

IMMEDIATE RESPONSE ACTION PLAN

Kiley Barrel Site Off-Property Locations Somerville, Massachusetts Release Tracking Number 3-28512

Prepared for:

City of Somerville
Office of Strategic Planning & Community Development
93 Highland Avenue
Somerville, Massachusetts 02143

Prepared by:

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July 20, 2009

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1.0 INTRODUCTION

On behalf of the City of Somerville (the “City”), TRC Environmental Corporation (TRC) prepared this Immediate Response Action (IRA) Plan in accordance with 310 CMR 40.0424 to address the Imminent Hazard (IH) condition identified at seven properties (5-7, 9, 11, and 13 Allen Street, 250-256 and 258 Somerville Avenue, and 4 Milk Place) located adjacent and downgradient to the Former Kiley Barrel Site in Somerville, Massachusetts.

A 2-hour reporting condition was identified after arsenic, which may be attributable to a historic release at the Former Kiley Barrel Site (RTN 3-2849), was identified in soil at concentrations exceeding the potential IH threshold of 40 mg/kg at two residential properties (9 and 11 Allen Street) located adjacent to the Former Kiley Barrel Site. On May 18, 2009, TRC notified the Massachusetts Department of Environmental Protection (MassDEP) of the potential IH condition present at the off-property at the Site. MassDEP assigned RTN 3-28512 to the IH condition. MassDEP orally approved additional assessment and the installation of ground cover to suppress windblown dust and minimize soil exposure. Copies of the Release Notification Form are provided in Appendix A.

Subsequent to notification, an IH Evaluation was performed by TRC and submitted to MassDEP on June 5, 2009 as required by the *Amended Notice of Response Action Interim Deadline Extension* dated April 1, 2009 (Appendix B). The *Amended Notice of Response Action Interim Deadline Extension* required the City to perform an IH Evaluation for the residential properties located adjacent to the Former Kiley Barrel Site. Results of the evaluation indicated that an IH was present at each of the properties, primarily due to elevated concentrations of arsenic, cadmium, and lead in surface soil.

The purpose of this IRA Plan is to describe risk reduction measures that will be undertaken by the City to address soil IH conditions at the seven residential properties located adjacent to the Former Kiley Barrel Site.

The Site owner and Licensed Site Professional (LSP) contact information is as follows:

Site Owner: City of Somerville
93 Highland Avenue
Contact: Mr. Stephen Azar, Senior Planner
Somerville Massachusetts 02143
617-625-6600 x2561

Licensed Site Professional: Mr. Christopher McDermott, P.E., LSP
LSP License Number 1955
TRC Environmental Corporation
31 Milk Street, Suite 1104
Boston, MA 02109
617-350-3406

2.0 SITE DESCRIPTION

2.1 Site Description

A Site Location Map identifying the general Site vicinity is provided as Figure 1, and a Site Plan, illustrating general features and current layout of the Former Kiley Barrel Site proper and adjacent residential properties addressed in this IRA Plan, is provided as Figure 2. The Universal Transverse Mercator (UTM) coordinates are Easting: 327629 and Northing: 4,693,926.

2.1.1 Former Kiley Barrel Site

The Former Kiley Barrel Site consists of eight contiguous parcels of land including 0 Prospect Street, 20-22 Prospect Street, 264-266 Somerville Avenue, 9 and 10 Milk Place, 8, 14 and 16-20 Bennett Street, located in the City of Somerville, Middlesex County, Massachusetts. The Former Kiley Barrel Site is approximately 31,956 square feet in size and is located at the southeast corner of the intersection of Prospect Street and Somerville Avenue, just east of Union Square in Somerville, Massachusetts. The Former Kiley Barrel Site adjoins Prospect Street, Milk Place, Bennett Street, and Somerville Avenue. A paved municipal parking lot currently occupies 0 Prospect Street. The remaining parcels are vacant and unpaved, and primarily consist of sparse to moderately vegetated open space.

Between the early 1920s and 1989, the Former Kiley Barrel Site operated as a family business which stored, cleaned, and recycled multiuse barrels. Cleaning operations involved the direct disposal of liquid wastes into the municipal sewer system followed by a steam rinse and painting of the barrels for reuse. Historical operations have apparently resulted in soil and groundwater contamination from numerous paint, solvent, and oil constituents (including PCBs) used during the cleaning and refurbishing processes.

2.1.2 Off-Property Locations

The residential properties addressed by this IRA Plan are 5-7 Allen Street, 9 Allen Street, 11 Allen Street, 13 Allen Street, 250-256 Somerville Avenue, 258 Somerville Avenue, and 4 Milk Place. The descriptions provided below were prepared by TRC based on observations from various site visits conducted between March 2009 and present.

5-7 Allen Street

This property consists of a three-story wood-framed building over an unfinished basement. The property owner does not live at the residence, and the six units are rented by groups of 3-4 tenants each. A back yard area is located adjacent to the Former Kiley Barrel Site, and can be accessed by a small walkway on the north side of the building or an exit at the west stairwell. The back yard area features a cement patio area with patio furniture and outdoor grills, and a vegetable garden plot where tomato, cabbage, lettuce, and pepper plants (identified by plant markers) were observed to be growing. This area is separated from the Site, as well as the 250-256 Somerville Avenue and 9 Allen Street properties, with an approximately 6-foot high wooden picket fence.

9 Allen Street

The 9 Allen Street property consists of a two-story, wood-framed, single family home over an unfinished basement with an earthen floor. The property owner currently occupies the house with his son. A common driveway is shared with the 11 Allen Street property and is used to access the back yards of both residences, which abut the Former Kiley Barrel Site perimeter fence. The back yard of the 9 Allen Street property consists of a lawn area and cement slab. An outdoor shower is present on the cement slab. Several planting pots were observed in the back yard, but appeared to be overgrown with vegetation. The back yard area is separated from the Former Kiley Barrel Site, as well as the 5-7 Allen Street property, with an approximately 6-foot high wooden picket fence. It is separated from the back yard of the 11 Allen Street property with an approximately 4-foot high wire mesh fence, supported from behind with wooden lattice.

11 Allen Street

Similar to 9 Allen Street, the 11 Allen Street residence also consists of a two-story, wood-framed, single-family home over an unfinished basement. The property owner currently occupies the residence with her elderly mother. The back yard area consists of concrete tiles and sand with sparse vegetation. The owner annually erects an above-ground pool during the summer months. The back yard is separated from the 9 Allen Street property by an approximately 4-foot high wire mesh fence, which is supported with wooden lattice. The area was separated from the Former Kiley Barrel Site and the 13 Allen Street property by an approximately 6-foot high wooden picket fence and approximately 10-foot high shrubs.

