

# **REPORT**

# PRE-RENOVATION INVESTIGATIVE SURVEY FOR ASBESTOSCONTAINING MATERIALS LITCHFIELD COURTHOUSE 15 WEST STREET LITCHFIELD, CONNECTICUT

Project No. JD-13-15 DPW No. 25328

Prepared for

State of Connecticut

Department of Construction Services

Hartford, Connecticut

Prepared by

**TRC** 

Windsor, Connecticut

October 31, 2013



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> Donald LePage Project Manager

TRC Project No. 209752-0000-0000 October 31, 2013

> TRC 21 Griffin Road North Windsor, Connecticut 06095 Telephone (860) 298-9692 Facsimile (860) 298-6399

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## **EXECUTIVE SUMMARY**

On October 17, 2013 TRC of Windsor, Connecticut conducted an inspection for suspect asbestos-containing materials (ACM) at the Litchfield Courthouse in Litchfield, Connecticut. The inspection was initiated prior to planned renovation activities in accordance with USEPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAPS) requirements.

The scope of the inspection was limited to the Courtroom 1, Courtroom 2, attic, roof and basement areas to be impacted by AHU removal/replacement activities at the Litchfield Courthouse. A Connecticut licensed asbestos inspector from TRC conducted the inspection in accordance with USEPA AHERA protocols and ASTM Standard E2356-04. Bulk samples of suspect materials were collected and analyzed via polarized light microscopy (PLM) and/or PLM gravimetric analysis methods at a CTDPH/NVLAP accredited laboratory. ACM was identified as HVAC tar sealant, various types of flashing tar and fire door insulation in the subject areas. ACM to be impacted by renovation activities must be removed prior to disturbance in accordance with OSHA, USEPA, CTDPH, and CTDEEP standards for asbestos abatement/disposal. Detailed results of the asbestos survey can be found in Tables 1-3 and Appendices A through D.

TRC also conducted asbestos air sampling to monitor airborne asbestos fiber emissions in the basement area due to ACM fire door insulation on four doors in the subject area. Air samples were collected and transferred using proper chain-of-custody records to TRC's Accredited Laboratory in Windsor, Connecticut and analyzed on-site by an AIHA Registered Asbestos Analyst from TRC for Phase Contrast Microscopy (PCM) analysis via the National Institute for Occupational Safety and Health (NIOSH) 7400 method. All asbestos air samples collected by TRC were found to be below the OSHA Permissible Exposure Level (PEL).

## PROJECT OUTLINE

Project Address:

Litchfield Courthouse

15 West Street, Litchfield, CT

DCS Contract No.

08PSX0202

DCS Project Manager:

Michael Sanders

DCS Project No.:

JD-13-15

DCS Building No:

25328

TRC Project No.:

209752-0000-0000

TRC Project Manager:

Don LePage

Asbestos Inspector:

Jonathan Gentile (LIC #000603)

Date of Inspection:

10/17/13

Asbestos Identified:

Yes

Additional Notes:

The site investigation was limited to the collection and analysis of suspect asbestos-containing materials from within the areas of the building to be impacted by scheduled HVAC upgrades.

