LIMITED ASBESTOS SURVEY REPORT

(prior to sprinkler system installation)

Harris County Administration Building with Basement 1001 Preston Houston, Texas 77002

Project Number: B-213011

PREPARED FOR:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

PREPARED BY:

Bay Environmental, Inc. 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

January 28, 2013

A Limited Asbestos Survey was conducted on January 16, 2013 by representatives of Bay Environmental, Inc. of the Harris County Administration Nine Story Building with basement located at 1001 Preston in Houston, Texas 77002.

The purpose of this asbestos survey was to identify Asbestos Containing Building Materials (ACBM) used in the construction or past renovations of specific areas of the building that may be affected by the planned installation of a building fire sprinkler system and prepare a report documenting the findings in compliance with the Texas Asbestos Health Protection Rules (TAPHR) 295.34© and 40 CFR 61.145. It should be noted that this was not a comprehensive asbestos inspection of the building and only areas above ceilings and rooms that may be affected by the sprinkler system installation were evaluated and tested.

The survey included and was limited to inspecting above ceilings, walls scheduled for penetration and mechanical rooms scheduled for piping tie ins in the existing nine story plus basement office building presently occupied by the Harris County. Suspect asbestos containing materials observed consisted of suspended acoustical ceiling tiles, wallboard with float compound and texture, suspended acoustical ceiling tiles and spray applied fire proofing insulations.

The inspection was conducted by Douglas C. Beckner, TDSHS Licensed Asbestos Consultant #10-5395 and Mark Wev, TDSHS Licensed Asbestos Inspector #60-2874. Forty-nine (49) bulk material samples were collected and submitted by appropriate Chain of Custody for analysis by Polarized Light Microscopy (PLM) to Environmental Analytical Services, LLC, a licensed laboratory located at 13201 Northwest Freeway, Suite 503 in Houston, Texas 77040, TDSHS Licensed # 30-0373 (license attached). Samples were analyzed by EPA method 600/R-93/116 July 1993 for determination of asbestos in bulk samples, with percentage compositions based on approximate area compositions viewed under a microscope.

As a result of this inspection, the following asbestos containing materials were identified associated with Harris County Administration Nine Story Building with basement located at 1001 Preston in Houston, Texas 77002:

- White mastic on foil duct insulation above ceilings
- Beige mastic on domestic water pipe insulations above ceilings

A listing of samples collected with location and results of analytical analysis are summarized below (analysis attached). Greater than 1% asbestos is presently defined by the EPA as asbestos containing.

Sample No.	Location/Type of Material	Results
01/	2' x 2' suspended acoustical ceiling tile with v. course texture / 9 th floor elevator lobby	None Detected
02/	White mastic on foil ductwork insulation / 9 th floor elevator lobby	5% Chrysotile

03/	Domestic water pipe insulation (beige mastic on white paper wrap over fiberglass) / 9 th floor elevator lobby	5% Chrysotile
	Note: Pipe fittings were found to be plastic	
04/	Wallboard with float compound above suspended ceiling tile / 9 th floor northwest hallway	None Detected
05/	2' x 2' suspended acoustical ceiling tile with irregular fissures / 8 th floor elevator lobby	None Detected
06/	Wallboard with float compound above suspended ceiling tile / 8 th floor southwest hallway	None Detected
07/	White mastic on foil ductwork / 8 th floor southwest hallway	5% Chrysotile
08/	Red fire stop putty / 8 th floor southeast mechanical room	None Detected
09/	2' x 2' suspended acoustical ceiling tile with v. course texture / 7 th floor elevator lobby	None Detected
10/	Wallboard with float compound above suspended ceiling tile / 7 th floor elevator lobby	None Detected
11/	Beige mastic on white paper wrap / 7 th floor south hallway	None Detected
12/	White mastic on foil ductwork / 7 th floor northwest hallway	5% Chrysotile
13/	2' x 2' suspended acoustical ceiling tile with v. course texture / 6 th floor northwest hallway	None Detected
14/	White mastic on foil ductwork / 6 th floor northwest hallway	5% Chrysotile
15/	12" x 12" affixed ceiling tile with heavy texture / 6th floor west hallway	None Detected
16/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 6 th floor southwest hallway	None Detected
17/	Wallboard with float compound above suspended ceiling tile / 6 th floor south central mechanical room	None Detected

18/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 5 th floor elevator lobby	None Detected
19/	2' x 2' suspended acoustical ceiling tile with fine fissures / 5 th floor north central reception	None Detected
20/	White mastic on foil ductwork / 5 th floor north central reception	None Detected
21/	12" x 12" affixed ceiling tile with heavy texture / 5 th floor northeast hallway	None Detected
22/	Wallboard with float compound above suspended ceiling tile / 5 th floor south central mechanical room	None Detected
23/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 4 th floor elevator lobby	None Detected
24/	12" x 12" affixed ceiling tile with heavy texture / 4th floor elevator lobby	None Detected
25/	Wallboard with float compound above suspended ceiling tile / 4 th floor south central mechanical room	None Detected
26/	2' x 2' suspended acoustical ceiling tile with fine fissures / 4 th floor southeast corner office	None Detected
27/	Gray mastic on metal ductwork / 4 th floor southeast corner office	None Detected
28/	2' x 2' suspended acoustical ceiling tile with four square pattern / 3 rd floor elevator lobby	None Detected
29/	White mastic on foil ductwork / 3 rd floor elevator lobby	None Detected
30/	Wallboard with float compound above suspended ceiling tile / 3 rd floor south central mechanical room	None Detected
31/	12" x 12" affixed ceiling tile with heavy texture / 3 rd floor southeast tax office	None Detected
32/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 3 rd floor southeast tax office	None Detected

33/	2' x 2' suspended acoustical ceiling tile with fine fissures / 3 rd floor private elevator lobby	None Detected
34/	2' x 2' suspended acoustical ceiling tile with four square pattern / 2 nd floor elevator lobby	None Detected
35/	Wallboard with float compound above suspended ceiling tile / 2 nd floor south central mechanical room	None Detected
36/	2' x 2' suspended acoustical ceiling tile with fine fissures / 2 nd floor southwest tax office	None Detected
37/	2' x 2' suspended acoustical ceiling tile with smooth finish / 2 nd floor northeast computer room	None Detected
38/	12" x 12" affixed ceiling tile with heavy texture / 2 nd floor west central storeroom	None Detected
39/	2' x 2' suspended acoustical ceiling tile with sculpted square finish / 1 st floor elevator lobby	None Detected
40/	2' x 2' suspended acoustical ceiling tile with fine fissures / 1 st floor northwest men's restroom	None Detected
41/	Wallboard with float compound above suspended ceiling tile / 1 st floor northwest stairwell	None Detected
42/	2' x 2' suspended acoustical ceiling tile with fine fissures / basement elevator lobby	None Detected
43/	Large diameter insulated pipe and flange (white wrap over fiberglass / basement elevator lobby	None Detected
44/	Large diameter insulation pipe run (white wrap over fiberglass) / basement elevator lobby	None Detected
45/	2' x 2' suspended acoustical ceiling tile with smooth finish / basement kitchen area	None Detected
46/	2' x 2' suspended acoustical ceiling tile with irregular fissures / basement kitchen pantry	None Detected
47/	Wallboard with float compound above suspended ceiling tile / basement kitchen pantry	None Detected
48/	White mastic on foil ductwork / basement kitchen pantry	None Detected

49/	2' x 2' suspended acoustical ceiling tile with	None Detected
	pinholes and pitts / basement north hallway near	
	tunnel	

Current regulations require removal of asbestos containing materials only when they are found to present a health hazard, be in damaged condition or scheduled to be disturbed in the course of a renovation or demolition. Any removal of asbestos containing materials should be conducted by a Licensed Abatement Contractor and monitored under a separate contract by a Licensed Asbestos Consultant. Notification to the State (Ten Working Days) is required prior to proceeding with any asbestos abatement or demolition project.

The installation of a fire sprinkler system within the building should not be impacted by the identified asbestos containing duct and piping mastics provided no disturbance during installation is allowed or occurs.

The samples were analyzed by layers. Specific layer or component asbestos content is reported in parentheses, when relevant. The asbestos content of layers and components should be considered when establishing policy regarding the bulk material.

The results do not imply product endorsement by NVLAP or any agency of the U.S. Government. Results must not be reproduced except in full. Test report relates only to the samples tested.

Questions regarding this report may be addressed by telephoning **Bay Environmental**, **Inc.** at (713) 729-2533 or by e-mail at <u>doug@bayenv.com</u>.

Douglas C. Beckner

Vice President & Manager of Operations

TDSHS Licensed Consultant #10-5395

Sofre C. The

Bay Environmental, Inc.

Asbestos & Environmental Consultants 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax: (713) 729-2698

LETTER OF TRANSMITTAL

TO: Harris County PID

Engineering Department

Project Mgmt. Office 1001 Preston Avenue, 7th Floor

Houston, Texas 77002

DATE:

December 1, 2014

PROJECT NO: B-214257

PROJECT:

Asbestos Air Monitoring

HC Administration Bldg

HVAC Upgrades 1001 Preston

Houston, Texas 77002

ATTENTION: Bob Faulds

WE ARE PLEASED TO SEND:

[X] Attached

[] Under Separate Cover

[X] Reports

[] Invoice

[] Draft Spec

[] Draft Report

[] Close-out Docs

[] Final Spec

[] Laboratory Result

[] Drawing

[] Lien Releases

QUANTITY	DATED	DESCRIPTION
1 Each	12/01/2014	Asbestos Air Monitoring Report with Design Specifications
1 Each	12/01/2014	Invoice for Consulting Services
		·

WE ARE SENDING THE ABOVE ITEMS:

[X] As Requested

[X] For Your Use/Files

[] For Review / Comment

[X] Other

For Processing

COMMENTS:

Respectfully,

Stephen R. (Randy) Wev

President & Director of Operations

Bay Environmental, Inc.

INVOICE

8839 Knight Road Houston, TX 77054 (713) 729-2533 Fax (713) 729-2698

INVOICE NO:

B11680

DATE:

December 1, 2014

TO:

Harris County Auditor c/o Accounts Payable 1001 Preston, Suite 800 Houston, Texas 77002 SHIP TO:

Project No. B-214257
Asbestos Management
HVAC Upgrades
1001 Preston

Houston, Texas 77002

ATTN: Bob Faulds

SALESPERSON	ALESPERSON P.O. #		SHIPPED VIA	TERMS		
SRW	P239420	12/01/2014	US Mail	Due Upon Receipt		

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1.0 Each	Asbestos Design Documents	\$300.00 / ea.	\$300.00
6.0 Hours	Asbestos Consultant	\$85.00 / hr.	\$510.00
4.0 Hours	Project Management and Air Monitoring (reg.time)	\$60.00 / hr.	\$240.00
54.0 Hours	Project Management and Air Monitoring (OT)	\$80.00 / hr.	\$4,320.00
			,
		·	
Invoiced to Date	: 1 invoice at \$5,370.00 of \$6,570.00 PO Amount	TOTAL:	\$5,370.00

Make all checks payable to Bay Environmental, Inc.

Please write invoice number on all checks.

