



Draft

westonandsampson.com

98 South Main Street, Suite 2
Waterbury, VT 05676
tel: 802.244.5051

REPORT

May 23, 2019

Analysis of Brownfields Cleanup
Alternatives
GOODYEAR INDUSTRIAL CAMPUS
(SMS# 2000-2797)
28 River Street
Windsor, Vermont

Prepared for:
Southern Windsor County Regional Planning
Commission

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	i
LIST OF FIGURES	ii
LIST OF TABLES	iii
LIST OF APPENDICES	iv
1.0 INTRODUCTION AND BACKGROUND	1-1
1.1 Introduction	1-1
1.2 Site Description	1-1
1.3 Previous Site Use and Previous Cleanup/Contamination	1-1
1.4 Project Goals	1-2
2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS	2-1
2.1 Cleanup Oversight Responsibility	2-1
2.2 Cleanup Standards	2-1
2.3 Laws and Regulations Applicable to the Cleanup	2-1
2.3.1 Asbestos	2-1
3.0 EVALUATION OF CLEANUP ALTERNATIVES	3-1
3.1 Cleanup Alternatives Considered	3-1
3.1.1 Alternative #1 – “No Action”	3-1
3.1.2 Alternative #2 – Abatement / Disposal of Hazardous Building Materials	3-1
4.0 COMPARISON OF CLEANUP ALTERNATIVES	4-1
4.1 Alternative #1 – “No Action”	4-1
4.2 Alternative #2 – Abatement / Disposal of Hazardous Building Materials	4-1
4.2.1 Effectiveness	4-1
4.2.2 Feasibility and Ease of Implementation	4-1
4.2.3 Risk Reduction and Associated Benefits	4-1
4.2.4 Cost Effectiveness	4-1
5.0 RECOMMENDED CLEANUP ALTERNATIVE	5-1

LIST OF FIGURES

Figure 1Locus Map
Figure 2Site Plan

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

This Analysis of Brownfields Cleanup Alternatives (ABCA) is for a portion of the former Goodyear Industrial Campus Site SMS#200-2797 (the “Site”) located at 28 River Street in Windsor, Vermont (**Figures 1 and 2**). This ABCA was prepared by Weston & Sampson Engineers, Inc. (Weston & Sampson) on behalf of Southern Windsor County Regional Planning Commission (SWCRPC).

The Windsor Investment Corporation (WIC), with support from Springfield Regional Development Corporation, is under contract to purchase the Site. They are proposing to lease one portion of the Site, the concrete slab area (the “project area”), for a solar array development. As part of redevelopment efforts, WIC intends to abate several piles of asbestos containing material (ACM) present in building demolition debris within the project area. The cleanup of this Site will eliminate the threat to sensitive receptors posed by these hazardous building materials.

1.2 Site Description

The Site, currently owned by Connecticut River Development Corporation (CRDC), is located at 28 River Street and occupies approximately 126,000 square feet (sq. ft.). The Site currently consists of five buildings: the Quonset Building; the Maintenance Building; the Bateman Building, the Banbury Building, and Hills Garage. All but the Banbury Building have tenants; it is presently unfit for occupation. There is a large concrete slab remaining in the center of the parcel left following the demolition of a portion of the rubber manufacturing plant previously occupying the Site. This is the location of the proposed solar array. This ABCA addresses cleanup activities to be completed in the project area in support of the installation of a solar array. Any remaining environmental conditions on other portions of this Site will not be addressed with the selected cleanup action as described in this ABCA.

Current uses by tenants include woodworking, light manufacturing, storage, and warehousing. The area surrounding the Site is developed for residential, commercial, and light industrial uses.

1.3 Previous Site Use and Previous Cleanup/Contamination

The Site was historically used for rubber manufacture by several entities including Goodyear Tire and Rubber Company. Several buildings have been demolished in the past including the large manufacturing building (aka Building 1 or Sawtooth Building) that formerly occupied the center of the Site. Manufacturing use dates back to at least 1917.

The former use of the Site for manufacturing led to several environmental issues first identified in 1995. These environmental issues were summarized recently in a September 2017 Phase I Environmental Site Assessment (Phase I ESA) and include the following:

- 1.) Five environmental conditions associated with the former use of the property for industrial manufacturing including:
 - o Contaminants present on-Site from the former use of waste coolant & hydraulic oil management system (AOI#2),

- Former raw products storage (AOI#6),
 - The presence of light non-aqueous phase liquid from the former manufacturing process (AOI#7),
 - The presence of polycyclic aromatic hydrocarbons (PAHs) associated with the former use of transformers (AOI#8), and
 - A plume of chlorinated volatile organic compounds (VOCs) in groundwater (AOI#10).
- 2.) The presence of on Site groundwater contamination originating from two off-Site sources includes chlorinated VOCs beneath the northern part of the Site and petroleum impacted groundwater along the western Site boundary.
 - 3.) The presence of suspect asbestos containing waste piles (roofing & brick/mortar) on Site.
 - 4.) The presence of 14,000-16,000 gallons of product in the 100,000-gal. above ground storage tank on Site presents a material threat of the release.
 - 5.) The presence of Vapor Encroachment Condition to Site buildings located with defined critical distances.

Several Site investigations were completed in the late 1990s and early 2000s that culminated in a Corrective Action Plan (CAP) that was developed in 2013. Implementation activities followed, and in 2017 a Remedial Action Closure Report was submitted to the VTDEC. With the exception of the presence of suspect ACM, the VTDEC has indicated that the RECs above have been investigated and addressed.

