



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

**CONTAINS ENFORCEMENT-SENSITIVE INFORMATION**

**MEMORANDUM**

**DATE:** August 24, 2005

**SUBJ:** Request for a Removal Action at the St. Albans Gas & Light Site,  
St. Albans, Vermont - **Action Memorandum**

**FROM:** Wing H. Chau, On-Scene Coordinator  
Emergency Response and Removal Section II

**THRU:** Steven R. Novick, Chief  
Emergency Response and Removal Section II

Arthur V. Johnson III, Chief  
Emergency Planning & Response Branch

**TO:** Susan Studlien, Director  
Office of Site Remediation and Restoration

**I. PURPOSE**

The purpose of this Action Memorandum is to request and document approval of the proposed removal action at the St. Albans Gas & Light Site, (the Site), which is located at 38 & 40 Maple Street in St. Albans, Franklin County, Vermont. Hazardous substances present in surficial soils at the Site, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to pose a threat to human health and the environment. There are no nationally significant or precedent-setting issues associated with this Site, and there has been no use of the OSC's \$200,000 warrant authority.

**II. SITE CONDITIONS AND BACKGROUND**

**CERCLIS ID# :** VTD988366688  
**SITE ID# :** 01CT  
**CATEGORY :** Time Critical

## **A. Site Description**

### **1. Removal site evaluation**

The EPA's Technical Support & Site Assessment Section is currently evaluating the St. Albans Gas & Light (Former) (SAGLF) property to identify releases or threatened releases of hazardous substances. The SAGLF property is approximately 1.3 acres in size and contains three two-story apartment buildings. The SAGLF property is abutted to the north by two adjacent residential properties (Nos. 38 and 40 Maple Street), which were part of the original property owned by the St. Albans Gas and Light Company prior to being developed and subdivided. Under an Extended Site Inspection conducted in the fall of 2004, EPA identified elevated levels of polycyclic aromatic hydrocarbons (PAHs) in the soils of the Nos. 38 and 40 Maple Street properties. As a result of their findings, this Site was referred to EPA's Emergency Planning and Response Branch (EPRB) in January 2005 for evaluation to determine whether site conditions warranted a time-critical removal action.

On May 10, 2005, EPRB initiated a preliminary assessment and site investigation (PA/SI) at this Site. EPA, the Agency for Toxic Substances and Disease Registry (ATSDR) regional representative, and EPA's Superfund Technical Assessment and Response Team (START) contractor met onsite to conduct a site walk-through and to establish a sampling grid system. Sampling activities commenced on May 11, 2005, which included collecting 61 surface soil samples, 43 subsurface soil samples, 5 sediment samples and 1 surface water sample from Stevens Brook. The samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals and cyanide. Analytical results for these samples indicate the presence of elevated concentrations of PAHs in the surface and subsurface soils. PAH concentrations within the surface and subsurface soils have been detected as high as 6,600 ug/kg and 29,000 ug/kg, respectively.

Based upon the sampling results and an evaluation of the environmental data from ATSDR, the PA/SI was closed on August 23, 2005 with the recommendation that a time-critical removal action be conducted.

### **2. Physical location**

The Site is located at the corner of Maple Street and LaSalle Street in St. Albans, Vermont. The geographic coordinates, as measured from the approximate center of the property, are 44° 48' 46.8" north latitude and 73° 05' 24.0" west longitude. The Site is further identified as Lot Nos. 23057024, 23057038, and 23057040 on the City of St. Albans Tax Assessor's Map No. 10. The Site is bordered by Maple Street and residential properties to the east, Lasalle Street and residential properties to the south, Stevens Brook and residential properties to the west, and residential properties to the north.

### **3. Site characteristics**

The property usage prior to 1870 is unknown. In 1870, the St. Albans Gas & Light Company (later known as the Vermont Lighting Company) purchased the property and conducted gas manufacturing operations until 1953. In 1971 the property was subdivided and redeveloped for residential use. The SAGLF property is approximately 1.3 acres and is occupied by an apartment complex (the Colony Square Apartments) for low-income families. On-site features include three two-story apartment buildings, a paved parking area, a children's play area, and grassy areas. The two other properties (Nos. 38 and 40 Maple Street) are approximately 0.3 acre in size, each contain a single family raised-ranch style house, grassy areas, vegetable gardens and unpaved driveways. The owner of No. 38 Maple Street also operates a day-care business within the house.

According to the EPA Region 1 Environmental Justice Mapping Tool, the Site is not in an environmental justice area. However, the Site is located within close proximity, 0.25 mile, of a low income environmental justice area and the apartment complex is for low-income families.

### **4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant**

Hazardous substances which have been released or pose a threat of release include the following:

- PAHs

### **5. NPL status**

The site is not currently on the National Priorities List, and has not received a Hazardous Ranking System rating.