Should there be any questions concerning this invoice, please call Randy Wev at (713) 729-2533

AIR MONITORING REPORT Spot Abatement of ACM TSI to Facilitate HVAC Upgrades

Harris County Administration Building 1001 Preston Houston, Texas 77002

BAY PROJECT NO. B-214257

PREPARED FOR:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

PREPARED BY:

Bay Environmental, Inc. 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

December 1, 2014

AIR MONITORING REPORT Spot Abatement of ACM TSI to Facilitate HVAC Upgrades

Harris County Administration Building 1001 Preston Houston, Texas 77002

> BAY PROJECT NO. B-214257

PREPARED FOR:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

PREPARED BY:

Bay Environmental, Inc. 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

December 1, 2014

PROJECT SUMMARY

Project Number:

B-214257

Client:

Harris County Engineering Department

1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

Project:

Spot Abatement of ACM TSI to Facilitate HVAC Upgrades

1001 Preston (All floors) Houston, Texas 77002

Abatement

Cherry Environmental, Inc.

Contractor:

4501 Cherry Lane Santa Fe, Texas 77517

Project Date:

November 17, 2014 thru November 21, 2014

Consultant:

Bay Environmental, Inc., TDSHS License # 10-0326

Individual Consultant:

Stephen R. Wev, TDSHS License # 10-5144

On-Site Technician:

Mark Wev, TDSHS License #50-2874

PCM Laboratory:

Bay Environmental, Inc., TDSHS License # 30-0284



> Project Description:

Spot abatement of identified ACM thermal systems insulations to facilitate installation of new HVAC controls for HVAC upgrades within the Harris County Administration Building located at 1001 Preston in Houston, Texas 77002.

A total of 62 locations as identified by HCPID's mechanical contractor were abated using glove bag methods. remaining locations were inspected and found to be either not insulated or insulated with non asbestos containing insulations.

Inspection Date: 11-17-14 Report Date: 11-17-14

Client: Harris County Engineering Dept. Project: Harris County Admin. Building

1001 Preston Avenue, 7th Floor 1001 Preston

Houston, Texas 77002-1893 Houston, Texas 77002

Project No.: B- 214257

Identification: Asbestos Abatement – Air Sampling

Analytical Method: Phase Contrast Microscopy (PCM) Fiber Count by NIOSH Method 7400,

Issue 2, 4th Edition, 8/15/94

A representative of Bay Environmental, Inc. was on-site at 1730 P.M. at the above referenced project on the above Sample/Inspection Date to provide visual inspection and air sampling services during abatement of asbestos containing TSI in the subject location. Air Monitoring was conducted within the regulated work area and adjacent spaces. Work by the abatement contractor (Cherry) on this date consisted of:

- 1. Mobilization of equipment and supplies.
- 2. Pre-cleaning and prepping of the regulated area and glove bags with remote decon.
- 3. Pre-abatement visual inspection of the work area.
- 4. Removal of asbestos containing materials from the regulated area Penthouse, 9th floor and 8th floor: approx. (11) total fittings.
- 5. Transfer of bags of contaminated waste materials (ACWM) to the trailer for disposal.
- 6. Final visual inspection of the regulated area.
- 7. Removal of the regulated area and remote decon.
- 8. Demobilization of equipment and supplies.

The contractor had Five (5) employees on-site on this date. The contractor designated Ramon Ayala as project superintendent and the foreman for this date.

During routine inspection of the contractor's work, no discrepancies were observed and reported to the project superintendent for correction.

Air sampling was conducted throughout the work period. The results of the air sampling are as follows:

Bay

Field No.

Sample Type/Location

Total Volume

Fiber Concentration

(liters)

(fibers/cc)

SEE ATTACHED SHEETS

The Bay representative departed the site at <u>0400</u> A.M.

*This method does not distinguish between fiber types (i.e.: asbestos, cellulose, glass, etc.). Fiber concentrations reported are not necessarily all asbestos fibers.

On-site Technician: Mark Wev, TDH License # 50-1020 & # 70-6147

Consultant: Stephen R. Wev, TDH License #10-5144/ Douglas Beckner, TDH License #10-5395

TDH Licensed Consultant Agency # 10-0326

TDH Licensed PCM Laboratory # 30-0284

Date: 11-17-14 Project No.: <u>B-214257</u>

Material Removed: TSI (Fittings) Amount: (11) E.A.

Time	Description of Events
1730	Arrived at jobsite. Cherry arrived at jobsite. Cherry advised they have Five
	(5) workers present on this date and designated Ramon Ayala as the on-site
	supervisor. Met with Bob Faulds of Harris County and went over scope of
	work and areas of abatement as well as point of contact (FPM Rover) to
	gain access to areas. Bob asked if we had Harris County Contractor badges.
	I advised him we had never been informed that we would need badges to
	conduct the work. He provided the information for acquiring badges and I
· · · · · · · · · · · · · · · · · · ·	advised him we would attempt to correct this.
1800	Workers signed in with Security and mobilized materials to the rooftop
	Penthouse. Advised Bob Faulds we will be working the Penthouse, 9 th and
	8 th floor Mechanical Rooms. We will continue to work our way down thru
	the building and complete the Tunnel areas last.
1830	Cherry commenced prepping of the regulated area and remote decon on the
	Penthouse.
1900	Started Area/OSHA samples.
1930	Cherry commenced abatement of approx. (5) total fittings in the Penthouse.
2030	Checked status of area samples and progress of abatement contractor.
2130	Checked status of area samples and progress of abatement contractor.
2230	Cherry completed abatement of identified fittings in Penthouse. Visually
2200	inspected – passed. Cherry broke for lunch.
2300	Cherry returned from lunch and moved to 9 th floor Mechanical Rooms and
2000	commenced prep.
2330	Cherry commenced abatement of identified fittings on 9 th floor.
0030	Checked status of area samples and progress of abatement contractor.
0130	Cherry completed the abatement of the 9 th flr. Visually inspected – passed.
7200	Cherry moved to the 8 th floor.
0200	Cherry commenced the abatement of the 8 th floor.
0300	Checked status of area samples and progress of the abatement contractor.
0330	Cherry advised they have completed the abatement of the 8 th floor. Visually
	inspected – passed. Cherry removed the regulated area and remote decon.
	Cherry demobilized equipment to trailer which will be picked up at 4AM.
0400	We departed jobsite.

Date: 11-17-14

Client: Harris County Engineering Department

Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u> Date Analyzed: <u>11-18-14</u>

Sample Number	Sample Location	Sample Type	Start Time	Stop Time	Liters Per/Min	Total Minutes	Total Volume Liters	Fiber Counted	Number of Fields	Fibers in Blanks	Detection Limit F/CC	Concent. F/CC
001	AREA SAMPLE (IC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
002	AREA SAMPLE (OC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
	F.B.							0	100		0.000	0.000
	F.B.							0	100		0.000	0.000

Sample Types: PL = Prevalent Level/ Baseline

PR = Prep
AB = Abatement
FC = Final Clearance
RA = Regulated Area

BL = Blank

Sample Locations:

IC = Inside Containment
OC = Outside Containment
HE = HEPA Exhaust
EX = Building Exterior
CR = Decon Clean Room

AR = Area Sample During Removal (Glove Bag or RFCI)

Date: 11-17-14

Client: Cherry Environmental Services, Inc.	Client:
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Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Date Analyzed: <u>11-17-14</u>

Sample Number	Employee Sampled	Social Security No.	Work Task	Respiratory Protection	Time Start	Time Stop	Total Time	Flow Rate	Total Vol.	No. of Fibers	No. of Fields	Concent. F/CC
PS001	LUIS VASQUEZ	XXX-XX-2544	AB	1/2	1900	1930	30	2	60	<5.5	100	0.045
PS002	LUIS VASQUEZ	XXX-XX-2544	AB	1/2	1930	0330	480	2	960	< 5.5	100	0.003
	F.B.									0	100	0.000

	Employee	8 Hr. Time Weighted Average F/CC	Employee	8 Hr. Time Weighted Average F/CC
	·			

Inspection Date: 11-18-14 Report Date: 11-18-14

Client: Harris County Engineering Dept. Project: Harris County Admin. Building

1001 Preston Avenue, 7th Floor 1001 Preston

Houston, Texas 77002-1893 Houston, Texas 77002

Project No.: B- 214257

Identification: Asbestos Abatement – Air Sampling

Analytical Method: Phase Contrast Microscopy (PCM) Fiber Count by NIOSH Method 7400,

Issue 2, 4th Edition, 8/15/94

A representative of Bay Environmental, Inc. was on-site at <u>1730 P.M.</u> at the above referenced project on the above Sample/Inspection Date to provide visual inspection and air sampling services during abatement of asbestos containing TSI in the subject location. Air Monitoring was conducted within the regulated work area and adjacent spaces. Work by the abatement contractor (<u>Cherry</u>) on this date consisted of:

- 1. Mobilization of equipment and supplies.
- 2. Pre-cleaning and prepping of the regulated area and glove bags with remote decon.
- 3. Pre-abatement visual inspection of the work area.
- 4. Removal of asbestos containing materials from the regulated area -7^{th} , 6^{th} and 5^{th} floors: approx. (12) total fittings.
- 5. Transfer of bags of contaminated waste materials (ACWM) to the trailer for disposal.
- 6. Final visual inspection of the regulated area.
- 7. Removal of the regulated area and remote decon.
- 8. Demobilization of equipment and supplies.

The contractor had <u>Five (5)</u> employees on-site on this date. The contractor designated <u>Ramon Ayala</u> as project superintendent and the foreman for this date.

During routine inspection of the contractor's work, no discrepancies were observed and reported to the project superintendent for correction.

Air sampling was conducted throughout the work period. The results of the air sampling are as follows:

Bay

Field No.

Sample Type/Location

Total Volume

Fiber Concentration

(liters)

(fibers/cc)

SEE ATTACHED SHEETS

The Bay representative departed the site at <u>0400</u> A.M.

*This method does not distinguish between fiber types (i.e.: asbestos, cellulose, glass, etc.). Fiber concentrations reported are not necessarily all asbestos fibers.

On-site Technician: Mark Wev, TDH License # 50-1020 & # 70-6147

Consultant: Stephen R. Wev, TDH License #10-5144/ Douglas Beckner, TDH License #10-5395

TDH Licensed Consultant Agency # 10-0326 TDH Licensed PCM Laboratory # 30-0284 Date: <u>11-18-14</u> Project No.: <u>B-214257</u>

Material Removed: TSI (Fittings) Amount: (12) E.A.