13 Allen Street

The 13 Allen Street property consists of a two-story wood-framed building. A large back yard, containing an apparent vegetable garden, is located behind the house and adjacent to the Former Kiley Barrel Site. Other vegetation appeared to consist of flowers and landscaping plants. The property is owner-occupied. The number of occupants of the 13 Allen Street residence is not known.

The southern portion of the back yard off the rear of the paved driveway appears to have been recently filled with soil mixed with demolition debris containing bricks, concrete, landscaping materials, and tree branches. There was no vegetation growing in this area. Reportedly, the fill material consists of soil and debris removed from the basement of 13 Allen Street.

The 13 Allen Street property is separated to the north from the 11 Allen Street property by an approximately 4-foot high chain link fence, which is set on top of landscaping timbers. It is separated to the northwest and west from the Former Kiley Barrel Site by an approximately 6-foot high chain link fence.

250-256 Somerville Avenue

This property consists of a three-story wood-framed apartment building over an unfinished basement. The apartment building contains 12 two-bedroom/one-bath apartments, which are all

currently rented. The area immediately adjacent to the Former Kiley Barrel Site consists of paved parking and a trash shed. Outdoor grills were observed along the 4-foot high chain link fence adjacent to the 5-7 Allen Street property. To the south, an approximately 6-foot high fence with geotextile material separates this property from the Site. An approximately 4-foot wide grass strip exists between the parking and the perimeter fencing at the south and east of the property. A grass strip also exists between the building and the paved parking area. No physical separation exists between the 250-256 Somerville Avenue property and the 258 Somerville Avenue and 4 Milk Place properties.

258 Somerville Avenue

258 Somerville Avenue is a small, vacant lot consisting of a gravel and dirt surface with sparse vegetation. There is no physical separation between this property and the adjacent residential properties to the east (250-256 Somerville Avenue) and south (4 Milk Place). To the west, the approximately 6-foot high perimeter fence and geotextile material, which surrounds the Site, provides separation.

4 Milk Place

The 4 Milk Place property consists of a two-story wood-framed structure, with a wooden porch extending from the south of the building. TRC did not interview residents at this property, and the number of occupants is not known. During a recent site visit, the back and side yard areas were overgrown in some places and used as storage for a boat and trailer. This property is not separated physically from the 250-256 and 258 Somerville Avenue properties, but is separated to the south and west from the Former Kiley Barrel Site by an approximately 6-foot high chain link fence with geotextile material.

2.2 Regulatory Background

Based on results of soil and groundwater sampling conducted at the Kiley Barrel Site and soil, groundwater, and indoor air samples collected from adjacent properties, historic operations conducted at the Former Kiley Barrel Site have likely impacted soil and/or groundwater at adjacent residential properties along Milk Place, Somerville Avenue, and Allen Street.

2.2.1 RTN 3-28464 – Indoor Air and Groundwater

IRA activities to address groundwater and potential indoor air impacts from volatile organic compounds (VOCs) released at the Former Kiley Barrel Site are currently being conducted at 250-256 Somerville Avenue, 5-7 Allen Street, 9 Allen Street, and 11 Allen Street under RTN 3-28464. IRA activities, which include indoor air monitoring and soil gas testing, are described in an IRA Plan for RTN 3-28464 submitted to MassDEP on July 9, 2009.

2.2.2 RTN 3-28512 - Soil

This IRA Plan addresses soil contamination at seven residential properties located adjacent to the former Kiley Barrel Site under RTN 3-28512. These residential properties are 5-7 Allen Street,

9 Allen Street, 11 Allen Street, 13 Allen Street, 250-256 Somerville Avenue, 258 Somerville Avenue, and 4 Milk Place.

On May 1 and 5, 2009, TRC conducted surficial soil sampling at the seven adjacent residential properties and along Bennett Street in response to a *Notice of Responsibility/Notice of Response Action/Notice of Commencement of Work Pursuant to M.G.L. C.21E* dated January 16, 2009 and modified under the *Amended Notice of Response Action Interim Deadline Extension* dated April 1, 2009 for the former Kiley Barrel Site under RTN 3-2849. Copies of these notices are provided in Appendix B. Soil samples were collected between existing residential buildings and the Former Kiley Barrel Site property line as shown in Figure 2.

Soil samples were collected from 30 locations to assess the extent of PCBs and metals in surface soils. Soil samples collected closest to the Former Kiley Barrel Site property line were designated as Primary Soil Samples and analyzed for PCBs and select metals (arsenic, barium, cadmium, chromium, lead, nickel, and zinc). Soil samples collected further from the Former Kiley Barrel Site property line were designated as Alternate Soil Samples and placed on hold, pending the analysis of the Primary Soil Samples. Both Primary and Alternate Sample locations are depicted on Figure 2. At least one soil sample from each residential property was additionally analyzed for pesticides, as the laboratory identified the possible presence of elevated pesticides in the Primary Soil Samples.

A summary of results for off-site soil samples collected on May 1 and 5, 2009 is included in Table 1. Analytical results of the Primary Soil Samples indicated multiple concentrations of contaminants above their respective Method 1 S-1/GW-2 and Method 1 S-1/GW-3 standards. In addition, the results indicated concentrations of arsenic above the potential IH threshold of 40 mg/kg at two of residential properties. Specifically, samples 9ALLEN-S-1 (0-0.5') and 9ALLEN-S-2 (0-0.5'), which were collected at the 9 Allen Street property, exhibited arsenic concentrations of 59 mg/kg and 47 mg/kg, respectively. A concentration of 60 mg/kg was reported for a duplicate sample associated with 9ALLEN-S-1 (0-0.05'). Samples 11ALLEN-S-1 (0-0.5') and 11ALLEN-S-2 (0-0.5'), which were collected at the 11 Allen Street property, exhibited arsenic concentrations of 140 mg/kg and 73 mg/kg, respectively. Laboratory analytical results were submitted to MassDEP with *Imminent Hazard Evaluation, Kiley Barrel Site* dated June 5, 2009 (TRC, 2009b).

Based on the Primary Soil Sample analytical results from the laboratory, on May 18, 2009, TRC informed the City of the potential IH conditions at 9 and 11 Allen Street and the resulting 2-hour MassDEP reporting obligation. Subsequently, on behalf of the City, TRC notified MassDEP of the condition. Notification was made to Mr. Ken Sanderson at MassDEP by TRC on May 18, 2009 at 11:19 am. Mr. Sanderson assigned RTN 3-285124 to the potential IH condition and orally approved additional assessment (i.e., activation of Alternate Soil Samples) and the installation of ground cover to suppress windblown dust and minimize soil exposure. TRC also informed Mr. Sanderson that an IH evaluation will be conducted on the other residential properties to assess whether IH conditions are present.

