material Number and DescriptionQuantityUnits Action Cost126Pipe Joint InsulationT2.1 – Mudded elbowIEA\$25.00	No.Material Number and DescriptionQuantityUnits Action CostAction Action Start Date126Pipe Joint InsulationT2.1 – Mudded elbowIEA\$25.00

Notes:

Floor No.	Room No.	Material	Homogeneous Material Number and Description	ACBM Quantity	Units	Estimated Response Action Cost	Schedule of Response Action - Start Date	Schedule of Response Action - Finish Date
Ι	100	Pipe Joint Insulation	T2.1 - Pipe joint, mudded elbow	10	EA	\$250.00		
Ι	104	Pipe Joint Insulation	T2.1 - Pipe joint, mudded elbow	4	EA	\$100.00		
I	104	Pipe Joint Insulation	T2.2 – Pipe joint – mudded elbow on roof drain	I	EA	\$25.00		
Ι	107	Pipe Joint Insulation	T2.I - Pipe joint, mudded elbow	I	EA	\$25.00		
I	108	Pipe Joint Insulation	T2.1 - Pipe joint, mudded elbow	I	EA	\$25.00		
I	109	Pipe Joint Insulation	T2.1 - Pipe joint, mudded elbow	2	EA	\$50.00		
I	110	Pipe Joint Insulation	T2.1 - Pipe joint, mudded elbow	6	EA	\$150.00		
I	112	Pipe Joint	T2.1 - Pipe joint, mudded	6	EA	\$150.00		

EA	\$275.00	
	\$275.00	
FA		
_/ `	\$350.00	
EA	\$225.00	
EA	\$50.00	
EA	\$100.00	
EA	\$125.00	
EA	\$100.00	
	EA	EA \$100.00

Notes:

SF Square Feet

Floor No.	Room No.	Material	Homogeneous Material Number and Description	ACBM Quantity	Units	Estimated Response Action Cost	Schedule of Response Action - Start Date	Schedule of Response Action - Finish Date
I	111	Other	MI6.3 – ceramic tile adhesive (assumed)	125	SF	\$750.00		
I	112	Other	MI6.3 – ceramic tile adhesive (assumed)	130	SF	\$780.00		
I	115	Fire Door Insulation	M9.1 – Fire door insulation	2	EA	\$150.00		
I	116	Other	MI6.3 – ceramic tile adhesive (assumed)	130	SF	\$780.00		
I	117	Other	MI6.3 – ceramic tile adhesive (assumed)	90	SF	\$540.00		
Roof	Roof	Roofing Materials	MI.I – Roofing materials (assumed)	6,395	SF	\$40,000.00		
Exterior	Exterior	Transite	M4.1 – Transite panels (assumed)	120	SF	\$720.00		
			Total Cost For F	Removal Pri	ority 7	\$43,720.00		

Notes:

SF Square Feet



## 4. Conclusions and Recommendations

### 4.1 Conclusions

Asbestos-containing materials were identified at the subject facility and observed to be in good condition at the time of the re-inspection. A previous inspection report, "Asbestos Re-Inspection" IRS Building, Provo, UT 84606, GSA Building No. UT0039ZZ" dated November 17, 2011, was referenced for this current re-inspection. The asbestos-containing materials and materials negative for the presence of asbestos identified in the previous report were relied upon during this current re-inspection. However, the previous report did not include lab results or the number of bulk samples previously collected for each suspect material at the facility.

### 4.2 **Recommendations**

- Pinyon recommends periodic inspections of the assumed and confirmed ACBM to make sure the material has not become damaged and/or friable.
- If renovation activities will be disturbing the assumed ACBM, the materials should be sampled to
  determine if it is in fact ACBM. The material can also remain assumed positive and be handled as ACBM
  following all Environmental Protection Agency (EPA) and Occupational Health and Safety Administration
  (OSHA) regulations.