Time	Description of Events
1730	Arrived at jobsite. Cherry arrived at jobsite. Cherry advised they have Five
	(5) workers present on this date and designated Ramon Ayala as the on-site
	supervisor. Met with Bob Faulds of Harris County and the FPM Rover and
	advised that we would be working on floors 7, 6 and 5 this evening. Rover
	went to open areas for BAS (Unify) and will then open areas for us. Cherry
	began mobilizing materials and equipment to the 7 th floor.
1800	FPM Rover opened the Mechanical Rooms on floors 7-5. Cherry began
	prepping of the regulated area and glove nags on the 7 th floor. Cherry began
· · · · · · · · · · · · · · · · · · ·	prepping the remote decon.
1840	Bob Faulds departed jobsite.
1900	Cherry commenced abatement on 7 th floor. Started Area/OSHA samples.
2000	Checked status of area samples and progress of the abatement contractor.
2100	Checked status of area samples and progress of abatement contractor.
2130	Cherry advised they have completed the abatement of 7 th floor Mechanical
	Rooms. Visually inspected – passed. Cherry broke for lunch.
2200	Cherry returned from lunch and moved down to 6 th floor. Prepped Glove
	bags and regulated area.
2230	Cherry commenced abatement of the 6 th floor Mechanical Rooms.
2330	Checked status of area samples and progress of the abatement contractor.
0030	Checked status of area samples and progress of abatement contractor.
0100	Cherry advised they have completed the abatement of the 6 th floor Mech.
	Rooms. Visually inspected – passed. Cherry moved to the 5 th floor.
0130	Cherry prepped regulated area and glove bags and commenced abatement
<u> </u>	of the 5 th floor Mechanical Rooms.
0230	Checked status of area samples and progress of the abatement contractor.
0330	Cherry advised they have completed the abatement of the 5 th floor Mech.
0000	Rooms. Visually inspected – passed. Stopped Area/OSHA samples. Cherry
	removed the regulated area and remote decon and demobilized equipment
	to trailer.
0400	We departed jobsite.
0400	We deputed jobsic.

Date: 11-18-14

Client: Harris County Engineering Department

Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Date Analyzed: 11-19-14

Sample Number	Sample Location	Sample Type	Start Time	Stop Time	Liters Per/Min	Total Minutes	Total Volume Liters	Fiber Counted	Number of Fields	Fibers in Blanks	Detection Limit F/CC	Concent. F/CC
003	AREA SAMPLE (IC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
004	AREA SAMPLE (OC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
	F.B.							0	100		0.000	0.000
	F.B.							0	100		0.000	0.000

Sample Types:

PL = Prevalent Level/ Baseline

PR = Prep

AB = Abatement FC = Final Clearance RA = Regulated Area

BL = Blank

Sample Locations:

IC = Inside Containment

OC = Outside Containment HE = HEPA Exhaust

EX = Building Exterior

CR = Decon Clean Room

AR = Area Sample During Removal (Glove Bag or RFCI)

Date: 11-18-14

Analyst: M.A.W.

Client:	Cherry Environmental Services, Inc.
---------	-------------------------------------

Project: Harris County Administration Building - 1001 Preston

Project No.: <u>B-214257</u> Date Analyzed: <u>11-19-14</u>

Sample Number	Employee Sampled	Social Security No.	Work Task	Respiratory Protection	Time Start	Time Stop	Total Time	Flow Rate	Total Vol.	No. of Fibers	No. of Fields	Concent. F/CC
PS003	JOSE MORALES	XXX-XX-0132	AB	1/2	1900	1930	30	2	60	< 5.5	100	0.045
PS004	JOSE MORALES	XXX-XX-0132	AB	1/2	1930	0330	480	2	960	< 5.5	100	0.003
	F.B.									0	100	0.000

Employee	8 Hr. Time Weighted Average F/CC	Employee	8 Hr. Time Weighted Average F/CC

Inspection Date: 11-19-14 Report Date: 11-19-14

Client: Harris County Engineering Dept.

1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893 Project: Harris County Admin. Building

1001 Preston

Houston, Texas 77002

Project No.: B-2

B-214257

Identification:

Asbestos Abatement – Air Sampling

Analytical Method: Phase Contrast Microscopy (PCM) Fiber Count by NIOSH Method 7400,

Issue 2, 4th Edition, 8/15/94

A representative of Bay Environmental, Inc. was on-site at 1730 P.M. at the above referenced project on the above Sample/Inspection Date to provide visual inspection and air sampling services during abatement of asbestos containing TSI in the subject location. Air Monitoring was conducted within the regulated work area and adjacent spaces. Work by the abatement contractor (Cherry) on this date consisted of:

- 1. Mobilization of equipment and supplies.
- 2. Pre-cleaning and prepping of the regulated area and glove bags with remote decon.
- 3. Pre-abatement visual inspection of the work area.
- 4. Removal of asbestos containing materials from the regulated area 4th, 3rd and 2nd floors: approx. (12) total fittings.
- 5. Transfer of bags of contaminated waste materials (ACWM) to the trailer for disposal.
- 6. Final visual inspection of the regulated area.
- 7. Removal of the regulated area and remote decon.
- 8. Demobilization of equipment and supplies.

The contractor had Five (5) employees on-site on this date. The contractor designated Ramon Ayala as project superintendent and the foreman for this date.

During routine inspection of the contractor's work, no discrepancies were observed and reported to the project superintendent for correction.

Air sampling was conducted throughout the work period. The results of the air sampling are as follows:

Bay

Field No.

Sample Type/Location

Total Volume

Fiber Concentration

(liters)

(fibers/cc)

SEE ATTACHED SHEETS

The Bay representative departed the site at 0400 A.M.

*This method does not distinguish between fiber types (i.e.: asbestos, cellulose, glass, etc.). Fiber concentrations reported are not necessarily all asbestos fibers.

On-site Technician: Mark Wev, TDH License # 50-1020 & # 70-6147

Consultant: Stephen R. Wev, TDH License #10-5144/ Douglas Beckner, TDH License #10-5395

TDH Licensed Consultant Agency # 10-0326

TDH Licensed PCM Laboratory # 30-0284

Date: 11-19-14 Project No.: B-214257

Material Removed: TSI (Fittings) Amount: (12) E.A.

Time	Description of Events
1730	Arrived at jobsite. Cherry arrived at jobsite. Cherry advised they have Five
	(5) workers present on this date and designated Ramon Ayala as the on-site
	supervisor. Met with Bob Faulds of Harris County and the FPM Rover and
	advised that we would be working on floors 4, 3 and 2 this evening. Bob
	questioned us as to screws that had been spilled on the Loading Dock and
	that the Judges Office on 9 th floor had been left open. We informed him that
	we do not use screws in abatement and that we completed our work on 9 th
	floor on Monday night. Unify Superintendent ten admitted that they had
	spilled a bucket of screws on the Loading Dock.
1800	Rover opened the Mechanical Rooms on 4th Floor and will open the other
	floors as well. Cherry mobilized equipment to the 4 th floor and commenced
	prepping of the regulated area and glove bags as well as remote decon.
1900	Cherry commenced abatement of the 4 th floor Mechanical Rooms. Started
	Area/OSHA samples.
2100	Checked status of area samples and progress of the abatement contractor.
2200	Rover for Harris County advised he was not able to open the 2 nd floor -
	South Mechanical Room and would have to get it open for us tomorrow.
2300	Cherry completed abatement on the 4 th floor. Visually inspected – passed.
	Moved to 3 rd floor and regulated area.
0000	Commenced abatement of the 3 rd floor.
0100	Checked status of area samples and progress of the abatement contractor.
0200	Completed abatement of the 3 rd floor. Visually inspected – passed. Cherry
	moved to 2 nd floor – North Mechanical Room and commenced abatement.
0330	Cherry completed the abatement of the 2 nd floor – North Mechanical Room.
	Visually inspected – passed. Stopped Area/OSHA samples. Cherry began
	demobililizing equipment to trailer.
0400	We departed jobsite.

Date: 11-19-14

Client: Harris County Engineering Department

Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u> Date Analyzed: <u>11-20-14</u>

Sample Number	Sample Location	Sample Type	Start Time	Stop Time	Liters Per/Min	Total Minutes	Total Volume Liters	Fiber Counted	Number of Fields	Fibers in Blanks	Detection Limit F/CC	Concent. F/CC
005	AREA SAMPLE (IC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
006	AREA SAMPLE (OC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
			· · · · · · · · · · · · · · · · · · ·	***************************************								
	F.B.							0	100		0.000	0.000
	F.B.							0	100		0.000	0.000

Sample Types:

PL = Prevalent Level/ Baseline

PR = Prep

AB = Abatement

FC = Final Clearance

RA = Regulated Area

BL = Blank

Sample Locations:

IC = Inside Containment

OC = Outside Containment

HE = HEPA Exhaust

EX = Building Exterior

CR = Decon Clean Room

AR = Area Sample During Removal (Glove Bag or RFCI)

Date: 11-19-14

Client: 9	Cherry Environmental!	Services, Inc.	
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Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: B-214257

Date Analyzed: 11-20-14

Sample Number	Employee Sampled	Social Security No.	Work Task	Respiratory Protection	Time Start	Time Stop	Total Time	Flow Rate	Total Vol.	No. of Fibers	No. of Fields	Concent. F/CC
PS005	HECTOR RODRIGUEZ	XXX-XX-1903	AB	1/2	1900	1930	30	2	60	< 5.5	100	0.045
PS006	HECTOR RODRIGUEZ	XXX-XX-1903	AB	1/2	1930	0330	480	2	960	< 5.5	100	0.003
	F.B.									0	100	0.000

	Employee	8 Hr. Time Weighted Average F/CC	Employee	8 Hr. Time Weighted Average F/CC

Inspection Date: 11-20-14 Report Date: 11-20-14

Client: Harris County Engineering Dept. Project: Harris County Admin. Building

1001 Preston Avenue, 7th Floor 1001 Preston

Houston, Texas 77002-1893 Houston, Texas 77002

Project No.: B- 214257

Identification: Asbestos Abatement – Air Sampling

Analytical Method: Phase Contrast Microscopy (PCM) Fiber Count by NIOSH Method 7400,

Issue 2, 4th Edition, 8/15/94

A representative of Bay Environmental, Inc. was on-site at 1730 P.M. at the above referenced project on the above Sample/Inspection Date to provide visual inspection and air sampling services during abatement of asbestos containing TSI in the subject location. Air Monitoring was conducted within the regulated work area and adjacent spaces. Work by the abatement contractor (Cherry) on this date consisted of:

- 1. Mobilization of equipment and supplies.
- 2. Pre-cleaning and prepping of the regulated area and glove bags with remote decon.
- 3. Pre-abatement visual inspection of the work area.
- 4. Removal of asbestos containing materials from the regulated area 2nd Floor South Mechanical Room and Basement (B64 Surveyors, Power Room, Loading Dock Mechanical Room, Loading Dock Office): approx. (18) total fittings.
- 5. Transfer of bags of contaminated waste materials (ACWM) to the trailer for disposal.
- 6. Final visual inspection of the regulated area.
- 7. Removal of the regulated area and remote decon.
- 8. Demobilization of equipment and supplies.

The contractor had Five (5) employees on-site on this date. The contractor designated Ramon Ayala as project superintendent and the foreman for this date.

During routine inspection of the contractor's work, no discrepancies were observed and reported to the project superintendent for correction.

Air sampling was conducted throughout the work period. The results of the air sampling are as follows:

Bay

Field No.

Sample Type/Location

Total Volume

Fiber Concentration

(liters)

(fibers/cc)

SEE ATTACHED SHEETS

The Bay representative departed the site at 0400 A.M.

*This method does not distinguish between fiber types (i.e.: asbestos, cellulose, glass, etc.). Fiber concentrations reported are not necessarily all asbestos fibers.

On-site Technician: Mark Wev, TDH License # 50-1020 & # 70-6147

Consultant: Stephen R. Wev, TDH License #10-5144/ Douglas Beckner, TDH License #10-5395

TDH Licensed Consultant Agency # 10-0326

TDH Licensed PCM Laboratory # 30-0284

Date: <u>11-20-14</u> Project No.: <u>B-214257</u>

Material Removed: TSI (Fittings) Amount: (18) E.A.