Subsequent to notification, the Alternate Soil Samples were activated for laboratory analysis. After receiving the sample results, an IH evaluation for each of the seven residential properties

was conducted. Contaminants of Potential Concern (COPCs) consisted of select metals, pesticides, and polychlorinated biphenyls (PCBs) that were detected in soil at the Former Kiley Barrel Site. Based on a Method 3 risk characterization, TRC concluded that an IH conditions, primarily attributed to elevated concentrations of arsenic and lead, are present at the seven residential properties. The IH Evaluation was submitted to MassDEP on June 5, 2009.

2.3 Reason Why an Immediate Response Action is Required

This IRA Plan is required to address IH conditions identified at the seven residential properties.

3.0 IMMEDIATE RESPONSE ACTION PLAN

3.1 Immediate Response Actions Taken to Date

3.1.1 Activation of Secondary Soil Samples

As described in Section 2.2.2, Secondary Soil Samples which were initially placed on hold with the analytical laboratory were subsequently activated to assess the extent of metals contamination at the seven residential properties.

3.1.2 Imminent Hazard Evaluation

As described in Section 2.2.2, on behalf of the City, TRC performed an IH Evaluation for each of the seven residential properties located adjacent to the Former Kiley Barrel Site. The IH Evaluation was submitted to MassDEP on June 5, 2009, and included the evaluation of identified COPCs at each of the seven residential properties. The results of the IH Evaluation indicated that IHs conditions are present at each of the seven properties, and the primary contributors are arsenic, cadmium, and lead. PCBs, chlordane, arsenic, and zinc are noted as additional contributors at some of the properties.

3.2 Planned Immediate Response Actions

Because an IH condition exists at the Site, the City intends to conduct the following IRA activities.

3.2.1 Installation of Ground Cover

To prevent direct contact exposure to human receptors, accessible soils at the seven residential properties will be covered with a geotextile fabric and 6 inches of crushed stone. Landscaping timbers, measuring at least 6-inches by 6-inches and the appropriate length, will be used to contain the gravel along the edges of ground to be covered and to provide a transition to paved and concrete surfaces and other stationary improvements. Based on preliminary site observations, approximate areas to be covered are shown in Figure 3. If contamination associated with the Former Kiley Barrel Site is identified on the adjacent residential properties at locations outside those shown in Figure 3, then those areas will be covered as well.

The City plans to meet individually with property owners to discuss the installation of the ground cover and explain the property use limitations associated with it.

Prior to installation of the geotextile fabric, existing unpaved areas will be cleared of vegetation and grubbed to minimize future vegetation from compromising the ground cover.

Although excavation and off-site disposal of surface soil is not anticipated, removal of small quantities of soil may be necessary to place the geotextile fabric and achieve at least six inches of ground cover.

3.2.2 Quarterly Inspection and Maintenance of Ground Cover

TRC will conduct quarterly inspections of the ground cover to ensure that that the installed ground cover remains in place and exposures to underlying soil continues to be restricted. Repairs to the ground cover will be made as needed. Inspections and maintenance activities will be documented in IRA Status Reports.

3.2.3 Immediate Response Action Completion Report

Following the completion of the remaining IRA activities, TRC will submit an IRA Completion Report to MassDEP in accordance with 310 CMR 40.0427.

4.0 REMEDIATION WASTE

Although excavation and off-site disposal of surface soil is not anticipated, removal of small quantities of soil and soil mixed with cleared vegetation may be necessary to accommodate the placement of the geotextile fabric and achieve at least six inches of ground cover. If necessary, excavated material will be temporarily stockpiled within the Former Kiley Barrel Site on poly sheeting. The excess soil will then be characterized for disposal parameters and disposed off site. Based on the nature of the IRA activities, no more than 20 cubic yards of excess is expected be excavated, stockpiled, and disposed off site.

Clearing and grubbing will be conducted in areas of the proposed ground cover. Cleared vegetation will be moved to within the Former Kiley Barrel Site.

5.0 IMMEDIATE RESPONSE ACTION SCHEDULE

The anticipated schedule for additional activities described in this IRA Plan is as follows:

August 2009	Installation of ground cover to prevent direct-contact soil exposure to human receptors at the seven residential properties adjacent to the Former Kiley Barrel Site
November 2009	Quarterly inspection of ground cover
December 2009	Submit IRA Status Report #1
February 2010	Quarterly inspection of ground cover
May 2010	Quarterly inspection of ground cover
June 2010	Submit IRA Status Report #2
August 2010	Quarterly inspection of ground cover
November 2010	Quarterly inspection of ground cover
December 2010	Submit IRA Status Report #3

Additional soil sampling may be performed at the one or more of the seven residential properties adjacent to the Kiley Barrel Site to define the extent of metals contamination.

6.0 FEDERAL, STATE & LOCAL PERMITS

6.1 Federal Permit Requirements

There are no known Federal permit requirements.

6.2 State Permit Requirements

Although there are no specific State permit requirements for the IRA activities described herein, An Administrative Consent Order (ACO) [File No.: ACO-NE-09-3C001] was issued to the City in April 2009. The conditions of the ACO require the following:

- A. Address any Imminent Hazard conditions at the Site as required by the MCP at 310 CMR 40.0410.
- B. By May 11, 2009, and yearly thereafter, submit a Tier II Extension application pursuant to 310 CMR 40.0560(7) until a Response Action Outcome or Remedy Operation Status is submitted.
- C. By November 25, 2009, submit a supplemental Phase II Report that meets the requirements of 310 CMR 40.0835.
- D. By May 25, 2010, submit a Phase III Remedial Action Plan as described in 310 CMR 40.0861.
- E. By November 25, 2010, submit a Phase IV Remedy Implementation Plan as described in 310 CMR 40.0874.
- F. By June 25, 2011, submit either an RAO Statement which meets the requirements of 310 CMR 40.1000 or a Remedy Operation Status Submittal which meets the requirements of 310 CMR 40.0893.

6.3 Local Permit Requirements

There are no known Local permit requirements.

6.4 Miscellaneous Fees, Notices, and Transportation Documentation

There are no known fees, notices, or transportation documentation

7.0 PUBLIC INVOLVEMENT

As required by 310 CMR 40.1403(3)(b), the Mayor and the Board of Health for the City of Somerville have been notified of the IRA activities. Copies of the notification letters sent to the Mayor and Board of Health are provided in Appendix A. In addition, the City plans to meet individually with property owners to discuss the installation of the ground cover and explain the property use limitations associated with it.