# 5. Removal Cost Estimate

Room	Description	Quantity	Unit	Total Cost
100	T2.1 - Pipe joint, mudded elbow	10	EA	\$250.00
104	T2.1 - Pipe joint, mudded elbow	4	EA	\$100.00
104	T2.2 – Pipe joint – mudded elbow on roof drain	I	EA	\$25.00
107	T2.1 - Pipe joint, mudded elbow	I	EA	\$25.00
108	T2.1 - Pipe joint, mudded elbow	I	EA	\$25.00
109	T2.1 - Pipe joint, mudded elbow	2	EA	\$50.00
110	T2.1 - Pipe joint, mudded elbow	6	EA	\$150.00
111	MI6.3 – ceramic tile adhesive (assumed)	125	SF	\$750.00
112	T2.1 - Pipe joint, mudded elbow	6	EA	\$150.00
112	MI6.3 – ceramic tile adhesive (assumed)	130	SF	\$780.00
114	T2.1 - Pipe joint, mudded elbow	11	EA	\$275.00
115	T2.1 - Pipe joint, mudded elbow	14	EA	\$350.00
115	M9.1 – Fire door insulation	2	EA	\$150.00
116	T2.1 - Pipe joint, mudded elbow	9	EA	\$225.00
116	T2.2 – Pipe joint – mudded elbow on roof drain	2	EA	\$50.00
116	MI6.3 – ceramic tile adhesive (assumed)	130	SF	\$780.00
117	T2.2 – Pipe joint – mudded elbow on roof drain	4	EA	\$100.00
117	MI6.3 – ceramic tile adhesive (assumed)	90	SF	\$540.00
126	T2.I - Pipe joint - mudded elbow	5	EA	\$125.00
126	T2.I – Pipe joint - mudded elbow	I	EA	\$25.00
127	T2.I - Pipe joint - mudded elbow	4	EA	\$100.00
Roof	MI.I – Roofing materials (assumed)	6,395	SF	\$40,000.00
Exterior	M4.I – Transite panels (assumed)	120	SF	\$720.00

Notes:

SF Square Feet



LIMITATIONS: All costs are estimates only and should be confirmed by a licensed asbestos abatement contractor. The costs do not include any costs for reinstallation of any surfacing, insulation, or miscellaneous materials or project design, project management, and construction inspection fees. The budgetary estimate presented assumes there will be no relocation costs. The estimate assumes that all identified ACBM's are removed concurrently.



## 6. Limitations

This asbestos assessment report was prepared based on information previously collected by others, obtained during the survey, and interpretation of the laboratory results of bulk samples of building materials collected during the survey. The conclusions of this report are professional opinions based solely upon visual site observations and interpretations of laboratory analyses as described in our report, and on previous surveys completed by others. The accuracy of the information in the previous surveys was not evaluated by Pinyon.

This report has been prepared to provide information concerning the various types and estimated quantities of asbestos-containing materials which may be present at this site. It includes only those materials that were visible and accessible at the time of our inspection. We did not remove any permanent building enclosures or disassemble any equipment to determine if any asbestos-containing materials were present. No samples were collected if the mechanical integrity of the material would be compromised. As a result, additional asbestos-containing materials may be present in inaccessible areas (e.g., between walls, beneath floors, etc.) of the buildings. Permanent building enclosures were not opened or disassembled for inspection and additional asbestos-containing materials may also be present in these areas.

This inspection and report is intended to identify and assess asbestos-containing materials. It is not intended to be used for purposes of obtaining bids for removal from abatement contractors.

Our opinions are intended exclusively for use by General Services Administration. The scope of services performed by Pinyon may not be appropriate to satisfy the needs of other users, and any use or re-use of this document, or the findings presented herein is at the sole risk of the user.

The opinions presented herein apply to the site conditions existing at the time of our investigation. Therefore, our opinions and recommendations may not apply to future conditions that may exist at the site, which we have not had the opportunity to evaluate.