**TABLES** 

# TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS LITCHFIELD COURTHOUSE LITCHFIELD, CONNECTICUT

Sample No.	Sample Location	Homogeneous Material	% and Type Asbestos	
1	Courtroom 1	froom 1 Mortar-like texture ceiling plaster skim coat (PL1)		
2	Courtroom 1	Mortar-like texture ceiling plaster skim coat (PL1)	ND<1%	
3	Courtroom 1	Mortar-like texture ceiling plaster skim coat (PL1)	ND<1%	
4	Courtroom 2 ceiling	Grey basecoat plaster (PL2)	ND<1%	
7	Courtoom 2 cennig	White skim coat	ND<1%	
5	Courtroom 2 ceiling	Grey basecoat plaster (PL2)	ND<1%	
	Court doin 2 cennig	White skim coat	ND<1%	
6	Courtroom 2 ceiling	Grey basecoat plaster (PL2)	ND<1%	
0	Court toom 2 cennig	White skim coat	ND<1%	
7	Courtroom 2 ceiling	Textured ceiling coating (TC1)	ND<1%	
8	Courtroom 2 ceiling	Textured ceiling coating (TC1)	ND<1%	
9	Courtroom 2 ceiling	Textured ceiling coating (TC1)	ND<1%	
10	Attic	Dark interior duct insulation (DI1)	ND<1%	
11	Attic	Dark interior duct insulation (DI1)	ND<1%	
12	Attic	Dark interior duct insulation (DI1)	ND<1%	
13	of – large HVAC unit Black tar-like sealant (TS1)		10% chrysotile	
14	Roof – large HVAC unit	Black tar-like sealant (TS1)	NA/PS	
15	Roof	Tar vapor barrier on concrete roof deck (VB1)	ND<1%	
16	Roof	Tar vapor barrier on concrete roof deck (VB1)	ND<1%*	
17	Roof - large HVAC unit base	Flack flashing tar (FL1)	Trace chrysotile	
18	Roof – large HVAC unit base	Flack flashing tar (FL1)	4.66% chrysotile*	
19 1	Roof at intersection of flat & sloped roofs	Remnant black flashing tar (FL2)	20% chrysotile	
20	Roof at intersection of flat & sloped roofs	Remnant black flashing tar (FL2)	NA/PS	
	Roof at intersection of flat & sloped roofs	Tan rubbery caulk on metal flashing (C1)	ND<1%	

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM

NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos

ND<1% Non-detected, less than 1%

NAD No asbestos detected

+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive

NOB material; result confirmed by TEM analyses

\* Analyzed by EPA/600/R-93/116 with gravimetric reduction

# TABLE 1 (...continued) BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS LITCHFIELD COURTHOUSE LITCHFIELD, CONNECTICUT

Sample No.	Sample Location	Homogeneous Material	% and Type Asbestos
22	Roof at intersection of flat & sloped roofs	Tan rubbery caulk on metal flashing (C1)	ND<1%
23	Basement office	White fire door insulation (FDI1)	30% chrysotile 10% amosite
24	Basement office	White fire door insulation (FDI1)	NA/PS

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos

ND<1% Non-detected, less than 1% NAD No asbestos detected

+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive

NOB material; result confirmed by TEM analyses

Analyzed by EPA/600/R-93/116 with gravimetric reduction

# TABLE 2 IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%) LITCHFIELD COURTHOUSE LITCHFIELD, CONNECTICUT

				3 2 1 45 T	
Material	Sampled- Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
Black tar-like sealant (TS1)	Sampled 10/13	Roof – large HVAC unit	Category I Non-friable	Miscellaneous	15 LF
Flack flashing tar (FL1)	Sampled 10/13	Roof – large HVAC unit base	Category I Non-friable	Miscellaneous	28 SF
Remnant black flashing tar (FL2)	Sampled 10/13	Roof at intersection of flat & sloped roofs	Category I Non-friable	Miscellaneous	30 SF
White fire door insulation (FDI1)	Sampled 10/13	Basement office	Category II Non-friable	Miscellaneous	4 EA