The City and MassDEP presented a public meeting to the residents and property owners of the seven residential properties adjacent to the Former Kiley Barrel Site on June 8, 2009. A summary of the findings of the IH evaluations and proposed response actions were discussed at the meeting. In addition, a letter was prepared by the City and mailed to the property owners of the seven residential properties to describe the IRA activities proposed herein. A copy of the letter is provided in Appendix A.

8.0 REFERENCES

TRC, 2009a, *Imminent Hazard Evaluation, Kiley Barrel Site, Somerville, Massachusetts*, Release Tracking Number 3-2849, May 4, 2009.

TRC, 2009b, *Imminent Hazard Evaluation, Kiley Barrel Site, Somerville, Massachusetts*, Release Tracking Number 3-2849, June 5, 2009.

TABLES

Summary of Analytical Results for Soil Samples - May 2009
 Kiley Barrel
 Somerville, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date: S-1/GW-3	7ALLEN-S-1		7ALLEN-S-2		7ALLEN-S-3		7ALLEN-S-4		9ALLEN-S-1			9ALLEN-S-2		9ALLEN-S-3		9ALLEN-S-4	
			0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3
			5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009
PCBs (mg/kg)	Aroclor-1016	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1221	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1232	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1242	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1248	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1254	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1260	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.43	0.11 U
	Aroclor-1262	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
	Aroclor-1268	2	0.49 U	0.47 U	0.49 U	0.47 U	0.12 U	0.12 U	0.12 U	0.12 U	0.48 U	0.47 U	0.47 U	0.47 U	0.45 U	0.12 U	0.11 U	0.11 U	0.11 U
Pesticides (mg/kg)	4,4'-DDD	4	NA	0.0094 U	NA	NA	NA	NA	NA	0.0097 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	3	NA	0.011	NA	NA	NA	NA	NA	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	3	NA	0.029	NA	NA	NA	NA	NA	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aldrin	0.04	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	alpha-BHC	NS	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	beta-BHC	NS	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	0.7 ⁽¹⁾	NA	0.024 U	NA	NA	NA	NA	NA	0.024 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	delta-BHC	NS	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	0.05	NA	0.0018	NA	NA	NA	NA	NA	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	1 ⁽²⁾	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	1 ⁽²⁾	NA	0.0094 U	NA	NA	NA	NA	NA	0.0097 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan Sulfate	NS	NA	0.0094 U	NA	NA	NA	NA	NA	0.0097 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	8	NA	0.0094 U	NA	NA	NA	NA	NA	0.0097 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin Ketone	NS	NA	0.0094 U	NA	NA	NA	NA	NA	0.0097 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	gamma-BHC (Lindane)	1	NA	0.0035 U	NA	NA	NA	NA	NA	0.0036 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	0.2	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor Epoxide	0.09	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	1	NA	0.0059 U	NA	NA	NA	NA	NA	0.0060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	200	NA	0.059 U	NA	NA	NA	NA	NA	0.060 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Metals, total (mg/kg)	Arsenic	20	12	8.1	15	11	13	10	18	17	59*	60*	49	47*	38	50*	14	79*	120
	Barium	1,000	360	190	360	150	310	200	360	260	720	760	700	560	300	600	210	480	380
	Cadmium	2	2.3	1.1	2.1	0.98	2.2	1.2	2.1	1.7	4.6	4.9	2.3	3.5	2.4	3.6	0.91	4.7	2.9
	Chromium	30	25	18	24	20	25	20	21	19	43	42	32	47	46	40	20	54	17
	Lead	300	1,500	790	1,500	680	1,500	2,200	1,900	2,200	2,300	2,100	2,000	1,600	1,100	2,000	750	2,100	980
	Nickel	20	20	16	18	15	22	18	18	16	26	25	16	24	20	58	17	43	16
	Zinc	2,500	470 B	320 B	420 B	260 B	470	290	390	550	1,100	1,100	870	800	530	700	260	550	210

Notes:
 mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
 B - Compound detected in associated method blank
 NA - Sample not analyzed for the listed analyte.
 U - Compound was not detected at specified quantitation limit.
 Values in **Bold** indicate the compound was detected.
 Values shown in **Bold and shaded type** exceed the listed MCP Method 1 standards.
 * - Exceeds concentration that could post an Imminent Hazard for soil within a depth of 12 inches below the ground surface per 310 CMR 40.0321.
 PCBs - Polychlorinated Biphenyls.
 (1) - MassDEP Method 1 S-1/GW-3 for Technical Chlordane used.
 (2) - MassDEP Method 1 S-1/GW-3 for Endosulfan used.

Summary of Analytical Results for Soil Samples - May 2009
 Kiley Barrel
 Somerville, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date: S-1/GW-3	11ALLEN-S-1		11ALLEN-S-2		11ALLEN-S-3		11ALLEN-S-4		13ALLEN-S-1			13ALLEN-S-2		13ALLEN-S-3		13ALLEN-S-4	
			0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3
			5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009
PCBs (mg/kg)	Aroclor-1016	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1221	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1232	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1242	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1248	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1254	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1260	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
	Aroclor-1262	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U
Aroclor-1268	2	0.50 U	0.47 U	0.50 U	0.46 U	NA	NA	NA	NA	0.50 U	0.51 U	0.50 U	0.46 U	0.47 U	0.48 U	0.49 U	0.48 U	0.48 U	
Pesticides (mg/kg)	4,4'-DDD	4	0.0097 U	NA	NA	NA	NA	NA	NA	0.0092 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	3	0.059	NA	NA	NA	NA	NA	NA	0.0046 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	3	0.25 D	NA	NA	NA	NA	NA	NA	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aldrin	0.04	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	alpha-BHC	NS	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	beta-BHC	NS	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	0.7 ⁽¹⁾	0.34	NA	NA	NA	NA	NA	NA	0.023 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	delta-BHC	NS	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	0.05	0.0081	NA	NA	NA	NA	NA	NA	0.0020	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	1 ⁽²⁾	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	1 ⁽²⁾	0.0097 U	NA	NA	NA	NA	NA	NA	0.0092 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan Sulfate	NS	0.0097 U	NA	NA	NA	NA	NA	NA	0.0092 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	8	0.0097 U	NA	NA	NA	NA	NA	NA	0.0092 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin Ketone	NS	0.0097 U	NA	NA	NA	NA	NA	NA	0.0092 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	gamma-BHC (Lindane)	1	0.030	NA	NA	NA	NA	NA	NA	0.0034 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	0.2	0.0067	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor Epoxide	0.09	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1	0.0061 U	NA	NA	NA	NA	NA	NA	0.0057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methoxychlor	200	0.061 U	NA	NA	NA	NA	NA	NA	0.057 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Metals, total (mg/kg)	Arsenic	20	140*	160	73*	60	110*	110	66*	67	15	18	81	10	4.1	34	9.1	9.3	9.9
	Barium	1,000	1,200	1,000	660	510	630	380	530	190	470	500	660	130	47	440	97	220	300
	Cadmium	2	4.7	3.2	3.5	1.6	5.1	2.9	3.9	1.8	2.3	2.7	3.9	1.0	0.33	2.6	0.73	1.3	0.99
	Chromium	30	53	42	40	20	54	19	34	14	25	32	40	26	18	30	28	22	22
	Lead	300	2,300	1,600	1,600	25,000	2,100	600	1,700	480	1,600	1,500	1,700	360	130	1,400	290	560	370
	Nickel	20	26	16	22	13	28	17	23	16	17	22	22	16	11	13	12	13	13
	Zinc	2,500	1,100 B	990 B	840 B	680 B	750	1,000	630	370	1,400	1,200	860	320	78	1,000	300	370	380

