

Appendix B: Limited Hazardous Materials Survey

LIMITED HAZARDOUS MATERIALS SURVEY REPORT

For

**Assignment #3 Rehabilitate the Wastewater Treatment Plants at the Port Byron and Clifton Springs Service
Areas
in the Syracuse Division, MP 310.2 eastbound and MP 337.1 eastbound**

**Port Byron Travel Plaza Wastewater Treatment Plant
Mile Post 310.2
New York State Thruway
Port Byron, New York**

Beardsley #17011

March 8, 2017

Prepared for:

New York State Thruway Authority
200 Southern Blvd.
Albany, New York 12209



Beardsley Project # 17011
5789 Widewaters Parkway
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EXECUTIVE SUMMARY

Beardsley Architects + Engineers (Beardsley) has conducted a Limited Hazardous Materials Survey at the Port Byron Travel Plaza Wastewater Treatment Plant located in Port Byron, New York.

Purpose:

A Limited Hazardous Material Survey was conducted to identify hazardous building materials prior to a planned Wastewater Treatment Plant rehabilitation project.

Findings:

- Asbestos-containing gray panel boards were identified during the limited survey at the Primary and Secondary Clarifier. Removal of the gray panel boards must be conducted under asbestos abatement conditions.
- Lead-containing paints (<0.5% lead by weight) were identified at yard valves, blower piping, vents at the Trickling Filter, and the panelboard/motor supports at the Primary and Secondary Clarifier. Painted surfaces observed in good condition were not sampled as part of this survey and must be assumed to have detectable lead levels at concentrations above OSHA and EPA standards due to the age of the Wastewater Treatment Plant. OSHA worker protection regulations (29 CFR 1926.62) will apply to disturbances of these paints.
- No suspect polychlorinated biphenyls-containing (PCBs) caulks were observed within the work area during our December 29, 2016 site visit.
- Refer to Report Section 6.0 for recommendations associated with these findings.

1.0 INTRODUCTION

1.1 Purpose

In accordance with Assignment Number 3 of Term Contract No. D214307, Beardsley conducted a Limited Hazardous Material Survey at the Port Byron Travel Plaza Wastewater Treatment Plant located at mile post 310.2 (eastbound) of the New York State Thruway in Port Byron, New York. The scope of the Limited Hazardous Material Survey was limited to areas and materials affected by the planned Wastewater Treatment Plant rehabilitation project. The services included limited asbestos and lead-based paint surveys, along with the analysis of caulk for polychlorinated biphenyls.

1.2 Limitations

The survey was further limited as follows:

1. Only materials expected to be disturbed during the planned wastewater treatment plant upgrade project were sampled and analyzed as part of the survey.
2. No destructive sampling through structure floors, walls, or ceilings was conducted to limit destruction of finished materials.
3. No survey was completed on operational mechanical/electrical equipment.
4. Beardsley did not have access within active Wastewater Treatment Plant tanks and equipment. As such suspect hazardous materials, may exist in these locations.

2.0 ASBESTOS SURVEY

2.1 Purpose

The purpose of the asbestos survey was to determine whether or not the building or structure, or portion(s) thereof to be demolished, renovated, remodeled, or have repair work, contain asbestos-containing material (ACM). Refer to Report Section 1.2 Limitations. The survey was conducted in accordance with New York State Department of Labor (NYSDOL) Industrial Code Rule 56.

2.2 Classification

Asbestos-containing material (ACM) is defined by the United States Environmental Protection Agency (EPA) as a material containing greater than 1% asbestos by weight. The Occupational Safety and Health Administration (OSHA) defines asbestos-containing material as a material containing any detectable concentration of asbestos.

2.3 Field Sampling

The survey, conducted on December 29, 2016, consisted of bulk sampling and analysis of exposed suspect asbestos-containing materials observed on structures and equipment in areas affected by the planned project. A total of sixteen bulk samples of suspect asbestos-containing materials were collected from the project area. In general, the types of materials sampled consisted of:

PORT BYRON WWTP SAMPLED MATERIALS		
Homogeneous Material		General Material Locations
No. ^{1.}	Material	
1	Skim coat #1	Trickling Filter concrete structure
2	Skim coat #2	Sludge Holding Tank concrete structure
3	Gray Panelboard	Scum and sludge control equipment panelboard at Primary and Secondary Clarifier
4	Skim coat #3	Concrete structure at Primary and Secondary Clarifier
5	Skim coat #4	Concrete structure and Control Building
6	Black seal	Wet well access hatch within Control Building
Notes: ^{1.} Homogeneous material number corresponds to the first set of numbers in Sample ID on Chain of Custody provided in Report Attachment A. ^{2.} Refer to Figure 2 for sample locations.		

2.4 Conclusions

EMSL Analytical, Inc, a New York State Department of Health (NYSDOH) ELAP-accredited testing laboratory (NYSELAP #11606), conducted the laboratory analyses. Samples of friable materials were analyzed by the polarized light microscopy (PLM) method. Samples of non-friable organically-bound (NOB) materials were analyzed by both the PLM and transmission electron microscopy (TEM) methods. Following the laboratory analysis, materials containing greater than 1% asbestos by weight are classified as asbestos-containing material, and those materials containing less than 1% asbestos by weight are classified as trace-asbestos-containing materials. The following table summarizes the analytical results for material samples found to contain asbestos:

PORT BYRON: SUMMARY OF ANALYTICAL RESULTS				
Sample # ^{1.}	Sample Location	Homogenous Material	Analysis Method	Asbestos Content
3-PB-1	Primary Clarifier panelboard at scum and sludge collection control equipment	Gray panelboard	PLM	16.70% Chrysotile

PORT BYRON: SUMMARY OF ANALYTICAL RESULTS				
Sample # ¹	Sample Location	Homogenous Material	Analysis Method	Asbestos Content
Notes: ¹ . Sampled materials listed within the laboratory analytical results listed as “Positive Stop (Not Analyzed)” are duplicate samples of homogenous materials found to contain asbestos.				