## 7. References

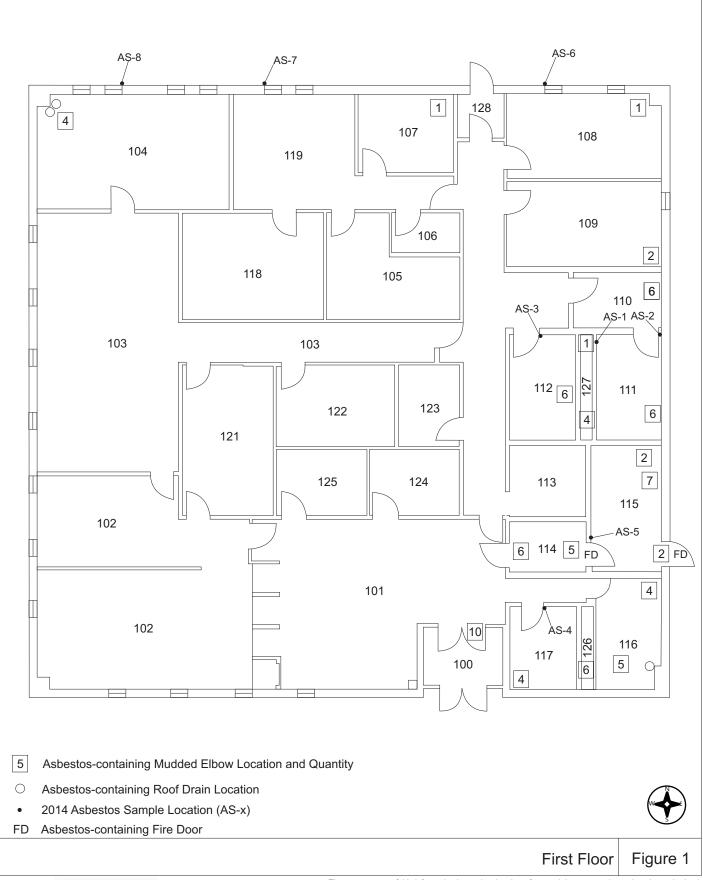
- UDASDAR, 2014. Utah Administrative Code, R307 Environmental Quality, Air Quality, R#-801, Utah Asbestos Rule, September 2014.
- EPA, 2011. "Title 40 Code of Federal Regulations 763 Asbestos," United States Environmental Protection Agency, July 2011.
- IHI, (2011). "Asbestos Re-Inspection Report, IRS Building," IHI, Dated November 17, 2011.