Notes:
 mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
 B - Compound detected in associated method blank
 NA - Sample not analyzed for the listed analyte.
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 Values in Bold indicate the compound was detected.
 Values shown in Bold and shaded type exceed the listed MCP Method 1 standards.
 * - Exceeds concentration that could post an Imminent Hazard for soil within a depth of 12 inches below the ground surface per 310 CMR 40.0321.
 PCBs - Polychlorinated Biphenyls.
 (1) - MassDEP Method 1 S-1/GW-3 for Technical Chlordane used.
 (2) - MassDEP Method 1 S-1/GW-3 for Endosulfan used.

Summary of Analytical Results for Soil Samples - May 2009
 Kiley Barrel
 Somerville, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date: S-1/GW-3	13ALLEN-S-5		13ALLEN-S-6		04MILK-S-1		04MILK-S-2		04MILK-S-3		04MILK-S-4		250SOM-S-1		250SOM-S-2	
			0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3	0-0.5	1-3
			5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/5/2009	5/1/2009	5/1/2009
PCBs (mg/kg)	Aroclor-1016	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
	Aroclor-1221	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
	Aroclor-1232	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
	Aroclor-1242	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
	Aroclor-1248	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
	Aroclor-1254	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	1.4	0.53 U
	Aroclor-1260	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	1.1	0.53 U
	Aroclor-1262	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U
Aroclor-1268	2	NA	NA	NA	NA	0.45 U	0.46 U	0.46 U	0.48 U	NA	NA	NA	NA	0.48 U	0.50 U	0.50 U	0.53 U	
Pesticides (mg/kg)	4,4'-DDD	4	NA	NA	NA	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	NA	NA	NA
	4,4'-DDE	3	NA	NA	NA	NA	0.013	NA	NA	NA	NA	NA	NA	NA	0.021	NA	NA	NA
	4,4'-DDT	3	NA	NA	NA	NA	0.023	NA	NA	NA	NA	NA	NA	NA	0.062	NA	NA	NA
	Aldrin	0.04	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	alpha-BHC	NS	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	beta-BHC	NS	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	Chlordane	0.7 ⁽¹⁾	NA	NA	NA	NA	0.022 U	NA	NA	NA	NA	NA	NA	NA	0.024 U	NA	NA	NA
	delta-BHC	NS	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	Dieldrin	0.05	NA	NA	NA	NA	0.00022 U	NA	NA	NA	NA	NA	NA	NA	0.0054	NA	NA	NA
	Endosulfan I	1 ⁽²⁾	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	Endosulfan II	1 ⁽²⁾	NA	NA	NA	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	NA	NA	NA
	Endosulfan Sulfate	NS	NA	NA	NA	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	NA	NA	NA
	Endrin	8	NA	NA	NA	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	NA	NA	NA
	Endrin Ketone	NS	NA	NA	NA	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	NA	NA	NA
	gamma-BHC (Lindane)	1	NA	NA	NA	NA	0.0033 U	NA	NA	NA	NA	NA	NA	NA	0.0035 U	NA	NA	NA
	Heptachlor	0.2	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
	Heptachlor Epoxide	0.09	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA
Hexachlorobenzene	1	NA	NA	NA	NA	0.0055 U	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA	
Methoxychlor	200	NA	NA	NA	NA	0.055 U	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	NA	NA	
Metals, total (mg/kg)	Arsenic	20	15	8.5	22	22	8.4	6.7	11	8.2	20	10	8.7	6.8	11	15	14	15
	Barium	1,000	330	67	600	740	180	120	300	160	220	170	320	92	280	190	360	440
	Cadmium	2	2.1	0.66	2.9	2.2	0.91	0.75	2.2	0.64	2.5	1.3	1.7	4.4	2.1	1.0	3.5	1.9
	Chromium	30	63	29	30	28	22	19	45	20	25	24	19	18	34	18	33	23
	Lead	300	900	110	1,700	2,000	600	530	2,400	900	7,000	660	2,200	500	4,700	1,600	1,600	1,800
	Nickel	20	17	16	18	13	16	13	25	12	19	16	14	14	16	15	19	17
	Zinc	2,500	610	210	880	1,300	190 B	170 B	590 B	430 B	350	200	390	4,100	540	630	620	560

Notes:
 mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
 B - Compound detected in associated method blank
 NA - Sample not analyzed for the listed analyte.
 U - Compound was not detected at specified quantitation limit.
 Values in **Bold** indicate the compound was detected.
 Values shown in **Bold and shaded type** exceed the listed MCP Method 1 standards.
 * - Exceeds concentration that could post an Imminent Hazard for soil within a depth of 12 inches below the ground surface per 310 CMR 40.0321.
 PCBs - Polychlorinated Biphenyls.
 (1) - MassDEP Method 1 S-1/GW-3 for Technical Chlordane used.
 (2) - MassDEP Method 1 S-1/GW-3 for Endosulfan used.