No other sampled materials contained detectable asbestos. A copy of the Laboratory Analytical Report is provided in Report Attachment A.

Asbestos-containing materials affected by the planned Wastewater Treatment Plant rehabilitation project by material type are summarized below:

PORT BYRON: SUMMARY OF ASBESTOS-CONTAINING MATERIALS			
Material	Location	Approximate Quantity ²	Condition
Gray Panelboard	Primary and Secondary Clarifier at scum and sludge collection control equipment	8 SF (4 SF each)	Good

3.0 LEAD-BASED PAINT SURVEY

3.1 Purpose

The purpose of this Lead-Based Paint Survey was to identify the type and extent of all lead-based paint (LBP) in poor condition with separation from substrate materials within the project area prior to the Wastewater Treatment Plant rehabilitation project.

3.2 Classification

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) define lead-based paint as paint containing equal to or greater than 1 mg lead/cm² or 0.5% lead by weight. The Occupational Safety and Health Administration (OSHA) defines lead-containing materials as paint and other materials which contain any detectable concentration of lead.

3.3 Field Sampling

On December 29, 2016, Beardsley collected sixteen paint chip samples from structures and equipment for laboratory analysis of lead content. The sample locations consisted of a single paint layer unless noted otherwise. The sampled paints were observed in poor to fair condition.

Visually similar paints and substrates observed from area to area were assumed to have the same paint and were not resampled.

3.4 Conclusions

EMSL Analytical, Inc. performed laboratory analysis for lead content by flame atomic absorption spectrometry (AAS) in accordance with EPA Method SW 846 7000B. None of the paint chip samples contained detectable lead concentrations greater than the EPA action level of 0.5% lead by weight. Five of the sixteen sampled paints contained detectable concentrations of lead and are classified as lead-containing materials according to OSHA. Laboratory analytical results are summarized below:

PORT BYRON: SUMMARY OF LEAD-BASED PAINT ANALYTICAL RESULTS			
Sample #	Paint Color	Locations	Lead Concentration (by weight)
L-PB-1	Cream-White	Painted concrete structure at the Pump Station	<0.010%
L-PB-2	Cream-White	Painted concrete structure at the Comminutor	<0.010%
L-PB-3	Gray	Painted steel valve structures at Splitter Box, Sludge Holding Tank, and Equalization Basin	<0.010%
L-PB-4	White	Painted steel valve structures at Splitter Box, Sludge Holding Tank, and Equalization Basin	<0.010%
L-PB-5	Red	Painted steel valve cap at Splitter Box, Sludge Holding Tank, and Equalization Basin	0.012%
L-PB-6	Blue/Light Blue	Painted steel structure at Blower Motors	<0.010%
L-PB-7	Green/Yellow	Painted steel pipe from Blowers to Equalization Basin	0.074%
L-PB-8	Dark Green/Gray	Painted steel vents at the Trickling Filter	0.26%
L-PB-9	Beige/White	Painted concrete structure at the Trickling Filter	<0.010%
L-PB-10	Blue-Gray/Gray	Painted wood door at the Trickling Filter	<0.010%
L-PB-11	Gray-Blue/Light Gray	Painted asbestos-containing panel board at Primary and Secondary Clarifier	0.24%
L-PB-12	Green-Rust	Painted steel motor support at Primary and Secondary Clarifier	0.091%
L-PB-13	Dark Green/Light Green	Painted steel access hatch to wet well at Control Building	<0.010%
L-PB-14	Gray-White	Painted concrete wall at Control Building	<0.010%

PORT BYRON: SUMMARY OF LEAD-BASED PAINT ANALYTICAL RESULTS			
Sample #	Paint Color	Locations	Lead Concentration (by weight)
L-PB-15	Light green/White	Painted concrete wall at Control Building	<0.010%
L-PB-16	Black/Gray	Painted wood door to wet well at Control Building	<0.010%

A copy of the EMSL Laboratory Test Report is included in Report Attachment B.

Painted surfaces observed in good condition were not sampled as part of this survey and must be assumed to have detectable lead levels at concentrations above OSHA and EPA standards due to the age of the Wastewater Treatment Plant.

4.0 POLYCHLORINATED BIPHENYLS SURVEY

4.1 Purpose

The purpose of the polychlorinated biphenyls survey was to determine if polychlorinated biphenyl (PCBs) are present in exposed caulks used within the project area prior to the planned Wastewater Treatment Plant rehabilitation project. Refer to Section 1.2 Limitations.

4.2 Classification

According to the EPA, caulk containing PCBs at concentrations greater than or equal to 50 ppm is considered a hazardous material.

4.3 Field Sampling

No suspect polychlorinated biphenyls-containing caulks were observed within the work area during our December 29, 2016 site visit.

5.0 DISCLAIMER

Beardsley assumes no responsibility, liability, or risk for the use of this report for any purpose other than as a Limited Hazardous Material Survey. A Limited Hazardous Material Survey is not intended to be used as an abatement design document. Furthermore, due to the potential for concealed hazardous materials, this Report should not be construed to represent all hazardous materials present at the site, and all quantities/locations of hazardous materials identified in this report are approximate and shall be verified on-site.