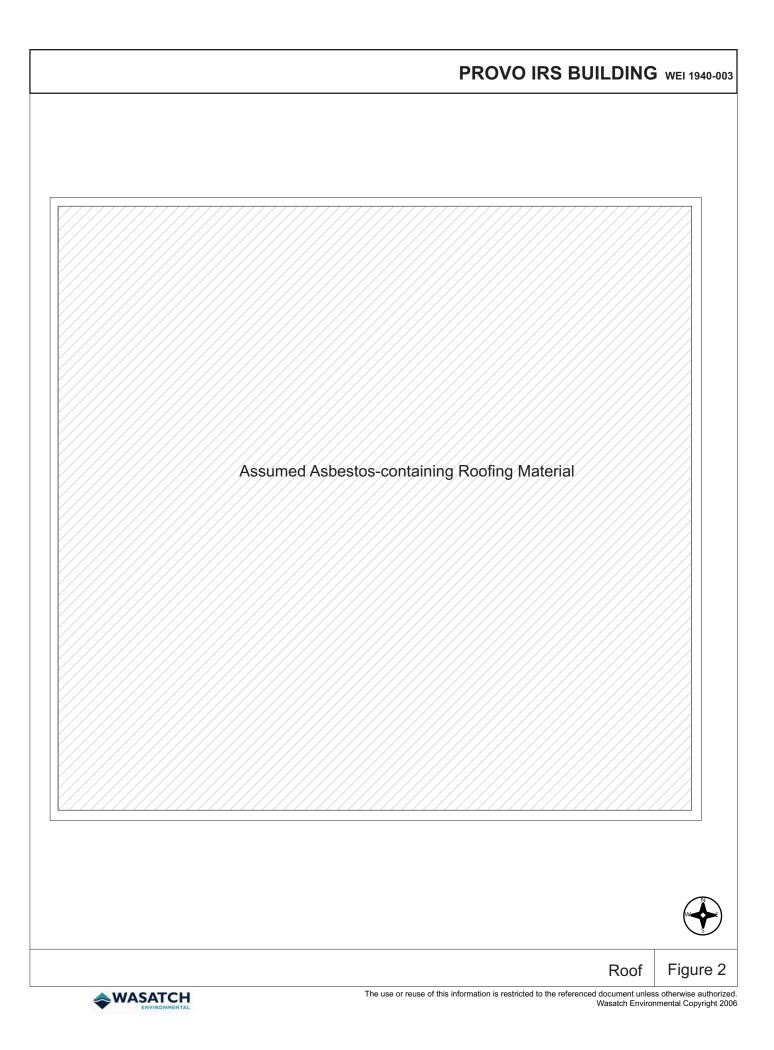
# Appendix A – Figures

Figure 1 – First Floor Plan with ACM Locations Figure 2 – Roof Plan with ACM Locations

### PROVO IRS BUILDING WEI 1940-003



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# Appendix B – Tables

- Table B-I Confirmed Asbestos-Containing Materials and Recommended Response Actions
- Table B-2 Materials Confirmed Not to Contain Asbestos
- Table B-3 Bulk Sample Analysis Results



Table B-I           Summary of Confirmed Asbestos-Containing Materials and Recommended Response Actions				
Material Description	Material Number and Additional Comments	Lab Results *	Recommended Response Action	
<b>Roofing Materials</b>	MI.I – Asphaltic built-up roof	Assumed	O&M	
Transite	M4.I – Transite panels	M4.1 – Transite panels Assumed		
Fire Door Insulation	M9.1 – Fire door insulation	M9.1 – Fire door insulation Assumed		
Other	MI6.3 – Ceramic tile adhesive Assumed		O&M	
Pipe Joint Insulation	T2.I – Mudded elbow	2-4% Chrysotile O&I		
Pipe Joint Insulation	T2.2 – Mudded elbow on roof drain	Assumed	O&M	

Notes: See Table C removal priority I listings for specific materials for immediate removal or repair.

% Percent

O&M Operations and Management

\* Documentation from the lab concerning bulk sample results collected in the previous survey were not included in the previous survey report but are referenced in this AHERA visual survey re-inspection report. Pinyon recommends performing a full AHERA Asbestos Inspection to confirm lab results from the previous survey report. Pinyon did collect bulk samples of new materials not identified in the previous survey report and documentation of those lab results are included in this report.

Material	Material Number and Additional	Asbestos	
Description	Comments	Lab Results *	
Floor Tile	F2.1 –12"x12" gray speckled vinyl floor tile	ND	
Floor Tile	F2.2 - 12"x12" tan mottled	ND	
Floor Tile	F2.3 - 12"x12" red, white and blue splotches	ND	
Mastic Under Floor Tile	F5.4 - Remnant mastic - black	ND	
Mastic Under Carpet	F5.2 - tan/yellow	ND	
Baseboard/Mastic	M12.3 - dark brown with white mastic	ND	
Baseboard/Mastic	MI2.4 - tan with yellow mastic	ND	
Other	MI6.2 - Pipe sealant - white	ND	
Ceiling Panel	M6.1 - two square look	ND	
Other	MI6.4 – interior block wall filler	ND	
Other	MI6.4 – exterior block wall filler	ND	

ND Non Detect

Pinyon

\* Documentation from the lab concerning bulk sample results collected in the previous survey were not included in the previous survey report but are referenced in this AHERA visual survey re-inspection report. Pinyon recommends performing a full AHERA Asbestos Inspection to confirm lab results from the previous survey report. Pinyon did collect bulk samples of new materials not identified in the previous survey report and documentation of those lab results are included in this report.