## **B. Other Actions to Date**

### **1. Previous actions**

Several assessments have been conducted at the Site by several different entities: federal, state, and private parties. The following is a list of reports generated that document the previous work done at the Site.

- *Vermont Department of Environmental Conservation (VT DEC), Preliminary Assessment (PA), 27 September 1991.*
- *Wehran Engineering Corporation, Soil Borings and Soil Sampling, 1991.*
- *Wagner, Heindel, & Noyes, Inc., Risk Assessment, 13 July 1992.*
- *VT DEC, Final Site Inspection (SI) Report, March 1994.*

- *Roy F. Weston, Inc., START Removal Program Preliminary Assessment/Site Investigation (PA/SI) Report, April 1996.*
- *Roy F. Weston, Inc., START Expanded Site Inspection (ESI) On-Site Reconnaissance, 28 November 2000.*
- *Roy F. Weston, Inc., ESI Small Diameter Driven Well Installation, Soil Sampling, and Sediment Sampling, 6-8 November 2001.*
- *Roy F. Weston, Inc., ESI Groundwater Sampling, 11 December 2001.*
- *Roy F. Weston, Inc., Final ESI Report, 30 December 2002.*
- *Weston Solutions, Inc., START Site Reassessment (SR) On-site Reconnaissance, 24 June 2004.*

## **2. Current actions**

EPA's Technical Support & Site Assessment Section is conducting an Expanded Site Inspection of the St. Albans Gas & Light Site.

### **C. State and Local Authorities' Roles**

#### **1. State and local actions to date**

VT DEC is working with the Technical Support & Site Assessment Section on evaluating the environmental issues related to this Site.

#### **2. Potential for continued State/local response**

VT DEC will provide state ARARs and continue to provide technical support.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

#### **A. Threats to Public Health or Welfare**

*Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; [§300.415(b)(2)(i)];*

Elevated levels of PAHs in the surface soils pose a direct contact threat to the residents and those who may enter the Site. ATSDR evaluated the environmental data and has indicated that a public health hazard exists.

*Actual or potential contamination of drinking water supplies or sensitive ecosystems [§300.415(b)(2)(ii)];*

Stevens Brook flows along the backside of the properties. It has been documented that higher levels of PAH contamination exists in the backyards of these properties which are adjacent to the

brook. It also has been reported that kids from the neighborhood have been seen swimming in the brook.

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.415(b)(2)(iv)];*

Sampling results have confirmed the presence of elevated levels of PAHs in the surface soils.

*The availability of other appropriate Federal or State response mechanisms to respond to the release; [§300.415(b)(2)(vii)];*

VT DEC does not have the resources to address the situation and have requested EPA's assistance in addressing this Site

*PAHs are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil, and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.*

*Mice that were fed high levels of one PAH during pregnancy had difficulty reproducing and so did their offspring. These offspring also had higher rates of birth defects and lower body weights. It is not known whether these effects occur in people. Animal studies have also shown that PAHs can cause harmful effects on the skin, body, fluids, and ability to fight disease after both short- and long-term exposure. But these effects have not been seen in people. The Department of Health and Human Services (DHHS) has determined that some PAHs may reasonably be expected to be carcinogens. Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).<sup>1</sup>*

## **B. Threats to the Environment**

*Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; [§300.415(b)(2)(i)];*

Elevated levels of PAHs have been detected in the vegetable gardens previously harvested by the residents at Nos. 38 and 40 Maple Street.

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<sup>1</sup>Agency for Toxic Substances and Disease Registry (ATSDR), U.S. Department of Health and Human Services, Public Health Service, *Tox FAQs Fact Sheet for Polycyclic Aromatic Hydrocarbons (PAHs)*, September 1996.

*Actual or potential contamination of drinking water supplies or sensitive ecosystems; [§300.415(b)(2)(ii)];*

Stevens Brook flows along the backside of the properties. It has been documented that higher levels of PAH contamination exists in the backyards of these properties which are adjacent to the brook.

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.415(b)(2)(iv)];*

Sampling results have confirmed the presence of elevated levels of PAHs in the surface soils.

*Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; [§300.415(b)(2)(v)];*

Heavy rainfalls could potentially cause contaminated soils to migrate into the nearby Stevens Brook.

#### **IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.<sup>2</sup>

#### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

##### **A. Proposed Actions**

##### **1. Proposed action description**

EPA plans to conduct this removal action as a fund-lead action, since no viable potentially responsible parties (PRPs) have been identified to date. The proposed actions will protect public health, welfare and the environment by removing the contaminated surface soils from the Site. Removal activities will include:

1. Conducting a site-walk through with EPA response contractors;
2. Conduct additional sampling as needed to define the extent of surface soil contamination;

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<sup>2</sup>In accordance with OSWER Directive 9360.0-34, an endangerment determination is made based on collaboration with a trained risk assessor.

3. Excavation and off-site disposal of PAH-contaminated surface soils at EPA-approved disposal facilities;
4. Capping in-place of contaminated soils (if any) which may remain at depth or which cannot otherwise be excavated;
5. Backfilling of excavated areas;
6. Conduct site restoration in areas disturbed by removal activities.