Time	Description of Events
1730	Arrived at jobsite. Cherry arrived at jobsite. Cherry advised they have Five
	(5) workers present on this date and designated Ramon Ayala as the on-site
	supervisor. Met with Bob Faulds of Harris County and the FPM Rover and
	advised we are working the remaining Mechanical Room on the 2 nd floor
	and the Basement.
1800	Rover opened the 2 nd floor, Did not have the keys to open up the B49 room
	(Purchasing) and said he would return with other keys. Cherry mobilized
	equipment and commenced prepping of the regulated areas and glove bags
	on the 2 nd floor and Basement Power Room. Set up remote decon in the
	Basement.
1900	Cherry advised they are ready to commence abatement. Visually inspected -
	passed. Started Area/OSHA samples.
2000	Checked status of area samples and progress of the abatement contractor.
2100	Checked status of area samples. Cherry advised they have completed the 2 nd
	floor Mech. Room. Visually inspected – passed. We secured the area and
	moved to Basement.
2200	Cherry advised they have completed the abatement of the Basement Power
	Room. Visually inspected – passed. Cherry began prep of the Loading Dock
	Mechanical Room and Office.
2300	Cherry completed prepping the regulated areas and commenced abatement.
	Contacted FPM Rover about Purchasing and he advised he was tied up with
	an odor at the Courthouse Building but would have someone open it next
	date.
0000	Checked status of area samples and progress of the abatement contractor.
0100	Found that the Loading Dock Office has Armaflex (Rubber Non-ACM)
	insulation. Removed regulated area.
0200	Cherry completed the Loading Dock Mechanical Room. Visually inspected
	- passed. Cherry prepped the regulated area for the B64 Surveyors Office
	and commenced abatement.
0330	Cherry completed abatement. Visually inspected – passed. Stopped Area/
	OSHA samples. Cherry demobilized equipment.
0400	We departed jobsite.

Date: 11-20-14

Client: Harris County Engineering Department

Project: Harris County Administration Building - 1001 Preston

Date Analyzed: 11-21-14

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Sample Number	Sample Location	Sample Type	Start Time	Stop Time	Liters Per/Min	Total Minutes	Total Volume Liters	Fiber Counted	Number of Fields	Fibers in Blanks	Detection Limit F/CC	Concent. F/CC
007	AREA SAMPLE (IC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
008	AREA SAMPLE (OC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
	F.B.							0	100		0.000	0.000
	F.B.							0	100		0.000	0.000

Sample Types:

PL = Prevalent Level/ Baseline

PR = Prep
AB = Abatement
FC = Final Clearance
RA = Regulated Area

BL = Blank

Sample Locations:

IC = Inside Containment
OC = Outside Containment
HE = HEBA Enhance

HE = HEPA Exhaust EX = Building Exterior

CR = Decon Clean Room

AR = Area Sample During Removal (Glove Bag or RFCI)

Date: 11-20-14

Client:	Cherry Environmental Services, Inc.
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Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Date Analyzed: 11-21-14

Sample Number	Employee Sampled	Social Security No.	Work Task	Respiratory Protection	Time Start	Time Stop	Total Time	Flow Rate	Total Vol.	No. of Fibers	No. of Fields	Concent. F/CC
PS007	HECTOR RODRIGUEZ	XXX-XX-1903	AB	1/2	1900	1930	30	2	60	< 5.5	100	0.045
PS008	HECTOR RODRIGUEZ	XXX-XX-1903	AB	1/2	1930	0330	480	2	960	< 5.5	100	0.003
	F.B.									0	100	0.000

Employee	8 Hr. Time Weighted Average F/CC	Employee	8 Hr. Time Weighted Average F/CC
		-	

Inspection Date: 11-21-14 Report Date: 11-21-14

Client: Harris County Engineering Dept.

1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893 Project: Harris County Admin. Building

1001 Preston

Houston, Texas 77002

Project No.:

B-214257

Identification:

Asbestos Abatement – Air Sampling

Analytical Method: Phase Contrast Microscopy (PCM) Fiber Count by NIOSH Method 7400,

Issue 2, 4th Edition, 8/15/94

A representative of Bay Environmental, Inc. was on-site at <u>1730 P.M.</u> at the above referenced project on the above Sample/Inspection Date to provide visual inspection and air sampling services during abatement of asbestos containing TSI in the subject location. Air Monitoring was conducted within the regulated work area and adjacent spaces. Work by the abatement contractor (<u>Cherry</u>) on this date consisted of:

- 1. Mobilization of equipment and supplies.
- 2. Pre-cleaning and prepping of the regulated area and glove bags with remote decon.
- 3. Pre-abatement visual inspection of the work area.
- 4. Removal of asbestos containing materials from the regulated area Basement (B49 Purchasing and Tunnel Mechanical Rooms/Chases: approx. (9) total fittings.
- 5. Transfer of bags of contaminated waste materials (ACWM) to the trailer for disposal.
- 6. Final visual inspection of the regulated area.
- 7. Removal of the regulated area and remote decon.
- 8. Demobilization of equipment and supplies.

NOTE: Harris County was never able to provide access to the B49 Purchasing area during the scheduled abatement. We were requested initially to return Monday night, however Harris County FPM was able to access the area on Monday and visually confirmed that the insulation was Non-ACM Armaflex rubber.

The contractor had <u>Five (5)</u> employees on-site on this date. The contractor designated <u>Ramon Ayala</u> as project superintendent and the foreman for this date.

During routine inspection of the contractor's work, no discrepancies were observed and reported to the project superintendent for correction.

Air sampling was conducted throughout the work period. The results of the air sampling are as follows:

Bay

Field No. Sample Type/Location

Total Volume

Fiber Concentration

(liters) (fibers/cc)

SEE ATTACHED SHEETS

The Bay representative departed the site at 0400 A.M.

*This method does not distinguish between fiber types (i.e.: asbestos, cellulose, glass, etc.). Fiber concentrations reported are not necessarily all asbestos fibers.

On-site Technician: Mark Wev, TDH License # 50-1020 & # 70-6147

Consultant: Stephen R. Wev, TDH License #10-5144/ Douglas Beckner, TDH License #10-5395

TDH Licensed Consultant Agency # 10-0326 TDH Licensed PCM Laboratory # 30-0284 Date: 11-21-14 Project No.: B-214257

Material Removed: TSI (Fittings) Amount: (8) E.A.

Description of Events
Arrived at jobsite. Cherry arrived at jobsite. Cherry advised they have Five
(5) workers present on this date and designated Ramon Ayala as the on-site
supervisor. Met with Bob Faulds of Harris County and the FPM Rover and
advised we have the Tunnel areas to complete and still need to access the
B49 Purchasing area
Went thru and opened areas in the Tunnel to be abated. Cherry mobilized
equipment and materials and commenced prepping regulated area and glove
bags. Rover checked several keys on room B49 and said he would have to
get the other keys and would return shortly.
Cherry completed prep and commenced abatement of the Tunnel areas.
Started Area/OSHA samples.
Checked status of area samples and progress of abatement contractor.
Checked status of area samples and progress of the abatement contractor.
FPM Rover returned and went thru several sets of keys and was still unable
to open B49. He advised to call Central Security and they would send out
a Locksmith. Spoke with Howard at Central Security and he advised he
would contact one. Cherry broke for lunch.
Cherry returned from lunch and resumed abatement.
Advised by Central Security that Bob Faulds of Harris County cancelled the
Locksmith and advised we would have to return Monday night for B49.
Cherry advised they have completed the abatement of the Tunnel areas.
Visually inspected – passed.
Stopped Area/OSHA samples.
We departed jobsite.

Date: 11-21-14

Client: Harris County Engineering Department

Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Date Analyzed: 11-22-14

Sample Number	Sample Location	Sample Type	Start Time	Stop Time	Liters Per/Min	Total Minutes	Total Volume Liters	Fiber Counted	Number of Fields	Fibers in Blanks	Detection Limit F/CC	Concent. F/CC
009	AREA SAMPLE (IC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
010	AREA SAMPLE (OC)	RA	1900	0330	5	510	2550	< 5.5	100	0	0.001	0.001
	F.B.							0	100		0.000	0.000
	F.B.							0	100		0.000	0.000

Sample Types:

PL = Prevalent Level/ Baseline

PR = Prep
AB = Abatement
FC = Final Clearance
RA = Regulated Area

BL = Blank

Sample Locations:

IC = Inside Containment
OC = Outside Containment
HE = HEPA Exhaust
EX = Building Exterior
CR = Decon Clean Room

AR = Area Sample During Removal (Glove Bag or RFCI)

Date: 11-21-14

Client: Cherry Environmental Services, Inc.	Client:
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Project: Harris County Administration Building - 1001 Preston

Analyst: M.A.W.

Project No.: <u>B-214257</u>

Date Analyzed: 11-22-14

Sample Number	Employee Sampled	Social Security No.	Work Task	Respiratory Protection	Time Start	Time Stop	Total Time	Flow Rate	Total Vol.	No. of Fibers	No. of Fields	Concent. F/CC
PS009	EDWIN REYES	XXX-XX-3895	AB	1/2	1900	1930	30	2	60	< 5.5	100	0.045
PS010	EDWIN REYES	XXX-XX-3895	AB	1/2	1930	0330	480	2	960	< 5.5	100	0.003
	F.B.			·						0	100	0.000
									·			

Employee	8 Hr. Time Weighted Average F/CC	Employee	8 Hr. Time Weighted Average F/CC
			

ASBESTOS ABATEMENT PROJECT DESIGN

(For the Spot Abatement of ACM TSI to Facilitate HVAC Upgrades)

Harris County Administration Building 1001 Preston Houston, Texas 77002

BAY PROJECT NO.: B-214257

Prepared For:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

Prepared By:

Bay Environmental, Inc. 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

November 17, 2013

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Section 00010	Project Directory with Contact List	1 Page
Section 00800	General Conditions (AIA 201 by Reference)	1 Page
Section 02080	Asbestos Abatement	5 Pages
Appendix A	Limited Asbestos Survey for Sprinkler System	6 Pages
Appendix B	Asbestos Inspection Report for 5 th Floor	6 Pages
Appendix C	Ten Day Notification	3 Pages
Appendix D	Watchman Request Form	2 Pages
Appendix E	Estimated List of Abatement Locations	2 Pages

DOCUMENT INTENT

This document represents the Project Specifications for the specific project. The procedures contained herein are written as a supplement to Bay Environmental, Inc. Master Specification Document dated January 2002. The CONTRACTOR shall be responsible for adhering to the specifications contained in the Project Manual and the Master Specification Document.

The Summary of Work is intended to limit the scope and locations of items of the Work included therein. It is not intended to limit the Scope of Work should plans, schedules or notes indicate and increased scope. Inadvertent omission of an item from its proper section of the specifications and its inclusion in another section shall not relieve the CONTRACTOR of responsibilities for the item specified.

Should the documents disagree one with another, the better quality or greater quantity of work or materials shall be performed or furnished. Conflicts resulting from contradictions between the Master Specification and the Project Manual shall be reported to the ENVIRONMENTAL CONSULTANT and resolved by the ENVIRONMENTAL CONSULTANT.