Table B-3           Bulk Sample Analysis Results and Assumed Materials				
Sample Number	Material Description	Sample Location (Room No.)	Lab Results *	
FT1-24 (2004)	F2.1 – Floor Tile -12"x12" gray speckled vinyl floor tile	100		
FT2-27 (2004)	F2.2 – Floor Tile - 12"x12" tan mottled	106	ND	
UT0039ZZ-02 (2007) FT2-28 (2004)	F2.2 – Floor Tile - 12"x12" tan mottled	123	ND	
F2.3 (2011) UT0039ZZ-01 (2007) FT1-29 (2004)	F2.3 - Floor Tile - 12"x12" red, white and blue splotches	128	ND	
RMI-26 (2004)	F5.4 - Remnant mastic - black	107	ND	
F5.2	F5.2 – Mastic under carpet - tan/yellow	120	ND	
None	MI.I – Asphaltic built-up roof	Roof	Assumed	
WC3-31 (2004)	M10.1 – Sink undercoating	109	Point Count 0.8%	
WCI-15	MI2.3 – Baseboard and mastic - dark brown with white mastic	101	ND	
WC1-16 (2004)	MI2.3 – Baseboard and mastic - dark brown with white mastic	123	ND	
WC2-21 (2004)	M12.4 – Baseboard and mastic - tan with yellow mastic	116	ND	
WC3-23 (2004)	MI2.1 - Baseboard and mastic-gray with yellow/brown mastic	100	Point Count 0.2%	
CTA-33	MI6.3 – Other - Ceramic tile adhesive	112	ND	
PSI-20 (2004)	MI6.2 - Pipe sealant - white	115	ND	
PSI-25 (2004)	MI6.2 - Pipe sealant - white	104	ND	
JC1-07 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	108	2-4% Chrysotile in joint compound	
JC1-08 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	120	I-2% Chrysotile in joint compound	
JC2-13 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	123	ND	
UT0039ZZ-03 (2007) JC1-32 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	113	2% Chrysotile in joint compound	



Table B-3           Bulk Sample Analysis Results and Assumed Materials				
Sample Number	Material Description	Sample Location (Room No.)	Lab Results *	
UT0039ZZ-04 (2007) WB2- 09, 10 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	101		
WBI-04 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	114	I-2% Chrysotile in joint compound	
WBI-05 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	115	I-2% Chrysotile in joint compound	
WBI-06 (2004)	M3.1 – Wallboard system M16.1 - Other - joint compound	128	I-2% Chrysotile in joint compound	
WB2-11 (2004)	M3.I – Wallboard system M16.I - Other - joint compound	107	ND	
CTI-0I (2004)	M6.I- Ceiling panel - two square look	101	ND	
CTI-02 (2004)	M6.1- Ceiling panel - two square look	104	ND	
CTI-03 (2004)	M6.1- Ceiling panel - two square look	120	ND	
None	M9.1 – Fire door insulation	115	Assumed	
AS-I	MI6.4 – Other - interior block wall filler	111	ND	
AS-2	MI6.4 – Other - interior block wall filler	111	ND	
AS-3	MI6.4 – Other - interior block wall filler	112	ND	
AS-4	MI6.4 – Other - interior block wall filler	117	ND	
AS-5	MI6.4 – Other - interior block wall filler	115	ND	
AS-6	MI6.4 – Other - exterior block wall filler	115	ND	
AS-7	MI6.4 – Other - exterior block wall filler	115	ND	
AS-8	MI6.4 – Other - exterior block wall filler	115	ND	
TSII-17 (2004)	T2.1 – Pipe joint insulation - Mudded elbow	114	2-4% Chrysotile	
TSII-18, 19 (2004)	T2.1 – Pipe joint insulation - mudded elbow	115	ND	
TSII-22 (2004)	T2.1 – Pipe joint insulation - mudded elbow	126	ND	
None Notes:	T2.2 – Pipe joint insulation - mudded elbow on roof drain	116	Assumed	

Notes:

ND Non Detect

% Percent



\* Documentation from the lab concerning bulk sample results collected in the previous survey were not included in the previous survey report but are referenced in this AHERA visual survey re-inspection report. Pinyon recommends performing a full AHERA Asbestos Inspection to confirm lab results from the previous survey report. Pinyon did collect bulk samples of new materials not identified in the previous survey report and documentation of those lab results are included in this report.