6.0 RECOMMENDATIONS

6.1 Concealed Materials

There is a possibility that other concealed hazardous materials may be present. If any suspect hazardous material is encountered during future renovation/demolition activities, the renovation/demolition work should immediately stop. Prior to resuming the building renovation/demolition work, the suspect hazardous material should be sampled by a certified professional and submitted to a certified laboratory for analysis. Alternatively, they may be assumed to be hazardous and removed by a licensed abatement contractor and disposed of in accordance with all applicable regulations.

6.2 Lead-Based Paint

During handling of lead-containing paints, measures should be taken to prevent lead exposure to the public and the environment. OSHA Lead in Construction Standard (29 CFR Part 1926.62) worker protection procedures will apply to disturbance of lead-based paint.

We trust that this Limited Hazardous Material Survey meets your requirements for the Wastewater Treatment Plant Rehabilitation project. If you should have any questions or require additional information, please feel free to contact our office at your convenience.

Very truly yours,

BEARDSLEY ARCHITECTS + ENGINEERS



Douglas E. Porter, P.E.

NYSDOL Asbestos Inspector/Designer #08-20452

USEPA LBP Inspector #NY-I-128954-1

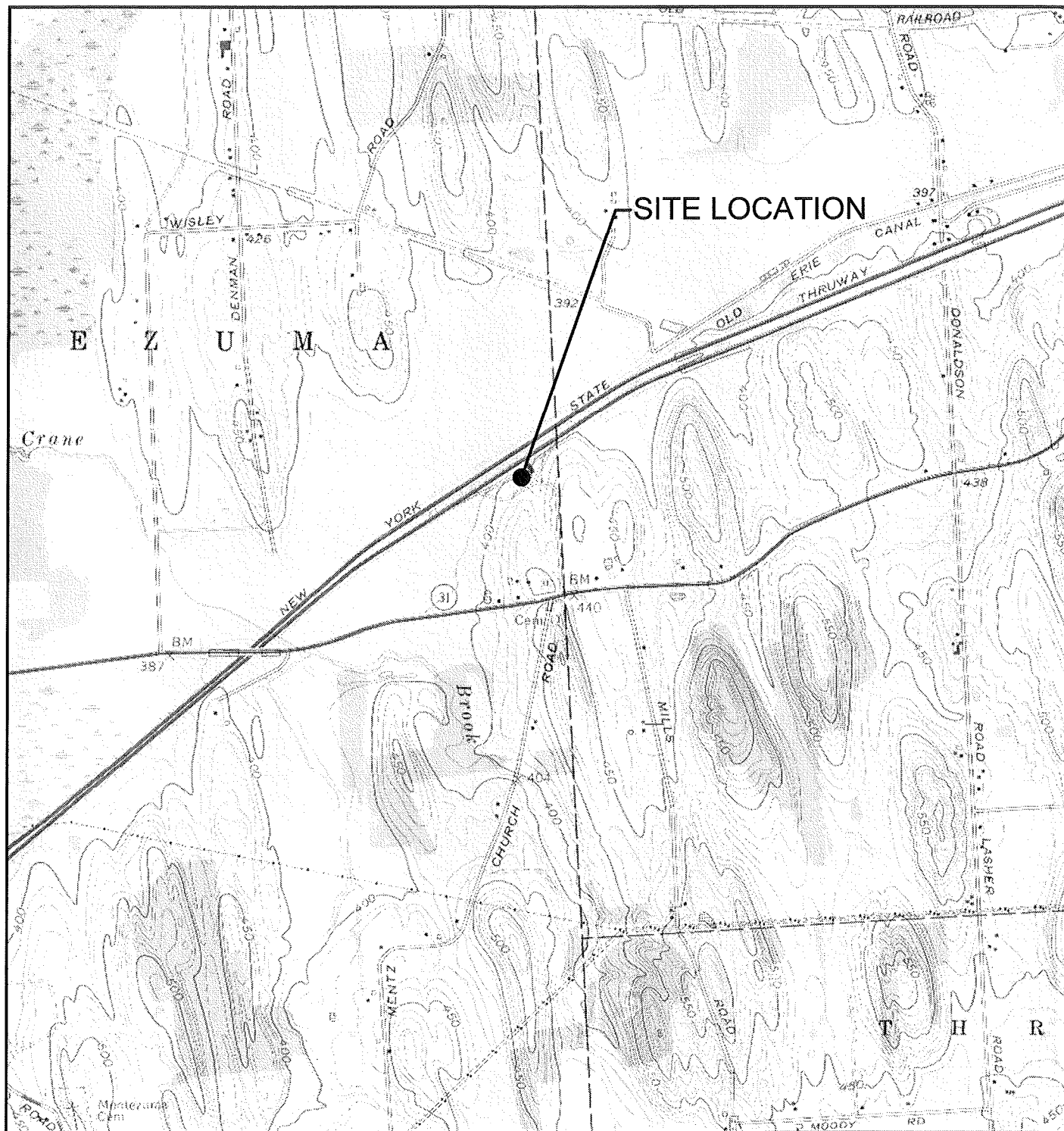


Carmen J. Lapine, P.E.

Principal

FIGURES

PLOTTED: 07/17/2017 2:32:24 PM



WARNING
Any alterations to this document not
conforming to section 7307, New York
State Education Law are strictly prohibited.