Reproduction of this document in whole or in part without the expressed written approval of Bay Environmental, Inc. is strictly prohibited.

PART I GENERAL

1.01 PROJECT DIRECTORY

PROJECT:

ACM TSI Spot Removal to Facilitate HVAC Upgrades

Harris County Administration Building

1001 Preston

Houston, Texas 77002

CLIENT:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor

Houston, Texas 77002-1893

Bob Faulds (713) 755-5640 Cell (713) 826-5376 Maurice La Montagne (713) 755-8286

ABATEMENT CONTRACTOR:

CHERRY ENVIRONMENTAL, INC. (Sub contract to Cherry Demolition)

4501 Cherry Lane Santa Fe, Texas 77517 (409) 316-2212

Ernest Gamez (281) 750-6965

Raymond Ayala- site supervisor

(956) 532-1735

ENVIRONMENTAL CONSULTANT:

BAY ENVIRONMENTAL, INC.

8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

LICENSED BY TEXAS DEPARTMENT OF HEALTH:

Individual Asbestos Consultant:

Stephen R. (Randy) Wev (License No. 10-5144) (Expires 05/09/16)

Licensed Asbestos Consultant Agency No. 10-0326 Licensed Asbestos Laboratory (PCM) No. 30-0284

In compliance with TAHPA 295.58(i)(3)(D), I, Stephen R. Wev, do hereby delegate and authorize Mark Wev, Edgar Cazares, or Ronald Monroe to conduct all required inspections on my behalf.

ASBESTOS ABATEMENT PROJECT DESIGN

CLIENT:

Harris County Engineering Department

1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

SITE:

Harris County Administration Building

1001 Preston

Houston, Texas 77007

1.0 SCOPE OF WORK

Provide all labor, materials, tools, supervision, etc. to properly abate using adequately wet methods and dispose of identified asbestos thermal systems insulations (TSI) as specified. The abatement contractor is responsible for verification of approximate quantities of materials listed.

ACM TSI (Spot Abatement by Glove Bag)

As a minimum, locations of thermal systems insulations as marked by HCPID shall be removed using glove bag methods within a regulated area with 6 mil poly on floor, remote wet decon, half face respirators and PPE in accordance with applicable regulations and as specified herein. These spot abatements are required to install new HVAC controls. The abatement contractor supervisor and Bay representative shall record locations and quantities of materials removed for determining final cost of project. Continuous area and OSHA personnel samples shall be collected by Bay with analysis by PCM.

Throughout Building on Valves or Actuators

ACM TSI (spot abatement)......quantity to be determined

(see list attached in Appendix E)

General Notes:

1. Coordinate all activities Bob Faulds with Harris County or his appointed representative.

The building is presently operational and occupied. Avoid disruption of operations. No worker should be allowed on any floor or areas of the building other than floors under abatement and identified egress areas.

Contractor shall protect and be responsible for damages to wall surfaces, flooring, carpet and furnishings and equipment in abatement areas.

The Freight Elevator will be used by the Abatement Team. Do not utilize passenger elevators.

Work shall commence on upper floors working down through building.

Remaining piping insulation shall be cut smooth and level and not left ragged for re-insulation by others.

Trailer needs to enter loading dock off of Fannin and stop at guard station. Guard should be on duty until 6:00 pm. Overhead clearance is 10' AFF. Park trailer of truck into special angled parking spot at loading dock adjacent to entrance. The trailer needs to be removed each morning by 4:00 am.

This project will be completed under the guidelines of all federal, state and local regulations regarding the removal of asbestos containing materials as well as this project design. All work shall be coordinated and scheduled with the consultant.

Analysis for this project will utilize Phase Contrast Microscopy (PCM). OSHA Compliance Air Monitoring will be responsibility of the contractor.

Stephen R. (Randy) Wev (License No. 10-5144) (Expires 05/09/16)

1.1 CONTRACT TIME

All work shall be completed within five (5) ten (10) hour work nights 6:00 pm to 4:00 am as follows"

Abatement Start

November 17, 2014

Abatement Completion

November 22, 2014

PROJECT MONITORING

2.1 BASELINE

A. Three baseline air samples shall be collected on each floor prior to beginning of each phase. Samples will be collected under normal building conditions prior to the disturbance of asbestos containing materials. A minimum of three samples shall be collected and analyzed in accordance with the latest edition of NIOSH 7400 protocol, counting rules A.

2.2 AMBIENT

- A. Ambient air samples will be collected during the project and analyzed in accordance with the latest edition of NIOSH 7400 protocol, counting rules A.
- B. Ambient samples will be collected:
 - Inside containment
 - Outside containment but inside the building (if applicable)
 - The negative air unit discharge
 - Immediately outside the entrance to the decontamination facility (representative of the air being drawn into the facility)
 - Outside the bag out facility
 - Any other locations required by the specifications or as deemed necessary by the on site project manager

2.3 CLEARANCE

- A. Area samples shall be collected and analyzed during glove bag operations. The maximum level of residual fibers shall be 0.01 f/cc.
- B. Samples shall be collected during all abatement activities to determine if the project has been properly conducted in accordance with the project specification and all applicable local, state and federal regulations and all ACM has been properly removed.
- C. Project samples shall be collected and analyzed by the latest edition of NIOSH 7400 protocol, counting rules A, Phase Contrast Microscopy (PCM). Clearance samples will be collected at a rate of fifteen (15) liters per minute on 0.8 micron mce filters in conducting cassettes with extension cowls. Minimum sample volume will be 1250 liters. Clearance will be achieved if no sample is reported greater than 0.01 f/cc by the analysis report from the licensed laboratory. Any area whose air test does not meet the clean air standard will be retested following re-cleaning of those areas.
- D. All samples will be collected by either a licensed air monitoring technician or a licensed consultant. The sample pumps will be monitored, during the sampling period, by the person collecting the samples or some other means of control will be established to ensure the integrity of the sample and prevent tampering.

2.0 REGULATORY DOCUMENTATION

- A. The following documents are required to be posted conspicuously by the Contractor to be visible at the entrance to the regulated area and must not be covered by any other documents:
 - The asbestos information poster issued by the Texas Department of State Health Services
 - Copies of any violations issued as evidenced by an order from the federal or state asbestos
 regulating authorities within the preceding 12 months from any asbestos project.
- B. Documents required to be on-site as follows:
 - All current licenses, registrations and accreditation certificates

- Texas Department of State Health Services regulations and all appropriate publications as listed in § 295.33 of this title (relating to Adoption by Reference of Federal Standards) for the asbestos activity which is being performed
- Contractors written Respiratory Protection Program
- Project design specification

3.0 PROHIBITIONS

- A. The following prohibitions are applicable to this project:
 - Disposal of improperly labeled or classified asbestos containing waste material as defined in 40 CFR Part 61, Subpart M is prohibited.

4.0 PROJECT MANAGER

- A. The Asbestos Project Manager is employed by Bay Environmental, Inc., a licensed asbestos consultant agency, to perform in capacity of the owner's representative to evaluate the quality of the work being performed during an asbestos abatement project. The asbestos project manager will:
 - Monitor the project to document the standards designed to protect project personnel and building occupants, the adequacy of controls
 - Observe the contractual requirements are being met by the abatement contractor
 - Consult with contractors on behalf of client on the selection and use of appropriate personal
 protective equipment related to the asbestos abatement activities

5.0 WORK SITE PREPARATIONS

6.1 WARNING SIGNS

A. Establish a regulated area with proper signage and barrier tape. Danger signs in accordance with 29 Code of Federal Regulations 1926.1101 shall be displayed, in both the Spanish and English languages, at all entrances to regulated areas and on the outside of critical barriers.

6.2 CRITICAL BARRIERS

A. Regulated areas within which asbestos abatement is to be conducted shall be separated from adjacent areas by impermeable barriers of four (4) mil polyethylene sheeting attached securely in windows, doorways, elevator openings, corridor entrances, ventilation openings (both supply air and return air), drains, ducts, grills, grates, diffusers and skylights, shall be sealed with a minimum of a single layer of four (4) mil polyethylene sheeting. All penetrations that could permit air infiltration or air leaks through the barriers shall be sealed, with exceptions of the make-up air provisions and the means of entry and exit.

6.3 MOVEABLE OBJECTS AND TRASH DEBRIS

A. All moveable objects shall be removed from the containment area. Cleaning of contaminated items shall be performed if the items are to be salvaged or reused. Otherwise, they shall be properly disposed of as asbestos waste. All non-moveable objects that remain in the containment shall be covered with a minimum of single layer of six (6) mil polyethylene sheeting secured in place.

6.4 DECONTAMINATION SYSTEM

A. A remote worker decontamination enclosure system shall be installed in the established regulated area and shall be constructed consisting of a clean room, shower room and equipment room, each separated from the other by airlocks accessible through doorways. Except for the doorways and the make-up air provisions for the enclosure, the worker decontamination system shall be sealed against leakage of air. All personnel must exit the containment area through the shower before entering the clean room. No asbestos-contaminated individual or items shall enter the clean room. The shower filtration unit will be installed with discharge of the filtered water to the nearest floor drain or other access to the sanitary sewer. Trap shower waste water using filters having a pore size of not larger than 5.0 microns.

6.5 HEATING, VENTILATION AND AIR CONDITIONING SYSTEM EQUIPMENT (HVAC)

A. All HVAC equipment in or passing through the work area should be shut down, if possible, and preventive measures taken to prevent accidental start-ups. All intake and exhaust openings and any seams in system components shall be sealed with at least six (6) mil polyethylene sheeting and/or duct tape if possible. Any old filters shall be disposed of as asbestos waste.

6.6 HIGH-EFFICIENCY PARTICULATE AIR (HEPA) CLEANING

A. Except with prior written approval from the Consultant, cleaning procedures shall use wet methods and HEPA vacuuming. All loose debris must be thoroughly wet with a solution of amended water and picked up and placed in a six (6) mil poly disposal bag.

6.7 CONTAINMENT AREA VENTILATION

A. Units with HEPA filtration and in sufficient number to provide a negative pressure of at least 0.02 inches of water column differential, verified by a manometer, between the containment and outside and minimum of four containment air changes per hour, shall be operated continuously for the duration of the project. The duration of the asbestos abatement project for the purposes of this requirement shall be considered from the time a regulated area is established through the time acceptable final clean air monitoring results area obtained. These units shall exhaust filtered air to the outside of the building wherever technically feasible.

6.8 CONTAINMENT PREPARATION

A. Unless specified otherwise in Paragraph 1.0, Scope of Work, wall sheeting shall completely cover all wall surfaces from floor to the ceiling and consist of a minimum of two layers of true 4-mil thickness polyethylene sheeting. Wall sheeting shall be installed so as to minimize joints. No seams shall be located at wall-to-wall joints. Where a fire hazard exists, all plastic sheeting will be certified by the Underwriters Laboratory (UL) as being fire retardant. Floor sheeting shall consist of two layers of six mil thickness polyethylene sheeting with drop cloth under active abatement areas.