Appendix C – Laboratory Analysis Report and Chain of Custody



Project: 1940-003 IRS-PROVO

Attn: Audra Heinzel Wasatch Environmental, Inc. 2410 West California Avenue Salt Lake Cty, UT 84104	Phone: Fax: Received: Analysis Date: Collected:	(801) 972-8400 (801) 972-8459 08/20/14 9:00 AM 8/26/2014
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### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

	Description Appe		Non-Asbestos		Asbestos
Sample		Appearance	% Fibrous	% Non-Fibrous	% Type
AS-1 Paint	111	White		75% Matrix	None Detected
091413187-0001		Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-2 Paint	111	White		75% Matrix	None Detected
091413187-0002		Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-3 Paint	112	White		75% Matrix	None Detected
091413187-0003		Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-4 Paint	117	White		75% Matrix	None Detected
091413187-0004		Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-5 Paint	115	White		75% Matrix	None Detected
091413187-0005		Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-6 Paint	NW EXTERIOR	Brown		75% Matrix	None Detected
091413187-0006	WALL	Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-7 Paint	N EXTERIOR	Brown		75% Matrix	None Detected
091413187-0007	WALL	Non-Fibrous Homogeneous		25% Non-fibrous (other)	
AS-8 Paint	NE EXTERIOR	Brown		75% Matrix	None Detected
091413187-0008	WALL	Non-Fibrous Homogeneous		25% Non-fibrous (other)	

Analyst(s)

Nonette Patron (8)

Derrick Tanner, Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported 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. 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. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1% Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from 08/26/2014 17:24:51

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Appendix D - Photographs



Photo 1. Typical asbestos-containing mudded elbow



Photo 2. Typical asbestos-containing mudded roof drain



# Appendix E – Abatement Documents

No abatement records for this facility were available at the time of the current re-inspection.



# Appendix F – General Inspection Information

Asbestos Overview Sample Collection Requirements Materials Category List Glossary



## Asbestos Overview

Asbestos is a trade name for a group of fibrous naturally occurring minerals which was used widely in building materials because of its ability to bind, resist chemicals, insulate, and fireproof. Exposure to elevated levels of asbestos fibers has been documented to cause a variety of diseases including asbestosis and cancer. Consequently, the application, removal, and disposal of asbestos-containing materials is regulated by several agencies.

One definition for asbestos-containing building materials (ACBM), found in Environmental Protection Agency (EPA) regulations, (40 CFR, Part 763 - Asbestos Model Accreditation Plan and Section 202, Toxic Substance Control Act) is as follows:

• Friable asbestos-containing material containing more than one percent asbestos, which has been applied on ceilings, walls, structural members, piping, ductwork, or any other part of a building, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. The term includes non-friable asbestos-containing materials after it becomes damaged, by any means, such that when dry, it may be crumbled, pulverized, or reduced to powder by hand-pressure. This definition also includes flooring materials.

Another definition, found in Occupational Safety and Health Administration (OSHA) regulations, (29 CFR Parts 1910 and 1926) is slightly different as follows:

• Asbestos-containing materials are defined as being any material which contains more than one percent asbestos and also defines certain high risk materials, which are presumed to contain asbestos, as Presumed Asbestos-containing Materials (PACM). The PACM designation applies to thermal system insulation, sprayed on or trawled on surfacing material and debris where such material is present. The PACM terminology was added to ensure compliance with the hazard communication provisions of the laws and specifically for buildings constructed prior to 1981. Non friable materials (floor tile, mastic, vinyl sheet flooring etc.) are assumed asbestos materials and have no cutoff date. Debris located in the vicinity of friable TSI or surfacing is assumed ACM with no cutoff date.



## Sample Collection Requirements

#### Friable Surfacing Material

- 1) At least three bulk samples from each homogeneous material that is 1,000 square feet or less.
  - 2) At least five bulk samples from each homogeneous material that is greater than 1,000 square feet but less than or equal to 5,000 square feet.
  - 3) At least seven bulk samples from each homogeneous material that is greater than 5,000 square feet.