ENVIROMENTAL
LOCATION PLAN

FIG-1

Submission Name
March 2017

Project No: 17011

Drawn By: FJS

Designed By: DEP

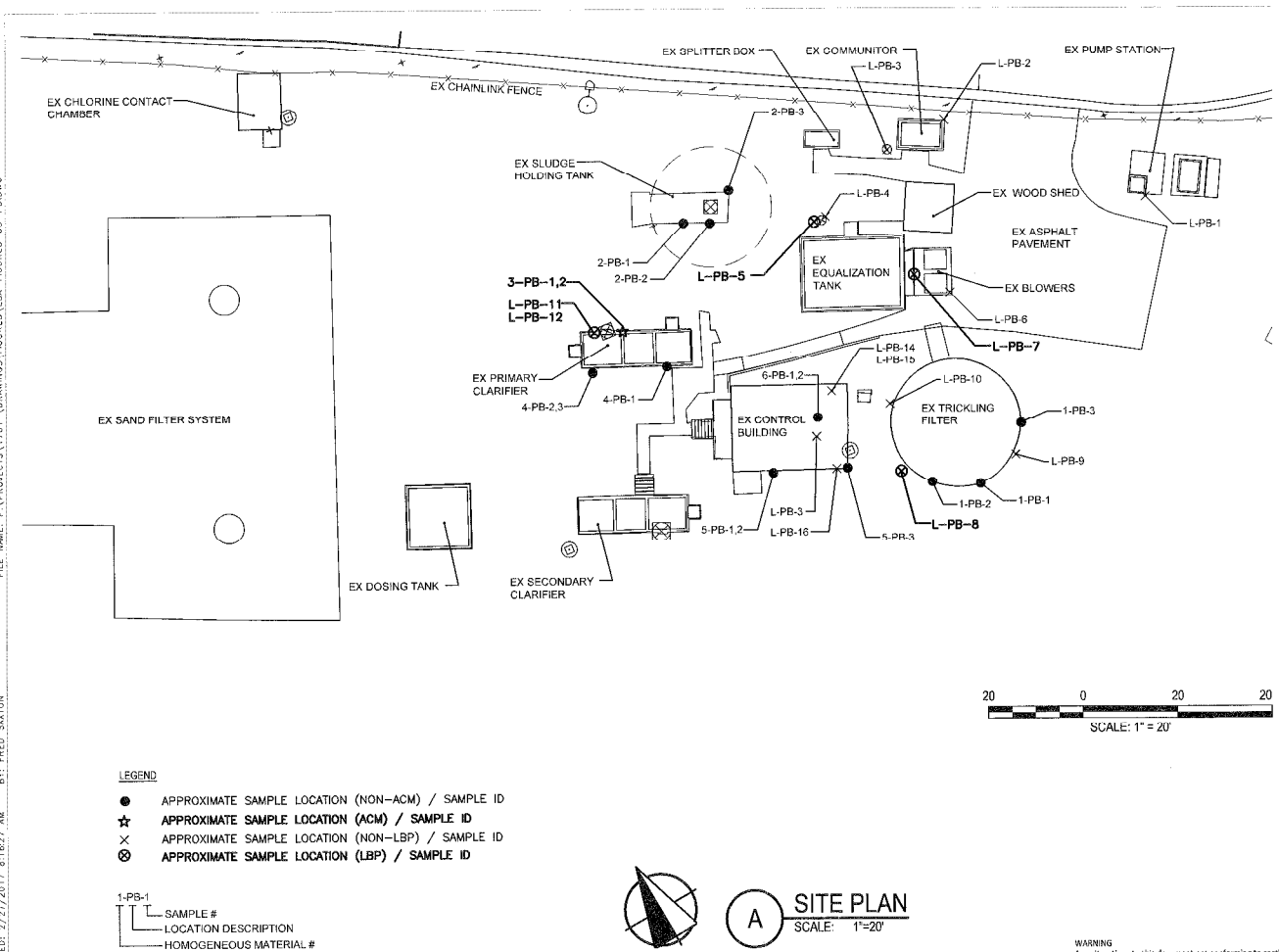
Reviewed By: DEP/CJL

Assignment #3 Rehabilitate the Wastewater
Treatment Plants at Clifton Springs and Port
Byron Service Areas in the Syracuse Division MP
337.10 Eastbound and MP 310.20 Eastbound

Port Byron Travel Plaza Wastewater Treatment
Plant

beardsley
architects + engineers

FILE NAME: P:\PROJECTS\17011\DRAWINGS\FIGURES\SA-FIGURES-CS-PB.DWG
PLOTTED: 2/27/2017 8:16:27 AM BY: FRED SAXTON



Submission Name
March 2017
Project No: 17011
Drawn By: FJS
Designed By: DEP
Reviewed By: DEP/CJL

Rehabilitate the Wastewater Treatment Plants at
Clifton Springs and Port Byron Service Areas in the Syracuse Division
MP 337.10 Eastbound and MP 310.20 Eastbound
PORT BYRON TRAVEL PLAZA WASTEWATER TREATMENT PLANT

no.	revision description	by	date
1	ENVIRONMENTAL		

SAMPLE LOCATION PLAN

FIG-2

WARNING
Any alterations to this document not conforming to section
7307, New York State Education Law are strictly prohibited.
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ATTACHMENT A

ASBESTOS ANALYSIS REPORTS

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

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

EMSL Order: 141700013

CustomerID: C&HE50

CustomerPO:

ProjectID:

Attn: **Douglas Porter**
Beardsley Design Associates
5789 Widewaters Parkway
De Witt, NY 13214

Phone: (315) 472-6980
 Fax: (315) 472-3523
 Received: 12/30/16 10:21 AM
 Analysis Date: 1/4/2017
 Collected: 12/29/2017