The cleanup proposed in this Action Memorandum is designed to mitigate the threats to human health and the environment posed by the Site. The actions taken at the Site would be consistent with and will not impede any future responses.

## **2. Community relations**

EPA will remain involved with the local community throughout the removal action via press releases, fact sheets, and public meetings, as needed.

## **3. Contribution to remedial performance**

The cleanup proposed in this Action Memorandum is designed to mitigate the threats to human health and the environment posed by the Site. The actions taken at the Site would be consistent with and will not impede any future responses.

## **4. Description of alternative technologies**

The use of alternative technologies with regard to disposal options will be further examined as the site work progresses. On-site field screening and analytical techniques will be utilized during the removal action.

## **5. Applicable or relevant and appropriate requirements (ARARs)**

Federal ARARs:

29 CFR Parts 1910, 1926, and 1904: OSHA Health and Safety Regulations

40 CFR Part 262 Standards Applicable to Generators of Hazardous Waste:

### Subpart B - The Manifest

- 262.20 : General requirements for manifesting
- 262.21 : Acquisition of manifests
- 262.22 : Number of copies of manifests
- 262.23 : Use of the manifest

### Subpart C - Pre-Transport Requirements

- 262.30 : Packaging
- 262.31 : Labeling
- 262.32 : Marking

### Subpart D - Recordkeeping and Reporting

- 262.40 : Recordkeeping

40 CFR Part 264 Standards for Owners and Operators of Hazardous waste Treatment, Storage, and Disposal Facilities:

Subpart I - Use and Management of Containers

264.171 : Condition of containers

264.172 : Compatibility of waste with containers

264.173 : Management of containers

264.174 : Inspections

264.175 : Containment

264.176 : Special requirements for ignitable or reactive waste

264.177 : Special requirements for incompatible wastes

40 CFR Part 264 Hazardous Waste Regulations - RCRA Subtitle C:

268-270 : Hazardous and Solid Waste Amendments Land Disposal Restrictions Rule

40 CFR Part 300.440 Procedures for Planning and Implementing Off-Site Response Actions (Off-Site Rule)

49 CFR Parts 171-179 : Department of Transportation Regulations for Transport of Hazardous Materials

State ARARs:

The OSC will coordinate with State officials to identify additional State ARARs, if any. In accordance with the National Contingency Plan and EPA Guidance Documents, the OSC will determine the applicability and practicability of complying with each ARAR which is identified in a timely manner.

**6. Project schedule**

The removal action is anticipated to be complete within ten months of its commencement.

**B. Estimated Costs**

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$400,000.00
Interagency Agreement		\$0,000.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$100,000.00
Extramural Subtotal		\$500,000.00
Extramural Contingency	20%	\$100,000.00
<b>TOTAL, REMOVAL ACTION CEILING</b>		<b>\$600,000.00</b>



## **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

In the absence of the response action described herein, conditions at the Site can be expected to continue to deteriorate, and the threats associated with the presence of hazardous substances will persist.

## **VII. OUTSTANDING POLICY ISSUES**

There are no precedent setting policy issues associated with this site.

## **VIII. ENFORCEMENT ... For Internal Distribution Only**

See attached Enforcement Strategy.

The total EPA costs for this removal action based on full-time accounting practices that will be eligible for cost recovery are estimated to be \$600,000 (extramural costs) + \$100,000 (EPA intramural costs) = \$700,000 X 1.3151 (regional indirect rate) = **\$920,570<sup>3</sup>**.

## **IX. RECOMMENDATION**

This decision document represents the selected removal action for the St. Albans Gas & Light Site in St. Albans, Vermont, developed in accordance with CERCLA, as amended, and not inconsistent with the National Contingency Plan. The basis for this decision will be documented in the administrative record to be established for the Site.

Conditions as the Site meet the NCP Section 300.415 (b) (2) criteria for a removal action due to the following:

*Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants [§300.415(b)(2)(i)];*

*Actual or potential contamination of drinking water supplies or sensitive ecosystems [§300.415(b)(2)(ii)];*

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<sup>3</sup>Direct Costs include direct extramural costs \$600,000 and direct intramural costs \$100,000. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific costs [31.51% x \$700,000], consistent with the full accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.415(b)(2)(iv)];*

*Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; [§300.415(b)(2)(v)];*

*The availability of other appropriate Federal or State response mechanisms to respond to the release; [§300.415(b)(2)(vii)].*

I recommend that you approve the proposed removal action. The total removal action project ceiling if approved will be \$600,000. Of this total, no more than \$500,000 comes from the Regional removal allowance.

APPROVAL: \_\_\_\_\_



DATE: \_\_\_\_\_

8-29-05

DISAPPROVAL: \_\_\_\_\_

DATE: \_\_\_\_\_