There are several areas of suspect ACM—this ABCA deals only with the ACM present in the proposed project area on the concrete slab (**Figure 2**).

1.4 Project Goals

WIC has established plans to redevelop this portion of the Site with a solar array. The cleanup of the project area will eliminate exposure of Site users to ACM from the stockpiles on the concrete slab and will utilize a formerly abandoned portion of the Site.

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx

2.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

2.1 Cleanup Oversight Responsibility

The Connecticut River Development Corporation (CRDC), as the current property owner is designated as the Potentially Responsible Party (PRP). Abatement activities will be overseen by a Vermont Licensed Asbestos Abatement contractor.

2.2 Cleanup Standards

Cleanup standards are limited to the requirements for asbestos abatement. All ACM will be removed from the project area in accordance with the laws of the State of Vermont.

2.3 Laws and Regulations Applicable to the Cleanup

Laws and regulations that are applicable to this cleanup include the Federal Small Business Liability Relief and Brownfields Revitalization Act, and the Federal Davis-Bacon Act. Federal, state, and local laws regarding procurement of contractors to conduct the cleanup will be followed.

All applicable permits and documentation (e.g., Inspectional Services/Building Permit, Dig Safe, soil transport/disposal manifests) will be obtained prior to the work commencing, and all work will be conducted in accordance with the conditions for approval. Pertinent laws and regulations applicable to the Site COC (asbestos) are presented below.

2.3.1 Asbestos

Asbestos is regulated by the Asbestos Hazard Emergency Response Act Program (AHERA), the Toxic Substances Control Act (TSCA), the Clean Air Act (CAA), and Vermont regulations. Asbestos abatement is regulated by the Vermont Regulations for Asbestos Control, V.S.A. Title 18, Chapter 26 (VRAC).

To protect asbestos abatement workers, all asbestos abatement work also must be performed in accordance with Occupational Safety and Health Administration (OSHA) asbestos regulations as promulgated in Title 29 of the Code of Federal Regulations (29CFR), Section 1926.1101. All asbestos-containing materials must be handled and disposed of in an approved manner (USEPA, 2006a; Asbestos/NESHAP Regulated Asbestos-Containing Materials Guidance).

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx

3.0 EVALUATION OF CLEANUP ALTERNATIVES

3.1 Cleanup Alternatives Considered

To be considered effective, the remedial alternative selected for the Site needs to minimize the potential for human exposure to ACM. Since the ACM is currently in stockpiles and readily accessible to any users or trespassers on the Site, there are only two remedial alternatives evaluated to address the identified contaminants of concern (COCs):

- Alternative #1 - No Action Alternative
- Alternative #2 – Abatement / Disposal

These remedial alternatives were evaluated for implementation at the Site and are further discussed in the following sections.

3.1.1 *Alternative #1 – “No Action”*

A “No Action” alternative signifies that no remediation activities would be implemented at the Site. The “No Action” alternative does not include a means for mitigating or eliminating potential exposure to building materials during and following redevelopment. Therefore, the potential for exposure continues to exist for future residents, commercial and Site workers, and visitors. This alternative does not meet the objectives of the project.

3.1.2 *Alternative #2 – Abatement / Disposal of Hazardous Building Materials*

This alternative would include abatement by removal and disposal of all ACM by a certified asbestos abatement contractor. This alternative would protect sensitive Site receptors and support reuse of this portion of the Site.

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx

4.0 COMPARISON OF CLEANUP ALTERNATIVES

The effectiveness, implementability, and cost of each alternative must be considered prior to selecting a recommended cleanup alternative.

4.1 Alternative #1 – “No Action”

The “No Action” alternative involves no remedial activities at the Site. This alternative is not effective in controlling the release of contaminants or achieving the goals of the project. This alternative was not considered further.

4.2 Alternative #2 – Abatement / Disposal of Hazardous Building Materials

4.2.1 Effectiveness

Under this alternative, ACM would be removed and disposed of at a licensed facility. This method would eliminate the toxicity, mobility, and volume of ACM and permanently prevent exposure to ACM by future receptors. This alternative permanently removes the contaminant source and allows for Site redevelopment.

4.2.2 Feasibility and Ease of Implementation

This alternative utilizes standard and proven remedial abatement techniques to remove COCs. Numerous area contractors are experienced in the necessary ACM abatement techniques; therefore, this alternative is technically feasible and is generally easily implementable.

4.2.3 Risk Reduction and Associated Benefits

This alternative fulfills the requirement for protection of human health and the environmental by permanently eliminating the risk of exposure to COCs.

4.2.4 Cost Effectiveness

The approximate cost to abate and remove the ACM is estimated to range between \$300,000-\$450,000.

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx

5.0 RECOMMENDED CLEANUP ALTERNATIVE

The recommended cleanup alternative is abatement/disposal of ACM. The ACM will be abated by a licensed contractor. Cleanup of the ACM-containing stockpiles is expected to be conducted over six to eight weeks. The cost of the asbestos abatement and removal is estimated to range between \$300,000-\$450,000.

\\wse03.local\WSE\Projects\VT\SWCRPC VT\Goodyear\2. Deliverables\2019_05 ABCA\Report Parts\Text_ABCA-Goodyear.docx