6.9 SAFETY REQUIREMENTS

- A. The following safety requirements shall be in effect for the duration of the project:
 - Fire Safety at least one fire extinguisher with a minimum National Fire Protection Association rations of 10BC (dry chemical) shall be placed within each abatement project containment for every 1,000 S.F., or fraction of containment area.
 - Electrical Safety ground fault circuit interrupter (GFCI) units shall be installed on all electrical circuits used within the regulated and containment areas. Lock-out and tag-out as necessary and possible
 - A licensed worker fluent in English shall be stationed to provide continuous inspections of active containments twenty four hours a day

6.10 ASBESTOS REMOVAL

- A. All ACM shall be thoroughly and adequately wetted with amended water prior to and during removal. ACM shall be removed in manageable sections and bagged while wet. All ACM shall be immediately bagged as per instructions in the Waste Disposal Section. At no time shall material be allowed to accumulate on the floor or become dry. Contractor shall maintain in working condition an airless sprayer capable of spraying a fine mist of amended water into the air and continually mist the air at all times during the removal project.
- B. Upon complete removal of all ACM, clean any debris from the poly splash guard and dispose of as ACM. Upon completion of all removal and cleanup, Consultant has delegated all responsibilities for final visual inspection to the site Project Manager. Upon approval of Consultant or Project Manager, Contractor will encapsulate the work area within an approved encapsulant in preparation for final air clearances.

7.0 FINAL CLEARANCE TESTING

7.1 VISUAL INSPECTIONS

A. Clearance samples shall be collected following a final visual inspection of the abatement area to determine if the project has been properly conducted in accordance with the project specifications and all applicable local, state and federal regulations and all ACM has been properly removed. Aggressive sampling methods

will be utilized for final clearance samples (i.e., use of a leaf blower with the force of air unaltered and operating as it comes from the factory, directed at all surfaces in order to cause loose asbestos fibers to become airborne).

7.2 SAMPLING

A. All samples shall be analyzed by the latest edition of the NIOSH 7400 protocol, counting rules A, Phase Contrast Microscopy (PCM). Final clearance samples will be collected at a rate of fifteen (15) liters per minute on 0.8 micron mce filters in conducting cassettes with extension cowls. Minimum sample volume will be 1250 liters. Clearance will be achieved if no sample is reported greater than 0.01 f/cc by the analysis report from the licensed laboratory. Any area whose air test do not meet EPA clean air standards will be retested following re-cleaning of those areas. Any related costs associated with any re-testing will be the responsibility of the Contractor.

8.0 DISPOSAL OF CONTAMINATED WASTE

8.1 BAG-OUT DECONTAMINATION PROCEDURES

- A. All ACM shall be double wrapped in six (6) mil true thickness poly or double bagged in true thickness six (6) mil poly disposal bags. Documentation from the manufacturer of the bags shall be on site. All bags shall be marked per the applicable Occupational Safety and Health Administration (OSHA) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.
- B. Wrapped material must be wiped or washed and cleaned prior to removal from the bag-out chamber or decontamination chamber.
- C. As the bagged materials area moved out through the bag-out chamber, place the previously bagged ACM into another six (6) mil plastic bag and seal it with duct tape. In order to double bag the asbestos wasted, the inner bag must be no more than half full, excess air must be squeezed out, the top twisted closed, folded over, sealed with duct tape, rinsed off or HEPA vacuumed to removed asbestos contamination and placed inside another bag (or in a fiberboard drum). If an outer bag is used, excess air must be squeezed out and the outer bag twisted closed, the top folded over and sealed with duct tape. If a fiberboard drum is used, the top must be sealed. Any bagging shall not allow leakage nor breakage due to overfilling.

8.2 DISPOSAL PROCEDURES

- A. Remove sealed and labeled bags of contaminated material and wastes and transport them for disposal to a TNRCC approved sanitary landfill as follows:
- B. Notify owner in a sufficient amount of time prior to removing each trailer or other waste transport from the job-site. Prepare contaminated waste manifest for material to be transported. Submit to owner for owner's signature as Generator. Owner will retain green copy of manifest.
- C. Transporter must be licensed by 5the Texas Department of State Health Services as required by the Texas Asbestos Health Protection Rules adopted September 22, 1994, as revised December 13, 1998.
- D. Notify Consultant a sufficient amount of time prior to the proposed time of delivery of contaminated waste to the landfill. The consultant may elect to observe this operation.
- E. Asbestos containing waste material shall be treated, packaged, labeled and disposed of in accordance with Title 40, Part 61, Subpart M, Section 61.152 of the Code of Federal Regulations.
- F. Ensure that there are no visible emissions to the outside air from site where materials and waste are deposited.

LIMITED ASBESTOS SURVEY REPORT

(prior to sprinkler system installation)

Harris County Administration Building with Basement 1001 Preston Houston, Texas 77002

Project Number: B-213011

PREPARED FOR:

Harris County Engineering Department 1001 Preston Avenue, 7th Floor Houston, Texas 77002-1893

PREPARED BY:

Bay Environmental, Inc. 8839 Knight Road Houston, Texas 77054 (713) 729-2533 Fax (713) 729-2698

January 28, 2013

A Limited Asbestos Survey was conducted on January 16, 2013 by representatives of Bay Environmental, Inc. of the Harris County Administration Nine Story Building with basement located at 1001 Preston in Houston, Texas 77002.

The purpose of this asbestos survey was to identify Asbestos Containing Building Materials (ACBM) used in the construction or past renovations of specific areas of the building that may be affected by the planned installation of a building fire sprinkler system and prepare a report documenting the findings in compliance with the Texas Asbestos Health Protection Rules (TAPHR) 295.34© and 40 CFR 61.145. It should be noted that this was not a comprehensive asbestos inspection of the building and only areas above ceilings and rooms that may be affected by the sprinkler system installation were evaluated and tested.

The survey included and was limited to inspecting above ceilings, walls scheduled for penetration and mechanical rooms scheduled for piping tie ins in the existing nine story plus basement office building presently occupied by the Harris County. Suspect asbestos containing materials observed consisted of suspended acoustical ceiling tiles, wallboard with float compound and texture, suspended acoustical ceiling tiles and spray applied fire proofing insulations.

The inspection was conducted by Douglas C. Beckner, TDSHS Licensed Asbestos Consultant #10-5395 and Mark Wev, TDSHS Licensed Asbestos Inspector #60-2874. Forty-nine (49) bulk material samples were collected and submitted by appropriate Chain of Custody for analysis by Polarized Light Microscopy (PLM) to Environmental Analytical Services, LLC, a licensed laboratory located at 13201 Northwest Freeway, Suite 503 in Houston, Texas 77040, TDSHS Licensed # 30-0373 (license attached). Samples were analyzed by EPA method 600/R-93/116 July 1993 for determination of asbestos in bulk samples, with percentage compositions based on approximate area compositions viewed under a microscope.

As a result of this inspection, the following asbestos containing materials were identified associated with Harris County Administration Nine Story Building with basement located at 1001 Preston in Houston, Texas 77002:

- White mastic on foil duct insulation above ceilings
- Beige mastic on domestic water pipe insulations above ceilings

A listing of samples collected with location and results of analytical analysis are summarized below (analysis attached). Greater than 1% asbestos is presently defined by the EPA as asbestos containing.

Sample No.	Location/Type of Material	Results
01/	2' x 2' suspended acoustical ceiling tile with v. course texture / 9 th floor elevator lobby	None Detected
02/	White mastic on foil ductwork insulation / 9 th floor elevator lobby	5% Chrysotile

03/	Domestic water pipe insulation (beige mastic on white paper wrap over fiberglass) / 9 th floor elevator lobby	5% Chrysotile
	Note: Pipe fittings were found to be plastic	,
04/	Wallboard with float compound above suspended ceiling tile / 9 th floor northwest hallway	None Detected
05/	2' x 2' suspended acoustical ceiling tile with irregular fissures / 8th floor elevator lobby	None Detected
06/	Wallboard with float compound above suspended ceiling tile / 8 th floor southwest hallway	None Detected
07/	White mastic on foil ductwork / 8 th floor southwest hallway	5% Chrysotile
08/	Red fire stop putty / 8 th floor southeast mechanical room	None Detected
09/	2' x 2' suspended acoustical ceiling tile with v. course texture / 7 th floor elevator lobby	None Detected
10/	Wallboard with float compound above suspended ceiling tile / 7th floor elevator lobby	None Detected
11/	Beige mastic on white paper wrap / 7 th floor south hallway	None Detected
12/	White mastic on foil ductwork / 7 th floor northwest hallway	5% Chrysotile
13/	2' x 2' suspended acoustical ceiling tile with v. course texture / 6 th floor northwest hallway	None Detected
14/	White mastic on foil ductwork / 6 th floor northwest hallway	5% Chrysotile
15/	12" x 12" affixed ceiling tile with heavy texture / 6 th floor west hallway	None Detected
16/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 6 th floor southwest hallway	None Detected
17/	Wallboard with float compound above suspended ceiling tile / 6 th floor south central mechanical room	None Detected
		

18/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 5 th floor elevator lobby	None Detected
19/	2' x 2' suspended acoustical ceiling tile with fine fissures / 5 th floor north central reception	None Detected
20/	White mastic on foil ductwork / 5 th floor north central reception	None Detected
21/	12" x 12" affixed ceiling tile with heavy texture / 5 th floor northeast hallway	None Detected
22/	Wallboard with float compound above suspended ceiling tile / 5 th floor south central mechanical room	None Detected
23/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 4 th floor elevator lobby	None Detected
24/	12" x 12" affixed ceiling tile with heavy texture / 4 th floor elevator lobby	None Detected
25/	Wallboard with float compound above suspended ceiling tile / 4 th floor south central mechanical room	None Detected
26/	2' x 2' suspended acoustical ceiling tile with fine fissures / 4 th floor southeast corner office	None Detected
27/	Gray mastic on metal ductwork / 4 th floor southeast corner office	None Detected
28/	2' x 2' suspended acoustical ceiling tile with four square pattern / 3 rd floor elevator lobby	None Detected
29/	White mastic on foil ductwork / 3 rd floor elevator lobby	None Detected
30/	Wallboard with float compound above suspended ceiling tile / 3 rd floor south central mechanical room	None Detected
31/	12" x 12" affixed ceiling tile with heavy texture / 3rd floor southeast tax office	None Detected
32/	12" x 12" affixed ceiling tile with medium heavy texture (patch tile) / 3 rd floor southeast tax office	None Detected

33/	2' x 2' suspended acoustical ceiling tile with fine fissures / 3 rd floor private elevator lobby	None Detected
34/	2' x 2' suspended acoustical ceiling tile with four square pattern / 2 nd floor elevator lobby	None Detected
35/	Wallboard with float compound above suspended ceiling tile / 2 nd floor south central mechanical room	None Detected
36/	2' x 2' suspended acoustical ceiling tile with fine fissures / 2 nd floor southwest tax office	None Detected
37/	2' x 2' suspended acoustical ceiling tile with smooth finish / 2 nd floor northeast computer room	None Detected
38/	12" x 12" affixed ceiling tile with heavy texture / 2 nd floor west central storeroom	None Detected
39/	2' x 2' suspended acoustical ceiling tile with sculpted square finish / 1 st floor elevator lobby	None Detected
40/	2' x 2' suspended acoustical ceiling tile with fine fissures / 1 st floor northwest men's restroom	None Detected
41/	Wallboard with float compound above suspended ceiling tile / 1st floor northwest stairwell	None Detected
42/	2' x 2' suspended acoustical ceiling tile with fine fissures / basement elevator lobby	None Detected
43/	Large diameter insulated pipe and flange (white wrap over fiberglass / basement elevator lobby	None Detected
44/	Large diameter insulation pipe run (white wrap over fiberglass) / basement elevator lobby	None Detected
45/	2' x 2' suspended acoustical ceiling tile with smooth finish / basement kitchen area	None Detected
46/	2' x 2' suspended acoustical ceiling tile with irregular fissures / basement kitchen pantry	None Detected
47/	Wallboard with float compound above suspended ceiling tile / basement kitchen pantry	None Detected
48/	White mastic on foil ductwork / basement kitchen pantry	None Detected
		·

2' x 2' suspended acoustical ceiling tile with pinholes and pitts / basement north hallway near tunnel	None Detected
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Current regulations require removal of asbestos containing materials only when they are found to present a health hazard, be in damaged condition or scheduled to be disturbed in the course of a renovation or demolition. Any removal of asbestos containing materials should be conducted by a Licensed Abatement Contractor and monitored under a separate contract by a Licensed Asbestos Consultant. Notification to the State (Ten Working Days) is required prior to proceeding with any asbestos abatement or demolition project.