Project: NYSTA Port Byron / BDA17011

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos		Asbestos
			Fibrous	Non-Fibrous	
Sample ID 1-PB-1 141700013-0001		Description Homogeneity	Port Byron, trickling filter - skim coat #1 Homogeneous		
PLM NYS 198.1 Friable	1/4/2017	Tan/White	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID 1-PB-2 141700013-0002		Description Homogeneity	Port Byron, trickling filter - skim coat #1 Homogeneous		
PLM NYS 198.1 Friable	1/4/2017	Tan/White	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID 1-PB-3 141700013-0003		Description Homogeneity	Port Byron, trickling filter - skim coat #1 Homogeneous		
PLM NYS 198.1 Friable	1/4/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID 2-PB-1 141700013-0004		Description Homogeneity	Port Byron, sludge holding tank - skim coat #2 Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID 2-PB-2 141700013-0005		Description Homogeneity	Port Byron, sludge holding tank - skim coat #2 Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

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

EMSL Order: 141700013
CustomerID: C&HE50
CustomerPO:
ProjectID:

Test Report:Asbestos Analysis of Bulk Material

		Non Asbestos			Asbestos
Test		Color	Fibrous	Non-Fibrous	
Sample ID	2-PB-3	Description	Port Byron, sludge holding tank - skim coat #2		
	141700013-0006	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	3-PB-1	Description	Port Byron, primary clarifier - panel board gray		
	141700013-0007	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Brown/Gray	83.30% Non-fibrous (other)		16.70% Chrysotile
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	3-PB-2	Description	Port Byron, primary clarifier - panel board gray		
	141700013-0008	Homogeneity			
PLM NYS 198.1 Friable	1/5/2017				Positive Stop (Not Analyzed)
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	4-PB-1	Description	Port Byron, primary clarifier - skim coat #3		
	141700013-0009	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	4-PB-2	Description	Port Byron, primary clarifier - skim coat #3		
	141700013-0010	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	4-PB-3	Description	Port Byron, primary clarifier - skim coat #3		
	141700013-0011	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/Tan	100.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

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

EMSL Order: 141700013

CustomerID: C&HE50

CustomerPO:

ProjectID:

Test Report:Asbestos Analysis of Bulk Material

		Non Asbestos			Asbestos
Test		Color	Fibrous	Non-Fibrous	
Sample ID	5-PB-1	Description	Port Byron, control building - skim coat #4		
	141700013-0012	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/White	100.00% Non-fibrous (other)		
PLM NYS 198.6 VCM					
PLM NYS 198.6 NOB					
TEM NYS 198.4 NOB					
Sample ID	5-PB-2	Description	Port Byron, control building - skim coat #4		
	141700013-0013	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/White	100.00% Non-fibrous (other)		
PLM NYS 198.6 VCM					
PLM NYS 198.6 NOB					
TEM NYS 198.4 NOB					
Sample ID	5-PB-3	Description	Port Byron, control building - skim coat #4		
	141700013-0014	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	1/5/2017	Gray/White	100.00% Non-fibrous (other)		
PLM NYS 198.6 VCM					
PLM NYS 198.6 NOB					
TEM NYS 198.4 NOB					
Sample ID	6-PB-1	Description	Port Byron, access hatch - black seal		
	141700013-0015	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					
PLM NYS 198.6 VCM					
PLM NYS 198.6 NOB	1/5/2017	Black	Inconclusive: None Detected		
TEM NYS 198.4 NOB	1/6/2017	Black	None Detected		
Sample ID	6-PB-2	Description	Port Byron, access hatch - black seal		
	141700013-0016	Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					
PLM NYS 198.6 VCM					
PLM NYS 198.6 NOB	1/5/2017	Black	Inconclusive: None Detected		
TEM NYS 198.4 NOB	1/6/2017	Black	None Detected		

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

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

EMSL Order: 141700013

CustomerID: C&HE50

CustomerPO:

ProjectID:

Test Report:Asbestos Analysis of Bulk Material

Test	Color	Non Asbestos		Asbestos
		Fibrous	Non-Fibrous	
Analyst(s)				
Mark Tate				
Shauna Strnad				

Rhonda McGee, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.

All samples examined for the presence of vermiculite when analyzed via NYS 198.1.

-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (*Lab Use Only*):

490 Rowley Road

Depew, NY 14043

PHONE (716) 651-0030

FAX: (716) 651-0394

14/700012

[illegible]



141700013
ASBESTOS BULK SAMPLING

CHAIN OF CUSTODY FORM

Location: NYSTA Port Byron
 Collected by: Danaher E Porter
 Delivered by: _____
 Received by: [Signature] 1

BDA# 17011
 Date: 12/29/16
 Date: _____
 Date: 12/30/16

Notes: _____

Requested Turnaround Time: 1 week

No.	Sample ID	Sample Location	Material Sampled	Homogenous Material #
1.	1-PB-1	Port Byron Trickling Filter	Skim coat #1	1
2.	1-PB-2	" "	" "	1
3.	1-PB-3	" "	" "	1
4.	2-PB-1	" Sludge Holding Tank	Skim coat #2	2
5.	2-PB-2	" " "	" "	2
6.	2-PB-3	" " "	" "	2
7.	3-PB-1	" Primary Clarifier	Panel board Gray	3
8.	3-PB-2	" " "	" " "	3
9.	4-PB-1	" " "	Skim coat #3	4
10.	4-PB-2	" " "	" "	4
11.	4-PB-3	" " "	" "	4
12.	5-PB-1	" Control Building	Skim coat #4	5
13.	5-PB-2	" " "	" "	5
14.	5-PB-3	" " "	" "	5
15.	6-PB-1	" Access Hatch	Black seal	6
16.	6-PB-2	" " "	" "	6
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ATTACHMENT B