#### Thermal System Insulation

- 1) In a randomly distributed manner, at least three bulk samples from each homogeneous material of thermal system insulation that is not assumed to contain asbestos.
- 2) At least one bulk sample from each homogeneous material of patched thermal system insulation that was not assumed to be asbestos-containing building material (ACBM).
- 3) In a manner sufficient to determine whether the material was ACBM or not ACBM, (generally three samples), bulk samples from each insulated mechanical system that was not assumed to be ACBM where cement or plaster was used on fittings such as tees, elbows, or valves.
- 4) Bulk samples were not collected from any homogeneous material where the inspector determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-asbestos-containing building material.

#### Miscellaneous Materials

 In a manner sufficient to determine whether a material is ACBM or not, three bulk samples were collected from each area of homogeneous friable miscellaneous material that was not assumed to be ACBM.

#### Non-friable suspected ACBM

1) If any non-friable suspect homogeneous ACBM was not assumed to be ACBM, then in a manner sufficient to determine whether the material is ACBM or not, bulk samples were collected from the homogeneous material.

#### Flooring

1) In a manner sufficient to determine whether a material is ACBM or not, three bulk samples were collected from each area of homogeneous flooring material that was not assumed to be ACBM.



## **Material Category List**

#### **THERMAL SYSTEM INSULATION (T.S.I.)**

- TI Gasket Materials
- T2 Pipe Joint Insulation
- T3 Straight Pipe Insulation
- T4 HVAC Connector Material (adjoining air ducts)
- T5 Tank Insulation
- T6 Boiler Insulation
- T7 Boiler Breaching / Ductwork / Firebrick
- T8 Duct Insulation
- T9 Patching Material

#### SURFACING MATERIALS (SPRAY-ON)

- SI Ceilings and Beams
- S2 Spray-on Fireproofing

#### **MISCELLANEOUS MATERIALS**

- MI Roofing Materials (only sample without damage to the roofing material)
- M2 Exterior Siding Material
- M3 Wallboard / Taping Material
- M4 Transite (cooling tower on roof, soffits, pipes, etc.)
- M5 Building Insulation
- M6 Ceiling Tiles/Panels
- M7 Plaster
- M8 Caulking
- M9 Fire Door Insulation (assumed to be ACM if fire doors are present)
- MI0 Undercoating/Stainless Steel Sinks/etc.
- MII Electrical Insulation
- MI2 Baseboard/Mastic
- MI3 Tile Debris
- MI4 Metalbestos Chimney
- MI5 Stucco
- MI6 Other

#### **FLOOR COVERING**

- FI Linoleum (seamless floor covering)
- F2 12" x 12" Floor Tile
- F3 9" x 9" Floor Tile
- F4 I 2" x 24" Floor Plank
- F5 Mastic under Floor Tile / Seamless / Ceiling Tiles / Carpet / Plank-Tile



# Glossary

#### ASBESTOS

A generic name given to a number of naturally occurring silicates that poses a unique crystalline structure. Incombustible in air, and separable into fibers. Asbestos includes the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, actinolite and tremolite.

#### ACBM

Asbestos Containing Building Material. A term that encompasses surfacing, thermal system, and miscellaneous asbestos-containing material in or on interior/exterior parts of a building. This definition also includes exterior hallways, connecting buildings, porticos, and mechanical system insulation.

#### ACM

Asbestos-Containing Material. Any material with more than one percent (1%) asbestos content.

#### BULK SAMPLE

A piece of suspected asbestos-containing building material that collected for analysis to determine asbestos content.

#### FIBER RELEASE

Process by which dust is given off from asbestos materials and becomes airborne.

#### FRIABLE

Material which can be crumbled, pulverized, or reduced to powder when dry, by moderate hand pressure.

#### FUNCTIONAL SPACE/AREA

Distinct units within a building such as a room, a group of rooms, or a homogeneous area - this includes crawl spaces and areas above a drop ceiling.

#### HVAC

Heating, Ventilating, and Air Conditioning Systems. The system of pipes, ducts, and equipment (air conditioners, chillers, heaters, boilers, pumps, fans) used to heat, cool, move, and filter air in a building.