Summary of Analytical Results for Soil Samples - May 2009
 Kiley Barrel
 Somerville, Massachusetts

Analysis	Analyte	Sample ID: Sample Depth (ft.): Sample Date: S-1/GW-3	250SOM-S-3		250SOM-S-4		250SOM-S-5		250SOM-S-6		250SOM-S-7		250SOM-S-8	
			0-0.5	1-3	0.2-0.5	1-3	0-0.5	1-3	0.2-0.5	1-3	0.2-0.5	1-3	0-0.5	1-3
			5/1/2009	5/1/2009	5/1/2009 (2" asphalt)	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009 (2" asphalt)	5/1/2009	5/1/2009	5/1/2009 (2" asphalt)	5/1/2009
PCBs (mg/kg)	Aroclor-1016	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1221	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1232	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1242	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1248	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1254	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1260	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
	Aroclor-1262	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA
Aroclor-1268	2	2.4 U	0.51 U	0.51 U	0.51 U	0.51 U	0.49 U	NA	NA	0.12 U	0.13 U	NA	NA	
Pesticides (mg/kg)	4,4'-DDD	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aldrin	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	alpha-BHC	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	beta-BHC	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	0.7 ⁽¹⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	delta-BHC	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	1 ⁽²⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	1 ⁽²⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan Sulfate	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin Ketone	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	gamma-BHC (Lindane)	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hexachlorobenzene	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methoxychlor	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Metals, total (mg/kg)	Arsenic	20	13	12	20	5.8	25	18	6.2	130	9.3	16	11	7.4
	Barium	1,000	420	550	330	63	1,500	250	93	190	150	130	410	89
	Cadmium	2	5.4	3.4	1.0	0.42	6.2	1.2	0.59	4.1	0.96	0.91	2.0	0.55
	Chromium	30	69	31	25	15	44	22	13	21	18	20	21	16
	Lead	300	1,800	1,800	1,100	190	9,800	1,400	640	780	2,700	350	1,400	250
	Nickel	20	27	19	15	11	23	15	12	43	25	14	23	14
	Zinc	2,500	1,000	730	430	120	1,500	570 B	350	440	260	370	440	160

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

B - Compound detected in associated method blank

NA - Sample not analyzed for the listed analyte.

U - Compound was not detected at specified quantitation limit.

Values in Bold indicate the compound was detected.

Values shown in Bold and shaded type exceed the listed MCP Method 1 standards.

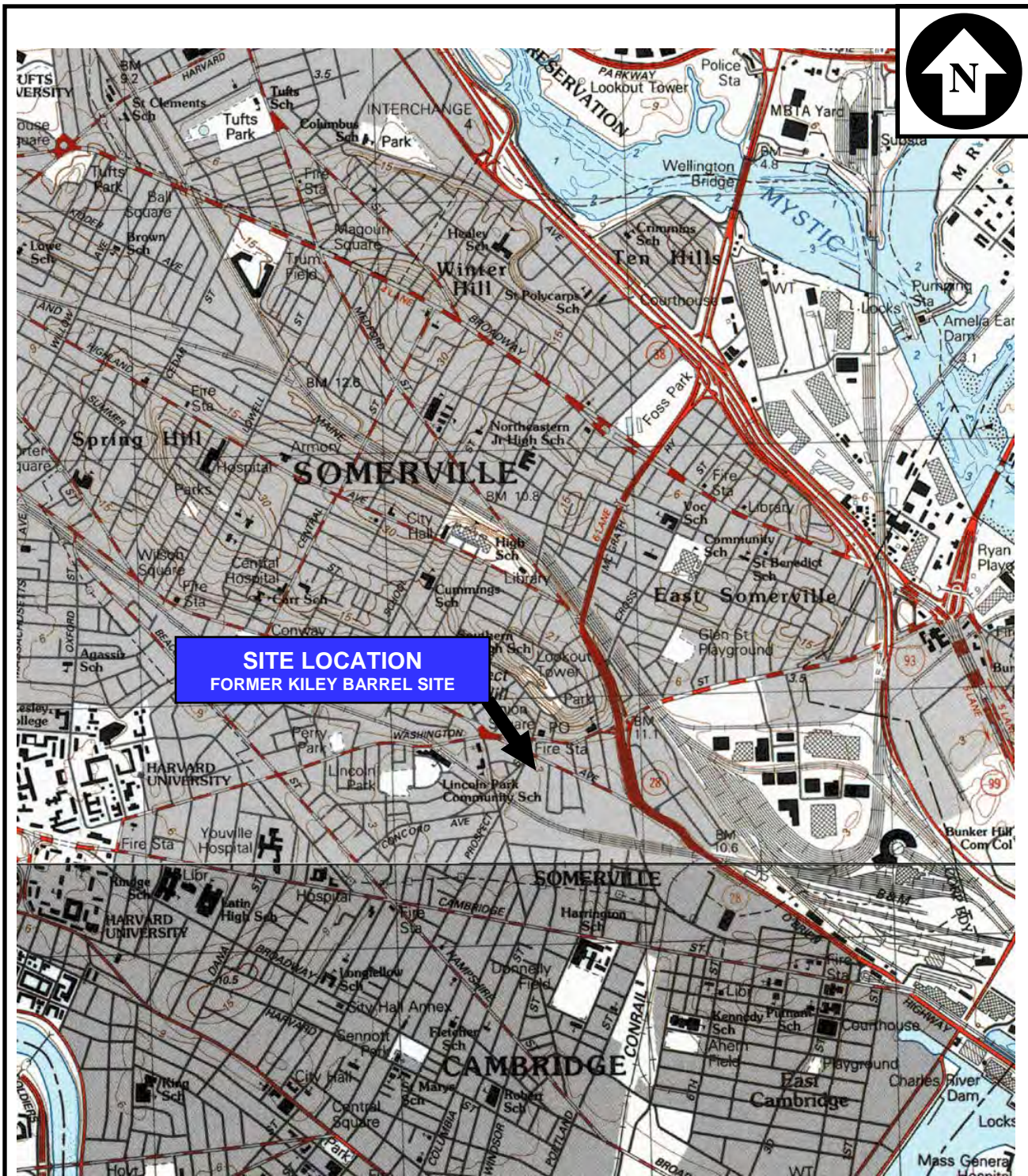
* - Exceeds concentration that could post an Imminent Hazard for soil within a depth of 12 inches below the ground surface per 310 CMR 40.0321.

PCBs - Polychlorinated Biphenyls.

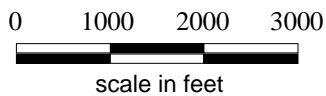
(1) - MassDEP Method 1 S-1/GW-3 for Technical Chlordane used.

(2) - MassDEP Method 1 S-1/GW-3 for Endosulfan used.