LEAD-BASED PAINT ANALYSIS REPORTS

**EMSL Analytical, Inc.**

528 Mineola Avenue, Carle Place, NY 11514

Phone/Fax: (516) 997-7251 / (516) 997-7528

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

EMSL Order: 061700039

CustomerID: C&HE50

CustomerPO:

ProjectID:

Attn: **Douglas Porter**
Beardsley Design Associates
5789 Widewaters Parkway
De Witt, NY 13214

Phone: (315) 472-6980
Fax: (315) 472-3523
Received: 12/30/16 9:22 AM
Collected: 12/29/2016

Project: **NYSTA-Port Byron/BDA17011****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
L-PB-1	061700039-0001	12/29/2016	1/5/2017	<0.010 % wt
Site: Pump Station Concrete Structure Desc: Cream-White				
L-PB-2	061700039-0002	12/29/2016	1/5/2017	<0.010 % wt
Site: Communitor Concrete Structure Desc: Cream-White				
L-PB-3	061700039-0003	12/29/2016	1/5/2017	<0.010 % wt
Site: Valve Steel Structure Desc: Gray				
L-PB-4	061700039-0004	12/29/2016	1/5/2017	<0.010 % wt
Site: Valve Structure Desc: White				
L-PB-5	061700039-0005	12/29/2016	1/5/2017	0.012 % wt
Site: Steel Valve CAD Desc: Red				
L-PB-6	061700039-0006	12/29/2016	1/5/2017	<0.010 % wt
Site: Blower Motor Supports Desc: Blue/Lt. Blue				
L-PB-7	061700039-0007	12/29/2016	1/5/2017	0.074 % wt
Site: Blower Pipe to EQ Structure Desc: Green/Yellow				
L-PB-8	061700039-0008	12/29/2016	1/5/2017	0.26 % wt
Site: Vents at Trickling Filter Desc: Darkgreen/Gray				
L-PB-9	061700039-0009	12/29/2016	1/5/2017	<0.010 % wt
Site: Trickling Filter Concrete Structure Desc: Beige/White				
L-PB-10	061700039-0010	12/29/2016	1/5/2017	<0.010 % wt
Site: Trickling Filter Wood Door Desc: Blue-Gray/Gray				
L-PB-11	061700039-0011	12/29/2016	1/5/2017	0.24 % wt
Site: Panel Board at Primary Clarifier Desc: Gray-Blue/Lt. Gray				

Michelle McGowan, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY Lab ID 102344 is accredited by the AIHA-LAP, LLC in the Environmental Lead accreditation program for Lead in Paint, CT PH-0249, NYS ELAP 11469

Initial report from 01/05/2017 20:50:50

**EMSL Analytical, Inc.**

528 Mineola Avenue, Carle Place, NY 11514

Phone/Fax: (516) 997-7251 / (516) 997-7528

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

EMSL Order: 061700039

CustomerID: C&HE50

CustomerPO:

ProjectID:

Attn: **Douglas Porter**
Beardsley Design Associates
5789 Widewaters Parkway
De Witt, NY 13214

Phone: (315) 472-6980
Fax: (315) 472-3523
Received: 12/30/16 9:22 AM
Collected: 12/29/2016

Project: **NYSTA-Port Byron/BDA17011****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
L-PB-12	061700039-0012	12/29/2016	1/5/2017	0.091 % wt
Site: Motor Support at Primary Clarifier Desc: Green/Rust				
L-PB-13	061700039-0013	12/29/2016	1/5/2017	<0.010 % wt
Site: Control Building Steel Access Hatch Desc: Dark Green/Light Green				
L-PB-14	061700039-0014	12/29/2016	1/5/2017	<0.010 % wt
Site: Control Building Concrete Wall Desc: Gray-White				
L-PB-15	061700039-0015	12/29/2016	1/5/2017	<0.010 % wt
Site: Control Building Concrete Wall Desc: Lt. Green/White				
L-PB-16	061700039-0016	12/29/2016	1/5/2017	<0.010 % wt
Site: Control Wet Wellwood Door Desc: Black/Gray				

Michelle McGowan, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY Lab ID 102344 is accredited by the AIHA-LAP, LLC in the Environmental Lead accreditation program for Lead in Paint, CT PH-0249, NYS ELAP 11469

Initial report from 01/05/2017 20:50:50



Lead (Pb) Chain of Custody

EMSL Order ID (Use Only):