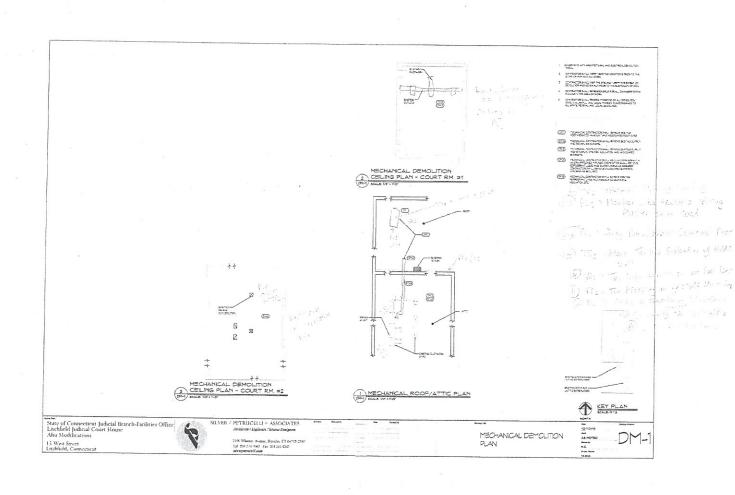
<sup>\*</sup> Roof tars have been completely exempted from OSHA Asbestos regulations and, as a Category I Non-friable material, do not need to be removed from a structure prior to renovation/demolition under EPA Asbestos NESHAP regulations and, so long as the materials are exterior to a structure and will remain Category I Non-friable materials during renovation/demolition, are not covered under the CTDPH Asbestos Abatement standards. In addition, as Category I Non-friable materials, the roof tars do not need to be disposed of as asbestos waste under the EPA Asbestos NESHAP regulations; however, the CTDEP special waste regulations would not allow the material to be disposed of as general construction waste within the State of Connecticut. Disposal of the roof tars as general construction waste (so long as the materials are not rendered into a state which would define them as regulated asbestos-containing materials (RACM), i.e., friable) is, however, allowed in other states such as Massachusetts.

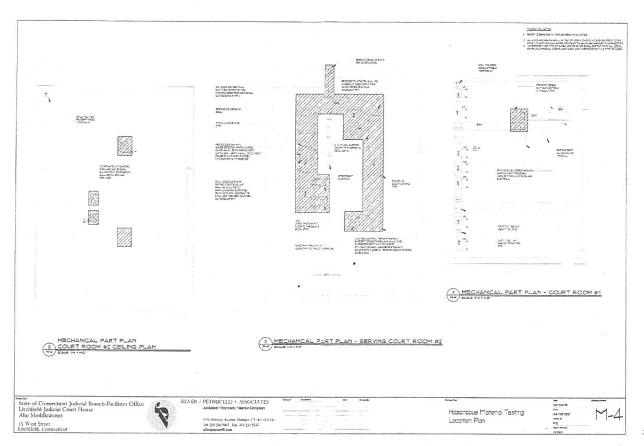
AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous NESHAP Categories = friable, category I non-friable or category II non-friable Friable = crumbled, pulverized or reduced to powder by hand pressure when dry Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing Category II Non-friable = all non-friable that is not Category I

# TABLE 3 CONFIRMED NON-ASBESTOS CONTAINING MATERIALS LITCHFIELD COURTHOUSE LITCHFIELD, CONNECTICUT

Material	General Location
Mortar-like texture ceiling plaster skim coat (PL1)	Courtroom 1
Grey basecoat plaster & associated white skim coat (PL2)	Courtroom 2 ceiling
Textured ceiling coating (TC1)	Courtroom 2 ceiling
Dark interior duct insulation (DI1)	Attic
Tar vapor barrier on concrete roof deck (VB1)	Roof
Tan rubbery caulk on metal flashing (C1)	Roof at intersection of flat & sloped roofs

APPENDIX A
SITE SKETCH





512VE BACUK 203-648-3201





SITE LOG

Page	
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Site / Station	Litchfield Courthouse	
	Litchfield, CT	

Month / Year 10/13
Project No 209752. accessor

Date	Time	Instrument and TRC ID	Comments	Initials
10/17/13	0700		JG onsite to meet w/ Steve P. (facility	K
			custodian) to look at split doors we arm	ĺ
			insulation, there are 4 doors	
	ଠୀ୫୦		JG has seen 4 doors, 2 are totally	
			exposed on the bottom of the top 1/2 of the	
			door, the other 2 nave a piece of wood	
			covering the acm insulation but there are	
			cracks & drilled holes where insul. is	
			visible JG will run 4 PCM samples to	
			check the background air, one sample but	
			main entrance blu doors to Rms 3-4 another	
			in hall blu doors to Rms 10+12, another in	
			Rm 12, and one more away from doors at	
			top of stairs to basement	
	0810		JG has started pump at top of basement	
			Stairs early as this is right outside of	
			Courtroom I where a jury trial is	
			scheduled to start at 0930	
	0630		JG has started remaining samples, Staffis	
			occupying building now and public to	
			begin entering by 0830	
	0930		JG collects sample at top of stairs to basement	
			+ preps to read	
	0940		JG has collected remaining 3 samples + will	
<u> </u>			prep = read	
	1015	/	All air samples below 0.01 f/cc JG will	
			notify D LePage (TRC) + clean -up equip+	
			De offsite	1/
	1045		JG offs, te	<u> </u>
	`			
		-		
			:	