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS
TOPOGRAPHIC QUADRANGLES: BOSTON, NORTH, 1985



**Former Kiley Barrel Site
SOMERVILLE, MASSACHUSETTS**

SITE LOCATION MAP



Wannalancit Mills
650 Suffolk Street
Lowell, Ma. 01854
(978) 970-5600

**FIGURE
1**

DRAWN: MAN
CHECKED: FC

SCALE: AS SHOWN
Date July 2008

LEGEND:



CMW-6



ECS-B2



EXISTING MONITORING WELL

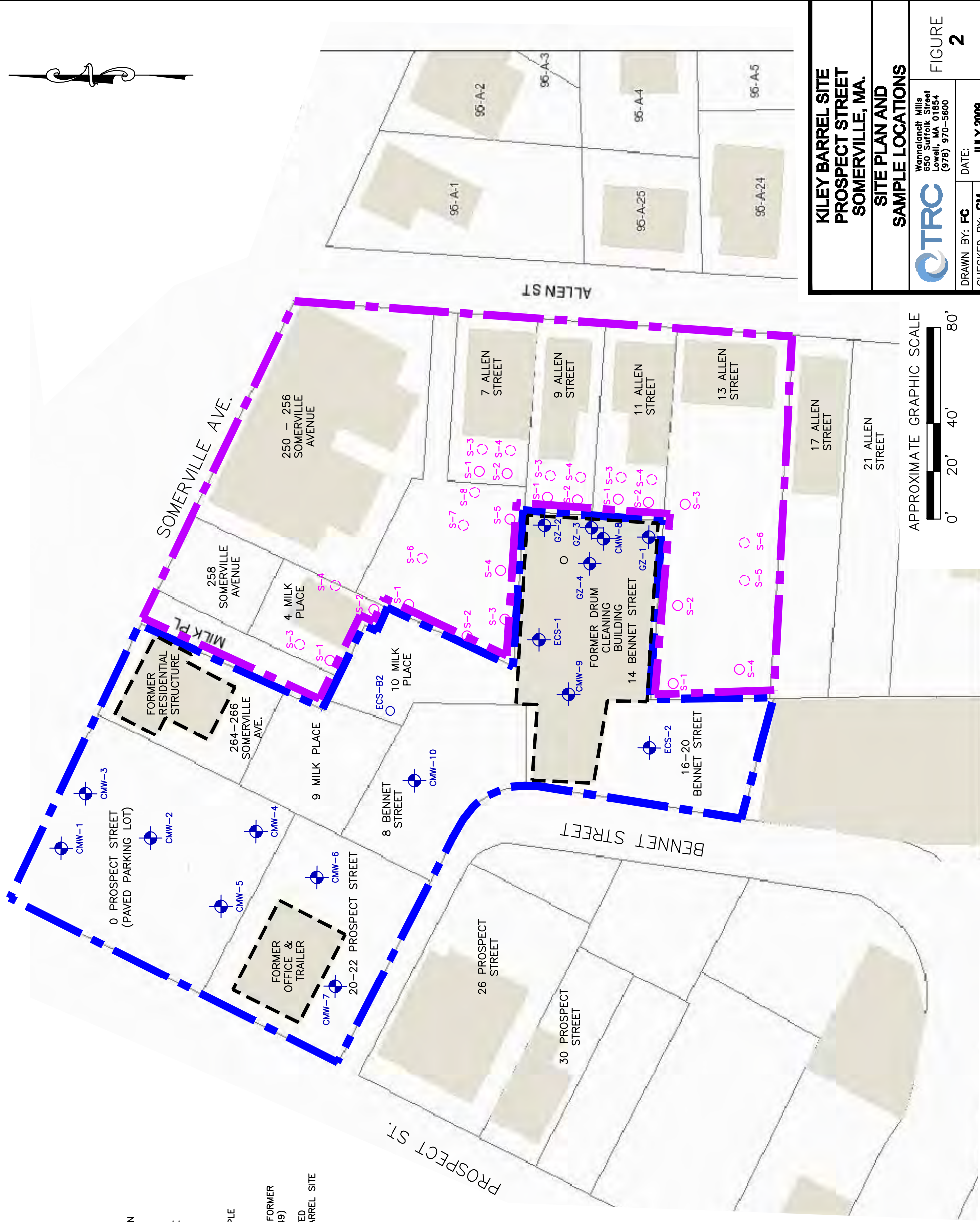
EXISTING SOIL SAMPLE LOCATION

PRIMARY SURFACE SOIL SAMPLE LOCATION FOR PCBs & METALS (0-0.5' AND 1-3')

ALTERNATE SURFACE SOIL SAMPLE LOCATION FOR PCBs & METALS (0-0.5' AND 1-3')

DISPOSAL SITE BOUNDARY FOR FORMER KILEY BARREL SITE (RTN 3-2849)

RESIDENTIAL PROPERTIES LOCATED ADJACENT TO FORMER KILEY BARREL SITE (RTN 3-28512)