The installation of a fire sprinkler system within the building should not be impacted by the identified asbestos containing duct and piping mastics provided no disturbance during installation is allowed or occurs.

The samples were analyzed by layers. Specific layer or component asbestos content is reported in parentheses, when relevant. The asbestos content of layers and components should be considered when establishing policy regarding the bulk material.

The results do not imply product endorsement by NVLAP or any agency of the U.S. Government. Results must not be reproduced except in full. Test report relates only to the samples tested.

Questions regarding this report may be addressed by telephoning **Bay Environmental**, Inc. at (713) 729-2533 or by e-mail at doug@bayenv.com.

Douglas C. Beckner

Vice President & Manager of Operations TDSHS Licensed Consultant #10-5395

Africa Me

Inspection Dates: August 26, 2014 &

Report Date: September 10, 2014

September 5, 2014

Client: Harris County Engineering Dept.

c/o Johnston, LLC

2000 Bering Drive, Suite 850

Houston, Texas 77057

Project: **Asbestos Inspection**

HC Administration Building

5th Floor

1001 Preston Avenue Houston, Texas 77002

Project No.:

B-214257

Method:

Polarized Light Microscopy (PLM), Interim (40 CFR Part 763 Appendix to

Subpart E), Improved EPA - 600 / R - 93 / 116

Percentages Determined Visually During Microscopic Examination

On August 26, 2014 and September 5, 2014, an asbestos inspection was conducted by a representative of Bay Environmental, Inc. (BAY) of the 5th Floor of the Harris County Administration and Office Building located at 1001 Preston Avenue in Houston, Texas 77002.

The purpose of this inspection was to identify Asbestos Containing Building Materials (ACBM) used in the construction or past renovations of the specific floor and prepare a report documenting the findings prior to renovations in compliance with the Texas Asbestos Health Protection Rules §295.34 and NESHAP 40 CFR §61.145.

The survey consisted of inspecting the approximately 24,000 s.f 5th floor in multi story office building. The majority of the floor was vacant at the time of this inspection with the exception of the north and northeast quadrant. Suspect asbestos containing building materials observed consisted of floor tile and/or mastics, wall board with float compound and texture, suspended ceiling tiles, thermal systems insulations and sink dampener mastics.

The inspection was conducted by Douglas C. Beckner, TDSHS Licensed Asbestos Consultant #10-5395. Fifty-two (52) bulk material samples were collected from suspect asbestos containing materials and submitted for analysis by Polarized Light Microscopy (PLM) to Environmental Analytical Services, LLC, a licensed laboratory located at 13201 Northwest Freeway, Suite 503 in Houston, Texas 77040, TDSHS Licensed Asbestos PLM Laboratory # 30-0373. Samples were analyzed by EPA method 600/R-93/116 July 1993 for determination of asbestos in bulk samples, with percentage compositions based on approximate area compositions viewed under a microscope.

As a result of this asbestos inspection, the following asbestos containing were identified associated with the 5th Floor of the Harris County Administration Building located at 1001 Preston Avenue in Houston, Texas 77002.

- Floor tile and/or floor mastic throughout select areas of the floor
- Duct mastic throughout the majority of the floor
- Chilled water and hot water fitting insulations in the mechanical rooms
- Sink Dampener mastic

A listing of samples collected with location and results of analytical analysis are summarized as follows (laboratory analysis attached). Greater than 1% asbestos is presently defined by the EPA as asbestos containing.

Sample <u>No.</u>	Sample Type/Location	Percentage of Asbestos
01A	Chilled water pipe insulation / mechanical room	None Detected
01B	Chilled water pipe insulation / mechanical room	None Detected
01C	Chilled water pipe insulation / mechanical room	None Detected
02A	Chilled water fitting insulation / mechanical room (approximately 24 fittings or valves in both mechanical rooms)	5% Chrysotile
02B	Chilled water fitting insulation / mechanical room (quantity included with sample 02A)	Archived
02C	Chilled water fitting insulation / mechanical room (quantity included with sample 02A)	Archived
03A	Hot water pipe insulation / mechanical room	None Detected
03B	Hot water pipe insulation / mechanical room	None Detected
03C	Hot water pipe insulation / mechanical room	None Detected
04A	Hot water fitting insulation / mechanical room (approximately 24 fittings or valves in both mechanical rooms)	5% Chrysotile
04B	Hot water fitting insulation / mechanical room (quantity included with sample 04A)	Archived

04C	Hot water fitting insulation / mechanical room (quantity included with sample 04A)	Archived
05A	Residual black mastic beneath carpet / room 542	None Detected
05B	Residual black mastic beneath carpet / room 537	None Detected
05C	Residual black mastic beneath carpet / room 541 (approximately 370 s.f. + 310 s.f. under carpet in room 523)	5% Chrysotile
06A	White mastic on foil insulated ductwork above ceilings / room 542 (approximately 640 l.f. of duct)	5% Chrysotile
06B	White mastic on foil insulated ductwork above ceilings /room 543 (quantity included in sample 06A)	Archived
06C	White mastic on foil insulated ductwork above ceilings/room 503 (quantity included in sample 06A)	Archived
07A	12" X 12" affixed heavy textured ceiling tiles room 542	None Detected
07B	12" X 12" affixed heavy textured ceiling tiles room 501A	None Detected
07C	12" X 12" affixed heavy textured ceiling tiles /room 503	None Detected
08A	12" X 12" off white floor tile with black mastic room 539 (approximately 1,080 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
08B	12" X 12" off white floor tile with black mastic room 539 (quantity included in sample 08A)	Archived
08C	12" X 12" off white floor tile with black mastic room 539 (quantity included in sample 08A)	Archived
09A	Pink sink dampener mastic / kitchen room 502 quantity (one (1) sink)	10% Chrysotile
09B	Pink sink dampener mastic / kitchen room 502	Archived
09C	Pink sink dampener mastic / kitchen room 502	Archived

10A	12" X 12" beige floor tile with black mastic / southeast area (approximately 1,290 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
10B	12" X 12" beige floor tile with black mastic / southeast area (quantity included with sample 10A)	Archived
10C	12" X 12" beige floor tile with black mastic / southeast area (quantity included with sample 10A)	Archived
11A	Mastic on roof drain insulation / east mechanical room	None Detected
11B	Mastic on roof drain insulation / east mechanical room	None Detected
11C	Mastic on roof drain insulation / east mechanical room	None Detected
12A	2' X 2' suspended ceiling tile with fine fissures north of room 509	None Detected
12B	2' X2' suspended ceiling tile with fine fissures outside of room 511	None Detected
12C	2' X 2' suspended ceiling tile with fine fissures outside of room 512	None Detected
13A	White mastic on foil ductwork / remodeled northeast area	None Detected
13B	White mastic on foil ductwork / remodeled northeast area	None Detected
13C	White mastic on foil ductwork / remodeled east area	None Detected
14A	12" X 12" white speckled floor tile with yellow mastic & black boarders / kitchen in remodeled northeast area	None Detected
14 B	12" X 12" white speckled floor tile with yellow mastic & black boarders / kitchen in remodeled northeast area	None Detected
14C	12" X 12" white speckled floor tile with yellow mastic & black boarders / kitchen in remodeled northeast area	None Detected
15A	Wall board with float compound & texture room 541	None Detected

15B	Wall board with float compound & texture room / mechanical room #5	None Detected
15C	Wall board with float compound & texture room / mechanical room #2	None Detected
16A	12"x12" floor tile with black mastic (2 layers) under carpet / room 521 (approximately 740 s.f.)	None Detected (tile) None Detected (mastic) 3% Chrysotile (tile) 2% Chrysotile (mastic)
16B	Residual black mastic under carpet with yellow carpet glue / room 501	None Detected (black mastic)
16C	12"x12" floor tile with black mastic under carpet / Jack Bryant's office (approximately 190 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
17A	12"x12" beige floor tile with black mastic under carpet / conference room 508 (approximately 125 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
17B	12"x12" floor tile with black mastic / Melvin Degracia office (approximately 160 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
17C	12"x12" floor tile with black mastic / office 540 (approximately 380 s.f.)	2% Chrysotile (tile) 5% Chrysotile (mastic)
18A	Computer floor black pedestal mastic / large storeroom on east side of floor	None Detected

All attempts were made to determine the limits of asbestos floor tile and/or mastic under carpet throughout the floor but the possibility exists that additional areas of floor tile and/or mastic may be discovered during abatement activities.

Current regulations require removal of asbestos containing materials only when they are found to present a health hazard, be in damaged condition or scheduled to be disturbed in the course of a renovation or demolition. Any removal of asbestos containing materials should be conducted by a Licensed Abatement Contractor and monitored under a separate contract by a Licensed Asbestos Consultant. Notification to the State (Ten Working Days) is required prior to proceeding with any asbestos abatement or demolition project.

The samples were analyzed by layers. Specific layer or component asbestos content is reported in parentheses, when relevant. The asbestos content of layers and components should be considered when establishing policy regarding the bulk material.

Results must not be reproduced except in full. Test report relates only to the samples tested.