# APPENDIX B LABORATORY AND INSPECTOR ACCREDITATIONS

0001171 FP \*\*PRSRT T6 0 1564 06035 JONATHAN D. GENTILE 65 LAKESIDE DR GRANBY CT 06035-1414

eleanda yan bereka an indo sana jasalan sa ra palaned sygna will mind koord verborde a leer bar cardinaan oo gan to Pean ing waxen Sahoulid Acoust va capys seeming absolu gan ing ar see a ling area oo a sharay ahaa sa cardina ah ah a waxe oo calla sa Sincerely navaminaanavangistana 

## INSTRUCTIONS:

- 1. Detach and sign each of the cards on this form.
- 2. Display the large card in a prominent place in your office or place of business.

  3. The wallet card is for you to carry on your person. If you do not wish to carry wallet card, place it in a secure place.

# STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT AS A 

ASBESTOS CONSULTANT-INSPECTOR

JONATHAN D. GENTILE

000603 000603 current through 1073 / 113 VALIDATION NO. 03-491521

SIGNATURE,

WALLET CARD

EMPLOYER'S COPY

NAME: JONATHAN D. GENTLE JUCENSE NO. CURRENT THROUGH OQO603 10/31/13

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

JONATHAN DI GENTLE

LICENSE NO CURRENT THROUGH

COOBGS 10/31/13

PROFESSION ... -ASBESTOS CONSULTANTANSPECTOR:

# CERTIFICATE OF ACHIEVEMENT

This certifies that

# Jonathan Gentile

Asbestos Site Inspector Refresher Training Asbestos Accreditation Under TSCA Title II has successfully completed the 40 CFR Part 763

conducted by

West Springfield, MA 01089 (413) 781-0070 73 William Franks Drive Cardno ATC

Regional Manager

SIAR-4414 Certificate Number

December 13, 2012
Examination Date

Date of Course Principal Instructor

December 13, 2013
Expiration Date

\*\*PRSRT T6 0 1584 06035 JONATHAN D. GENTILE 65 LAKESIDE DR GRANBY CT 06035-1414

**រ**្សីស្ត្រី នៅក្នុង ស្ត្រី Attached you will the your value to dice selecting too.
for the coming year, Should you have any questions county
your license/certificate renewal, please to not hestake to analogera og Segar Filosofie STEARTHWRITE OF SHELL THE COLLINES OF THE

## INSTRUCTIONS:

1. Detach and sign each of the cards on this form.

Display the large card in a prominent place in your office or place of business.
 The wallet card is for you to carry on your person, if you do not wish to carry