061700039

Carle Place, NY 11514

PHONE: (516) 997-7251

FAX: (516) 997-7528

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Company: Beardsley Design Associates		EMSL-Bill to: ☐ Different ☒ Same If Bill to is Different note Instructions in Comments**	
Street: 5789 Widewaters Parkway		Third Party Billing requires written authorization from third party	
City: De Witt	State/Province: NY	Zip/Postal Code: 13214	Country: United States
Report To (Name): Douglas Porter		Telephone #: 315-472-6980	
Email Address: dporter@beardsley.com		Fax #: 315-472-3523	Purchase Order:
Project Name/Number: NYSTA - Port Byron/BDA17011		Please Provide Results: ☐ FAX ☒ E-mail ☐ Mail	
U.S. State Samples Taken: NY		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt	
Turnaround Time (TAT) Options* - Please Check			
☐ 3 Hour	☐ 6 Hour	☐ 24 Hour	☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide			
Matrix	Method	Instrument	Reporting Limit
Chips ☒ % by wt. ☐ mg/cm ² ☐ ppm	SW846-7000B	Flame Atomic Absorption	0.01%
Air ☒	NIOSH 7082	Flame Atomic Absorption	4 µg/filter
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter
Wipe* ☐ ASTM ☐ non ASTM ☐ *If no box is checked, non-ASTM Wipe is assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe
	SW846-6010B or C	ICP-AES	1.0 µg/wipe
	SW846-7000B/7010	Graphite Furnace AA	0.075 µg/wipe
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)
	SW846-1131/SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)
	SW846-7010	Graphite Furnace AA	0.3 mg/kg (ppm)
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)
Wastewater Unpreserved ☐ Preserved with HNO ₃ pH < 2 ☐	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.7	ICP-AES	0.020 mg/L (ppm)
Drinking Water Unpreserved ☐ Preserved with HNO ₃ pH < 2 ☐	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)
TSP/SPM Filter	40 CFR Part 50	ICP-AES	12 µg/filter
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter
Other:			
Name of Sampler: Doug Porter		Signature of Sampler: Douglas Porter	
Sample #	Location	Volume/Area color	Date/Time Sampled
L-PB-1	PUMP Station concrete structure	cream-white	12/29/16 - PM
L-PB-2	Communitor concrete structure	cream-white	12/29/16 - PM
L-PB-3	Valve steel structure	Gray	12/29/16 - PM
L-PB-4	whi Valve structure	white	12/29/16 - PM
L-PB-5	Steel valve cap	Red	12/29/16 - PM
Client Sample #'s		Total # of Samples: 16	
Relinquished (Client): Douglas Porter	Date: 12/29/16	Time: 4:05 PM	
Received (Lab):	Date: 12-30-16	Time: 9:22 AM	
Comments:			

Pb-DL 1/5/17



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

LEAD (Pb) CHAIN OF CUSTODY

EMSL ORDER D (Use Only)

06 1700039

EMSL Analytical, Inc.
528 Mineola Avenue

Carle Place, NY 11514

PHONE: (516) 997-7251

FAX: (516) 997-7528

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	~~Volume/Area~~ Color	Date/Time Sampled
L-PB-6	Blower motor supports	Blue/Lt. blue	12/29/16 - PM
L-PB-7	Blower pipe to EQ structure	Green/yellow	12/29/16 - PM
L-PB-8	Vents at Trickling Filter	Dark green/gray	12/29/16 - PM
L-PB-9	Trickling Filter concrete structure	Beige/white	12/29/16 - PM
L-PB-10	Trickling Filter concrete wood door	Blue-gray/gray	12/29/16 - PM
L-PB-11	Panel Board at Primary Clarifier	Gray-Blue/Lt. gray	12/29/16 - PM
L-PB-12	Motor support at Primary Clarifier	Green/rust	12/29/16 - PM
L-PB-13	Control Building steel access hatch	Dark green/light green	12/29/16 - PM
L-PB-14	" " concrete wall	Gray-white	12/29/16 - PM
L-PB-15	" " " "	Lt. green/white	12/29/16 - PM
L-PB-16	" " wet well wood door	Black/gray	12/29/16 - PM
Comments/Special Instructions:			
Pb-DL 1/5/17			

2016 DEC 30 AM 9:23

ATTACHMENT C

RESUMES & CERTIFICATIONS OF KEY INDIVIDUALS

New York State – Department of Labor

Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

Beardsley Design Associates, Architecture, Engineering
and Landscape Architecture, D. P.C.

64 South Street
Auburn, NY 13021

FILE NUMBER: 01-0566
LICENSE NUMBER: 29269
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 03/16/2016
EXPIRATION DATE: 03/31/2017

Duly Authorized Representative – Richard C Elliott:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.



Eileen M. Franko, Director
For the Commissioner of Labor

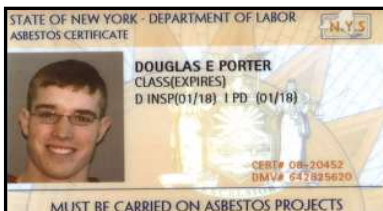
Education: BS Environmental Resources Engineering, SUNY Environmental Science and Forestry, 2008

Employment: 8+ years with Beardsley

Active Registrations: NYS Professional Engineer 2013, #092623
 NYSDOL Asbestos Building Inspector/Project Designer (#08-20452)
 EPA Lead-Based Paint Inspector #NY-I-128954-1/#R2T-I-128954-1
 OSHA Hazardous Waste Operations Training Certification (HAZWOPER)

Memberships: NYS Commercial Association of REALTORS (NYSCAR)

Experience: Mr. Porter is responsible for the technical aspects of the firm's environmental services, including assessments, subsurface investigations, groundwater monitoring, hazardous material surveys, and remediation design.

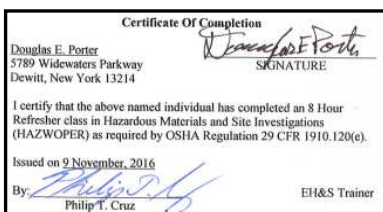
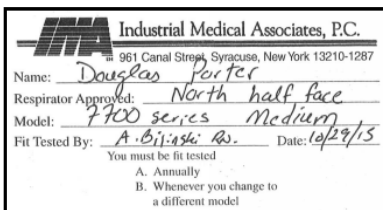


Hazardous Building Material Surveys Various

Mr. Porter has performed over 100 Hazardous Material Surveys that include asbestos, lead, PCBs, radon, and mold for projects located throughout New York State. Surveys were performed for vacant and occupied residential, commercial, multi-tenant housing, and State/Federally owned facilities.