#### HOMOGENEOUS AREA

An area which appears similar throughout in terms of color, texture, and date of material application.

#### **INACCESSIBLE AREA**

Inaccessible areas are those which cannot be inspected due to physical barriers. Buildings may contain areas that are intrinsically inaccessible. These include gaps and spaces in walls, areas above fixed ceilings and below floors, enclosed boiler breechings, and ducts. Some buildings contain other inaccessible areas, such as very small pipe tunnels, sealed crawlspaces, unsafe attics, encased boilers, etc.

#### NON-FRIABLE

Material which cannot be crumbled or pulverized by hand pressure.

PACM Presumed Asbestos Containing Material.

PIPE JOINT The elbow, valve, connector, reduction or pipe hanger.



#### PLENUM

A space designed to transport air in a building. Commonly found below ground level and in the space between a dropped ceiling and the floor above it.

#### PLM

Polarized Light Microscopy. An accepted method for analyzing bulk ACBM samples.

#### MATERIAL TYPE

Suspected Asbestos-Containing Building Materials (SACBM) are materials identified for sampling which may or may not be regulated ACBM.

#### USEPA

United States Environmental Protection Agency. The Federal agency governing general population and environmental problems. In the case of ACM in buildings, the USEPA deals with regulations and their guidelines for application, removal and disposal of ACBM in building structures.



Appendix G – Inspector Certificates



UNIVERSITY OF UTAH | Rocky Mountain Center for SCHOOL OF MEDICINE | Occupational & Environmental Health

> Department of Family & Preventive Medicine 391 Chipeta Way, Suite C Salt Lake City UT 84108 Phone: (801) 581-4055 Fax: (801) 585-5275

THIS CERTIFIES THAT

# Audra Heinzel

HAS COMPLETED THE REQUISITE TRAINING FOR ASBESTOS ACCREDITATION UNDER TSCA TITLE II

ATTENDED AN ANNUAL REFRESHER COURSE IN

PRACTICES AND PROCEDURES IN ASBESTOS ABATEMENT

# **Asbestos Inspector Refresher**

DATE:August 1, 2014NUMBER:140545EXPIRES:August 1, 2015CREDITS:0.40 CEUs / 1.34 ABIH CM Points

,dll

Connie Crandall, MBA, MA Continuing Education Director



State of Utah GARY R. HERBERT Governor

SPENCER J. COX Lieutenant Governor

August 5, 2014

Audra Heinzel Wasatch Environmental, Inc. 2410 West California Avenue Salt Lake City, UT 84104

Dear Ms. Heinzel:

Re: Utah Asbestos Program Individual Certification Card

Department of

Environmental Quality

Amanda Smith Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird

Director

The Utah Division of Air Quality (DAQ) has reviewed your Utah Asbestos Program Certification Application for Individuals and we are pleased to inform you that your application has been approved. Your new asbestos program individual certification card is enclosed with this letter and this card is the sole method of individual certification documentation that you will receive from the DAQ.

Please check the information on your asbestos program certification card carefully. Please confirm that the photograph, name, and certification discipline(s) are correct. Also, please remember to keep your current asbestos program certification card with you at all times when you are performing regulated asbestos work activities.

If you have any questions regarding this letter or the enclosed asbestos program certification card, please contact Lisa Gelino-Titcomb at (801) 536-4007 or at lgelino@utah.gov.

Sincerely,

Robert W. Ford, Manager Air Toxics, Lead-Based Paint, and Asbestos Section

RWF:bt LW

195 North 1950 West, 4<sup>th</sup> Floor • Salt Lake City, UT Mailing Address: P.O. Box 144820 • Salt Lake City, UT 84114-4820 Telephone (801) 536-4000 • Fax (801) 536-4099 • T.D.D. (801) 536-4414 *www.deg.utah.gov* Printed on 100% recycled paper

## Utah Asbestos Certification Audra L. Heinzel ASB-3952

Inspector (Exp. 08/01/15)

Director, Utah Division of Air Quality

DAQA-001-14