4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy

STATE OF CONNECTICUT:
OFPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT ASA
ASBESTOS CONSULTANT PROJECT MONITOR

JONATHAN D. GENTILE

000538 CURRENT THROUGH 10/31/13 VALIDATION NO. 03-491518

EMPLOYER'S COPY

STATE OF CONNECTICUT . DEPARTMENT OF PUBLIC HEALTH

JONATHAN D. GENTRE
LICENSE NO. CURRENT THROUGH
000538 10/31/13 VALIDATION NO. 03-491518

PROFESSION \*\*\*\*\* ASBESTOS CONSULTANT-PROJECT MONITOR

WALLET CARD

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

NAME

JONATHAND GENTLE
VALUATION NO. LICENSE NO. CURRENT PHROUGH
03-4915 | 8 000538 10/31/13
PROFESSION

ASBESTOS CONSULTANT PROJECT MONITOR

# CERTIFICATE OF ACHIEVEMENT

This certifies that

# Jonathan Gentile

has successfully completed the

8-Hour Asbestos Project Monitor Refresher Training Course

conducted by

West Springfield, MA 01089 (413) 781-0070 Cardno ATC 73 William Franks Drive

PMR-1651 Certificate Number

January 22, 2013 Date of Course

January 22, 2014 Expiration Date

January 22, 2013
Examination Date

# tate of Connecticut. Department of Public Health Approved Environmental Laboratory

THIS IS TO CERTURY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH THIS CERTIFICATE IS ISSUED IN THE NAME OF KAthleen Williamson

WHO HAS BEEN DESIGNATED

BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERIUD BY THIS CERTIFICATE OF December 2011 Windsor, CT 06095 TRC ENVIRONMENTAL CORPORATION SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED BULK IDENTIFICATION - PLM AIR-FIBER COUNTING - PCM DAY OF Erik Plimpton ASBESTOS December 31, 2013 21 Griffin Road North DATED AT HARTFORD, CONNECTICUT, THIS AND REGISTERED IN THE NAME OF THIS CERTIFICATE EXPIRES APPROVAL AS FOLLOWS: LOCATED AT

Registration

PH-0426

CHIEF, ENVIRONMENTAL HEALTH SECTION SUZANNE BLANCAFLOR, MS

National Institute of Standards and Technology United States Department of Commerce



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101424-0

TRC Environmental Corporation

Windsor, CT

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

# BULK ASBESTOS FIBER ANALYSIS

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025.2005.

2012-07-01 through 2013-06-30

Effective dates



AL DAGL

For the National Institute of Standards and Technology



# National Voluntary Laboratory Accreditation Program



# SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

**TRC Environmental Corporation** 

21 Griffin Road North Windsor, CT 06095

Ms. Kathleen Williamson

Phone: 860-298-6392 Fax: 860-298-6214

E-Mail: kwilliamson@trcsolutions.com URL: http://www.trcsolutions.com

BULK ASBESTOS FIBER ANALYSIS (PLM)

**NVLAP LAB CODE 101424-0** 

**NVLAP** Code

Designation / Description

18/A01

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

Samples

2012-07-01 through 2013-06-30

Effective dates

Mm R. M. Q

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)



Shaping the Future

Cardno ATC

290 Roberts Street Suite 301

www.cardno.com

www.cardnoatc.com

East Hartford, CT 06108

Phone +1 860 282 9924

+1 860 282 9826

December 7, 2012

Mr. Michael Sanders State of Connecticut Department of Construction Services 165 Capitol Avenue, Room 482 Hartford, CT 06106

Re: Limited Asbestos Inspection

Litchfield Courthouse - Restrooms and Lounge

Project JD-12-17 Building 25328

Cardno ATC Project 61.22573.0018 Task 18063

Dear Mr. Sanders:

Please find enclosed the Asbestos Inspection Report for the first floor restrooms and second floor lounge at the Litchfield Courthouse, 15 West Street, Litchfield, Connecticut.

Should you have any questions concerning this report, do not hesitate to contact me at 860 282-9924 ext. 1123.

Sincerely,

Cardno ATC

Edward P. Fennell Jr., P.E. Building Sciences Division Manager

for Cardno ATC

Direct Line +1 860-282-9924x1123 Email: edward.fennell@cardno.com

S/BldgScivClients/CTDPW/s1.22573.0018.oncall.services2012/Task18063LitchfieldCourthouseRestrooms/Documents/120712LOT AIR Litchfield Courthouse Restrooms and Lounge doex

Australia • Belgium • Canada • Columbia • Ecuador • Germany • Indonesia • Italy • Kenya • New Zealand • Papua New Guinea • Peru • Tanzania • United Arab Emirates • United Kingdom • United States • Operations in 85 countries