A partial list of Hazardous Material Surveys that Mr. Porter has completed includes:

- AFRL: Demolish Building 102; Rome, New York
- AFRL: Demolish Building 104; Rome, New York
- AFRL: Mail Room Renovations; Rome New York
- NYS OGS: Building 58 Fire Alarm System; Newark, New York
- NYS OGS: Boiler Replacement; Batavia, New York
- NYS OGS: Replace Cell Backs; Auburn, New York
- Private: Commercial Bank Renovations; Fayetteville, New York
- Private: Vacant Commercial Building Renovations; Auburn, New York
- Private: Vacant Residential Building Demolition; Auburn, New York
- VA: Building 17 Renovations; Bath, New York
- VA: Replace Condensate Line; Canandaigua, New York
- VA: Life Safety Circuits Upgrade; Syracuse, New York
- WFLBOCES: Flint Campus Capital Improvements; Stanley, New York
- WFLBOCES: Boiler Replacement; Newark, New York



**Pre-Demolition Hazardous Material Survey and Abatement Design
Rome, New York**

Prior to the scheduled demolition of a 35,000 square foot former air force research and development building, Mr. Porter completed a comprehensive review of the building's environmental history. During the review potential concerns were identified and included asbestos, lead, PCBs, ionizing radiation, and building component hazards (drywells, mercury switches, etc.). Subsequent to the review, Mr. Porter completed a comprehensive Hazardous Material Survey at the site to identify asbestos, lead, and PCB-containing materials that would require abatement prior to the building's demolition. Additionally, Mr. Porter assisted in overseeing a Radium-226 Characterization Survey which was conducted in accordance with MARS-SIM standards. The purpose of the survey was to identify locations of residual radium contamination associated with the facility's past luminous painting operations. At the conclusion of the investigations Mr. Porter assisted with the develop of abatement plans, specifications, and cost estimates. Special considerations of hazardous materials abatement were noted on abatement plans to meet the client's goal of recycling 50% of demolished building materials.

**Limited Hazardous Material Survey and Abatement Design
Stanley, New York**

As part of a planned capital improvements project, Mr. Porter conducted a hazardous material survey of limited portions of an educational building. The survey was completed to identify asbestos, lead, and PCB-containing materials that would be disturbed during renovation activities and subsequently require abatement. To reduce the cost of the survey, Mr. Porter worked directly with project architects/engineers to define the extents of the project area. During the survey an incidental disturbance of a suspect asbestos-containing material was observed. Mr. Porter assisted with the development of an immediate plan to characterize the affected area and restrict access. A site specific variance was developed and approved by the NYSDOL to allow the continued monitoring of the disturbance and delay abatement/cleanup of the asbestos-containing material until planned renovations. Mr. Porter prepared abatement specifications, estimates, and detailed drawings for the project.

**Boiler Room Hazardous Material Survey and Abatement Design
Batavia, New York**

Prior to scheduled boiler system replacement of a 17,000 square foot vehicle maintenance building, Mr. Porter conducted a hazardous material survey. The survey was completed to identify asbestos, lead, and PCB-containing materials that would be disturbed during renovation activities and subsequently require abatement. Based on the results of the survey, Mr. Porter prepared abatement specifications, estimates, and detailed drawings for the project.

**Roof Asbestos Survey and Abatement Design
Trumansburg, New York**

Mr. Porter served as the Asbestos Building Inspector and Project Designer for this project. Prior to the scheduled roof replacement of two educational facilities, Mr. Porter conducted an asbestos survey to identify the types, locations, conditions, and approximate quantities of asbestos-containing materials before the commencement of renovation activities. Based on the results of the survey, Mr. Porter prepared asbestos abatement specifications, estimate, and drawings. The drawings included scaled roof plans and notes in order to specify the asbestos abatement work required.

**Limited Asbestos and Lead-Based Paint Surveys
Syracuse, New York**

Mr. Porter conducted a pre-survey inspection of the building to determine the scope of the project and served as lead Asbestos Building Inspector. Prior to substantial building renovations of the 24,000 square foot commercial office building, Mr. Porter collected nearly 250 bulk samples of suspect materials in accordance with NYS Code Rule 56 sampling requirements. Sampling activities included both interior and exterior portions of the building. The limited lead-based paint survey identified paints in poor condition containing lead concentrations above OSHA and EPA standards.

**Pre-Demolition Asbestos Surveys
Auburn, New York**

Mr. Porter has performed asbestos surveys of eight vacant residential buildings in the City of Auburn that were scheduled to be demolished. The purpose of the asbestos surveys was to identify the types, locations, conditions, and approximate quantities of asbestos-containing materials before the commencement of demolition activities. The asbestos surveys included intrusive sampling methods which involved penetrating walls, ceilings, and floors in preparation for the demolition operations at the property.

**Incidental Disturbance Assessment
Auburn, New York**

Mr. Porter worked with the building's current Owner, a not-for-profit organization committed to the redevelopment of a Theater listed on the National Register of Historic Places, to determine the extent of asbestos containing debris within the building. The severe degradation of interior finishes and thermal system insulation contributed to the spread of asbestos fibers within the building. Through the use of bulk, swipe, and air sampling, Mr. Porter documented the extent of the incidental disturbance. Comprehensive abatement cost estimates were developed to plan for clean-up of the building and assist the Owner in obtaining funding for the clean-up through grant submissions. A phased cleanup methodology was developed to allow for the building to be renovated in stages based on the amount of funding available.