Stephen R. (Randy) Wev

President & Director of Operations

TDSHS Licensed Asbestos Consultant #10-5144

TDSHS Licensed PLM Laboratory #30-0373





ASBESTOS/DEMOLITION NOTIFICATION FORM

ė	TYPE OF NOTIFICATION: (Select one and fill in the requested information)
\boxtimes	ORIGINAL AMENDMENT No CANCELLATION
	•Was emergency request made to the Regional Office or Environmental Health Notifications Group (EHNG) by phone? □ Yes □ No •If yes, the DSHS reference #:N/A and name of the Regional or EHNG representative with a large of the Regional or EHNG representative with the large of the Regional or EHNG representative with the large of the Regional or EHNG representative with the large of the Regional or EHNG representative with the large of the Regional or EHNG representative with the large of the Regional or EHNG representative with the large of the Regional or EHNG representative with t
c	Date:/ Time:
	ORDERED: (For structurally unsound facilities, attach copy of demolition order and identify Governmental Official) Name: N/A Registration No. N/A Title: N/A Date of order (ACCORDER)
(w)	Date of order (MM/DD/YY): _ / _ / Date order to begin (MM/DD/YY): _ / _ /
(x) Below if Amended	AMENDMENTS: You must complete the entire form and mark the appropriate check box(es) along the left-hand side of this form to indicate amended information.
	TYPE OF WORK
	Asbestos Abatement Demolition Annual Consolidated O&M Abatement/Demolition Is this a phased project? Yes No
	FACILITY INFORMATION 1. Facility Location Description or Facility Name: Harris County Administration Building Physical Address: 1001 Preston County: Harris City: Houston Zip: 77002 Facility Contact: Bob Faulds Phone #: (713) 826-5376
	2. Type of Facility (Select one) Public Federal Industrial/Manufacturing NESHAP-Only Public School K-12
	3. Facility Details Description of Area/Room Number: Select mechanical areas on each floor Age of Building: 40 Size: 216,000 SF Number of Floors: 11 Is this building occupied? Yes No Prior Use: County offices Future Use: County offices Date of Asbestos Survey/NESHAP Inspection: 09/05/14 DSHS Inspector License #: 10-5395
∐	Analytical Method: PLM TEM Assumed Asbestos No Suspect Material DSHS Laboratory License #: 30-0373
	WORK SCHEDULE/ASBESTOS AMOUNTS (Note: if the start date(s) entered below cannot be met, the DSHS Regional or Local Program office must be notified prior to the scheduled start date. Failure to do so is a violation of TAHPA Section 295.61.)
	1. Asbestos Abatement Work Schedule: Start date: 11/17/14 and End date: 11/22/14 Work days: Mon. Tues. Wed. Thurs. Fri. Sat. Sun. Working hours: 1800 a.m. p.m. to 0400 a.m. p.m. 2. Demolition Work Schedule: Start date: N/A/ and End date: // Work days: Mon. Tues. Wed. Thurs. Fri. Sat. Sun. Working hours: N/A a.m. p.m. to

C. ASBESTOS AMOUNTS							
Is Asbestos Present? X Yes No (Complete the table below	if asbesta	os is pi	resen	t)		27	
Asbestos-Containing Building Material Type	т						· · · · · ·
	Ap		mate Asbes	amount of			
*Only mark the boxes below on this chart if they are being amended	Pipes	Ln	Ln	Surface Area	SQ	SQ	Cu
8		Ft	M		Ft	M	Ft
RACM to be removed	140						Barres Avenue
RACM left in place during demolition	140		H		 	H	
_Interior Category I non-friable removed		++	H		1	H	
Exterior Category I non-friable removed		+	+		 	H	
Category I non-friable left in place during demolition		++	+		 	-	
Interior Category II non-friable removed		+	H		H	-	CONTROL OF STREET
Exterior Category II non-friable removed		++	H		+	부	
Category II non-friable left in place during demolition		H	ዙ		-	 	100
RACM Off-Facility Component		NAZARANA N			223000	303000000	
2. Description of planned demolition or abatement work, type of of ACM mastic on thermal systems insulations to facilitate in methods within a regulated area with 6 miles of a control of the control of	,						ent
3. Description of work practices and engineering controls to be a Glove bag methods within regulated area. Approximately 70	tinuous	and O	SHA	WAC controls us monitoring wit	sing gl h anal	ysis b	ag y PCN
3. Description of work practices and engineering controls to be a Glove bag methods within regulated area. Approximately 70 sampling to be completed with analysis by PCM. PROJECT INFORMATION A. FACILITY OWNER Facility Owner Name: Harris County PID Architecture and Enghone #: (713) 755-5373 Attention: Mr. Mike Swain, Chief Architect Mailing Address: 1001 Preston #703 City: Houston State: Texas Zip: 77002	stallation tinuous : sed to pr location:	and O event	ew H SHA emiss ntinu	WAC controls us monitoring wit	sing gl h anal	ysis b	ag y PCN
3. Description of work practices and engineering controls to be a Glove bag methods within regulated area. Approximately 70 sampling to be completed with analysis by PCM. PROJECT INFORMATION A. FACILITY OWNER Facility Owner Name: Harris County PID Architecture and Enghone #: (713) 755-5373 Attention: Mr. Mike Swain, Chief Architect Mailing Address: 1001 Preston #703	stallation tinuous : sed to pr location:	and O event	ew H SHA emiss ntinu	WAC controls us monitoring wit	sing gl h anal	ysis b	ag y PCN

D. ASBESTOS SUPERVISOR

DSHS Supervisor License #: 80-4652 Site Supervisor: Carlos Maya

DSHS Supervisor License #: 80-4226 Site Supervisor: Ernest Gamez

(X) Below if	
Amended	E. NESHAP TRAINED INDIVIDUAL
□	NESHAP Trained Individual: N/A
	Certification Date:/_ /
	F. DEMOLITION CONTRACTOR
	Demolition Contractor: N/A
	Address: N/A
	City: N/A State: N/A Zip: Phone #: () -
L.i	G. PROJECT CONSULTANT OR OPERATOR
	DSHS License No.: <u>10-0326</u>
	Project Consultant or Operator: Bay Environmental, Inc.
	Address: 8839 Knight Road City: Houston, State Town, Zing Grand, Night Road
	City: <u>Houston</u> State: <u>Texas</u> Zip: <u>77054</u> Phone #: <u>(713) 729-2533</u>
	H. Waste Transporter
	DSHS Waste Transporter License #: 40-0217
	· Waste Transporter: Cherry Environmental Services, Inc.
	Address: 4501 Cherry Lane
	City: Santa Fe State: Texas Zip: 77517
	Contact Person: John Cherry Phone #: (409) 316-2212
ή	I. Waste Disposal Site
	TCEQ Permit #: H-1721
	Waste Disposal Site: Coastal Plains Disposal Facility
	Address: 21000 East Highway 6
	City: Alvin State: Texas Zip: 77511
	Phone #: (281) 338-1708
	CERTIFICATION STATEMENT Thereby dealers that I have been a second as a second
•	I hereby declare that I have examined this notification and, to the best of my knowledge and belief, all information provided is
	The proof of the control of the cont
	associated with this notification. I also understand that the owner, operator, or delegated agent is responsible for notification to the department.
	/Signature of 2 Date: 10/20/14
	(Signature of Owner, Operator or Delegated Agent)
	Stanhan D. (Danda) W / Danda J. W.
	Stephen R. (Randy) Wev / President Bay Environmental, Inc. on behalf of Harris County PID Arch. & Eng. Div. (Printed Name & Title)
	/

IMPORTANT INFORMATION

NOTIFICATION TIMELINESS REQUIREMENT:

E-mail Address: randy@bayenv.com Phone #: (713) 254-5052

Your Asbestos/Demolition Notification form must be postmarked no less than ten working days (not calendar days) prior to the start of any asbestos abatement or demolition.

FILING FEE: An invoice will be mailed to the facility owner upon completion of the project.

CALL FOR ASSISTANCE:

(512) 834-6747 or (888) 778-9440 (toll free in Texas)

MAIL FORM TO:

ENVIRONMENTAL HEALTH NOTIFICATIONS GROUP TEXAS DEPARTMENT OF STATE HEALTH SERVICES

PO BOX 143538

AUSTIN, TX 78714-3538



Watchman Request Form

Date: 1/3	14
To: Watchman (provide common location name, address) OO PR	587EH,
This is to Inform you that (name of company(les)/contractor(s) or Harris Coursell From ENTIL AND CHECKY ENVIRONTED	
Will be in your building from:	_
Start Date: 11/17/14 Start Time (Indicate and)	D: 6P.H.
End Date: 11/2/14 End Time (Inclicate am) p	in . A.M.
Work to be performed: AGRISTOS, ABATEMENT INSIG	5 MECHANICAL
ROOMS TO ACCOMPLEATE THE THETALLATION	OF NEW VALVES
AND ACTUATORS.	
Location (floor, room; in/outside, etc.) CANAL ATTERNATION OF THE MENT OF THE MENT OF THE PARTY	
ON DOWN TO 2ND PLOOP, THEN STATE FASTE	IBY AND JUNNOL.
Contact Information (person on sife)	w IMEMI
Name: MARK (USV Company) Department: WAY SWIT	• • • • • • • • • • • • • • • • • • • •
Work: 713-729-2533 Home: WA Mol	oile: <u>28 -222-097</u> 2
Contractor/ Worker's Information	
Name: CHERRY ENTRON 154174 Alternate Num	ber:
	per: 932-92-496
Name: Parts Pallips House Colo	
	ber: <u>713-826-53</u> 76
County FPM Confact: Num	oer:

Faulds, Bob (Construction Programs)

From:

randy@bayenv.com

Sent:

Wednesday, November 12, 2014 1:02 PM

To:

Faulds, Bob (Construction Programs); Kristi McFarland; Mark McGhee; Swain, Mike

(Engineering)

Cc:

LaMontagne, Maurice (Construction Programs); Mark Wev; Ernest Gamez

Subject:

1001 Preston HVAC Upgrades Asbestos Abatement REMINDER

Randy Wey (713) 254-5052, cell

BAY ENVIRONMENTAL, INC. 8839 Knight Road Houston, Texas 77054 (713) 729-2533, office (713) 729-2698, fax

Administration Building HVAC Upgrades Estimate of Number of Areas to be Abated (10-10-14)

Area in Building	Unit Type	Number of Valves & Actuators
Elevator Penthouse Lower Level	AHU # 2	1
Upper Level	3 FCU's	3
9 th Floor-2 nd Floor	16 AHU's	32
1 st Floor	No Work	0
Basement		
Purchasing Dept. Room B49	FCU	1 Note, Unit has not worked for 10 Yrs.
Dock Office	FCU	1
Dock Mech. Rm.	AHU # 4 AHU # 5	2 3
Surveyor's Office Room B64	FCU	2
Main Mech. Room (Off Engine Room)		
	AHU# 1 AHU# 2 AHU# 3	2 3 5

Area in Building	Unit Type	Number of Valves & Actuators	
Tunnel System Locations			
Tunnel Mechanical Room	B1A B2 A B3A	2 2 2	
Tunnel Mechanical Room	FCU# 3 FCU # 4	1 1	
Tunnel Mechanical Room (Serving Stairwell to Court	fCU	1	
Total Number of Valve	s/Actuators	64	



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

BAY ENVIRONMENTAL INC

is certified to perform as a

Asbestos Consultant Agency

in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

Fried Lake M

DAVID LAKEY, M.D. COMMISSIONER OF HEALTH

License Number: 100326

Control Number: 96647

Expiration Date: 1/16/2016

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

BAY ENVIRONMENTAL INC

is certified to perform as a

Asbestos Laboratory PCM

in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

DAVID LAKEY, M.D. COMMISSIONER OF HEALTH

License Number: 300284

Control Number: 95921

Expiration Date: <u>1/16/2016</u>

(Void After Expiration Date)

VOID IF ALTERED

NON-TRANSFERABLE



Texas Department of State Health Services

Asbestos Individual Consultant

STEPHEN R WEV License No. 105144 Control No. 96690

Expiration Date: 5/9/2016



Texas Department of State Health Services

Asbestos Air Monitoring Technician

MARK A WEV

License No. 706147 Control No. 96827

Expiration Date: 4/10/2015





Texas Department of State Health Services

Asbestos Project Manager

MARK A WEV

License No. 501020

Control No. 96779

Expiration Date: 4/6/2015