APPROXIMATE GRAPHIC SCALE



**KILEY BARREL SITE
PROSPECT STREET
SOMERVILLE, MA.**

**SITE PLAN AND
SAMPLE LOCATIONS**



Worcester Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: **FC**

CHECKED BY: **CM**

DATE: **JULY 2008**

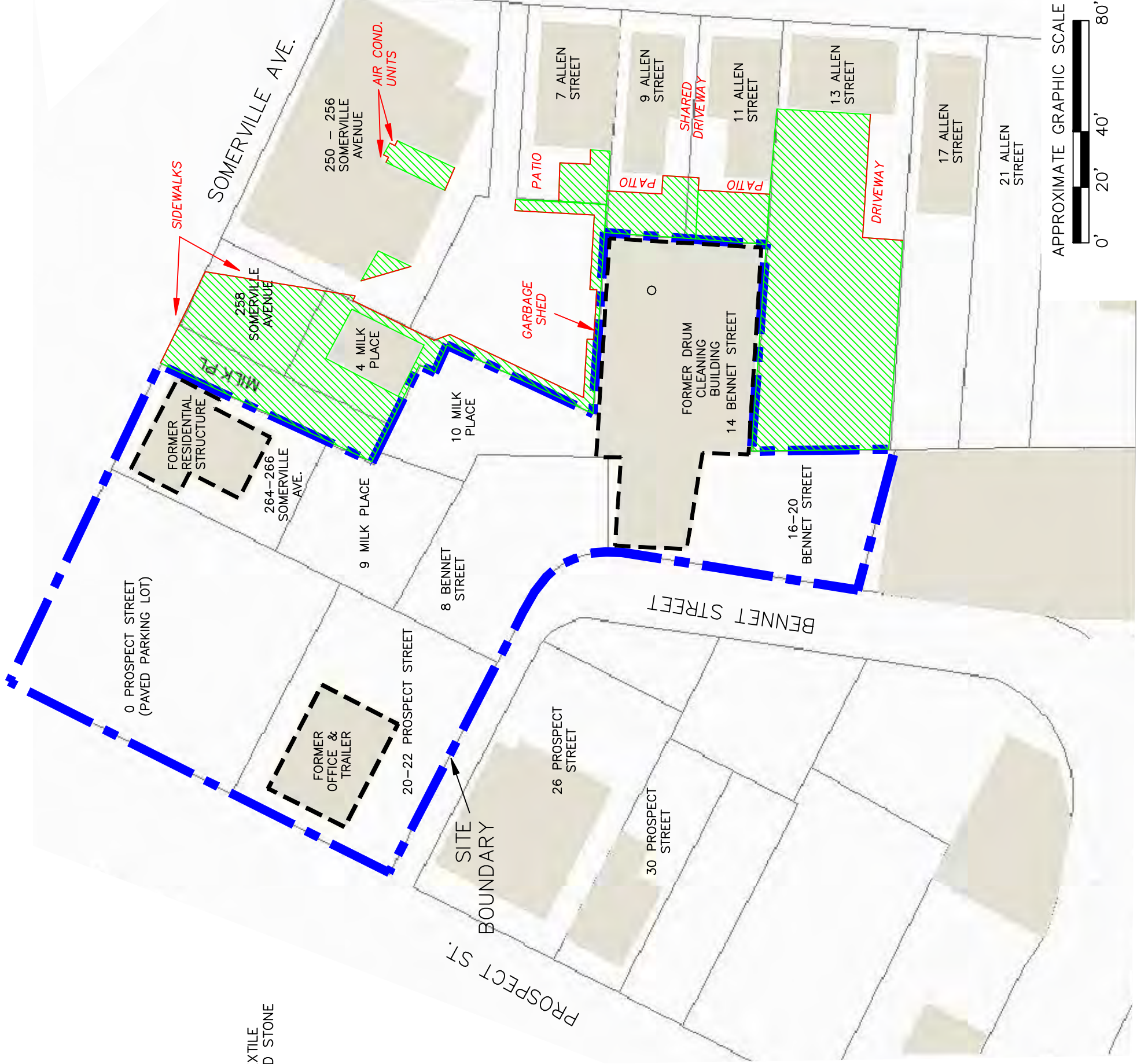
FIGURE
2



LEGEND:

— LANDSCAPING TIMBERS

▨ AREA TO BE COVERED WITH GEOTEXTILE FABRIC AND 6 INCHES OF CRUSHED STONE



APPROXIMATE GRAPHIC SCALE
0' 20' 40' 80'

**KILEY BARREL SITE
PROSPECT STREET
SOMERVILLE, MA.
PROPOSED GROUND
COVERING PLAN**



Warrancraft Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: **DP**
CHECKED BY: **FC**

DATE: **JULY 2008**

APPENDIX A

**RELEASE NOTIFICATION FORM AND PUBLIC
NOTIFICATION LETTERS**



RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Release Tracking Number

3 - 28512

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: **FORMER KILEY BARREL SITE**

2. Street Address: **20-22 PROSPECT ST**

3. City/Town: **SOMERVILLE** 4. ZIP Code: **021433418**

5. UTM Coordinates: a. UTM N: **4693926** b. UTM E: **327629**

B. THIS FORM IS BEING USED TO: (check one)

- 1. Submit a **Release Notification**
- 2. Submit a **Revised Release Notification**
- 3. Submit a **Retraction of a Previously Reported Notification** of a release or threat of release including supporting documentation required pursuant to 310 CMR 40.0335 (Section C is not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

1. Date and time of Oral Notification, if applicable: **5/18/2009** Time: **11:19** AM PM
mm/dd/yyyy hh:mm

2. Date and time you obtained knowledge of the Release or TOR: **5/18/2009** Time: **09:20** AM PM
mm/dd/yyyy hh:mm

3. Date and time release or TOR occurred, if known: Time: AM PM
mm/dd/yyyy hh:mm

Check all Notification Thresholds that apply to the Release or Threat of Release:
(for more information see 310 CMR 40.0310 - 40.0315)

<p>4. 2 HOUR REPORTING CONDITIONS</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Sudden Release <input type="checkbox"/> b. Threat of Sudden Release <input type="checkbox"/> c. Oil Sheen on Surface Water <input type="checkbox"/> d. Poses Imminent Hazard <input checked="" type="checkbox"/> e. Could Pose Imminent Hazard <input type="checkbox"/> f. Release Detected in Private Well <input type="checkbox"/> g. Release to Storm Drain <input type="checkbox"/> h. Sanitary Sewer Release (Imminent Hazard Only) 	<p>5. 72 HOUR REPORTING CONDITIONS</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch <input type="checkbox"/> b. Underground Storage Tank (UST) Release <input type="checkbox"/> c. Threat of UST Release <input type="checkbox"/> d. Release to Groundwater near Water Supply <input type="checkbox"/> e. Release to Groundwater near School or Residence <input type="checkbox"/> f. Substantial Release Migration 	<p>6. 120 DAY REPORTING CONDITIONS</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s) <input type="checkbox"/> b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards <input type="checkbox"/> c. Release of Oil to Groundwater Exceeding Reportable Concentration(s) <input type="checkbox"/> d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch and Less than 1/2 Inch
---	--	--



**RELEASE NOTIFICATION & NOTIFICATION
 RETRACTION FORM**

Release Tracking Number

3 - **28512**

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR): (cont.)

7. List below the Oils (O) or Hazardous Materials (HM) that exceed their Reportable Concentration (RC) or Reportable Quantity (RQ) by the greatest amount.

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
ARSENIC		HM	140	MG/KG	RCS-1

8. Check here if a list of additional Oil and Hazardous Materials subject to reporting is attached.

D. PERSON REQUIRED TO NOTIFY:

1. Check all that apply: a. change in contact name b. change of address c. change in the person notifying

2. Name of Organization: **CITY OF SOMERVILLE**

3. Contact First Name: **STEVEN** 4. Last Name: **AZAR**

5. Street: **93 HIGHLAND AVENUE** 6. Title:

7. City/Town: **SOMERVILLE** 8. State: **MA** 9. ZIP Code: **021431740**

10. Telephone: **6176256600** 11. Ext.: 12. FAX:

13. Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE OR THREAT OF RELEASE:

1. RP or PRP a. Owner b. Operator c. Generator d. Transporter
 e. Other RP or PRP Specify: _____

2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

4. Any Other Person Otherwise Required to Notify Specify Relationship: _____



RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Release Tracking Number

3 - 28512

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, **Steven Azar**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **Steven Azar** Signature 3. Title: _____

4. For: **CITY OF SOMERVILLE** 5. Date: **07/20/2009**
(Name of person or entity recorded in Section D) mm/dd/yyyy

6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____
8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____
11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

**Received by DEP on
7/20/2009 12:31:21 PM**

Kiley Barrel Site
Off-Site Property Owner Information
Updated: July 17, 2009

Property	Owner Information
5-7 Allen Street	Zack Wang 8 Windemere Drive Acton, MA 01720
9 Allen Street	Michael Lipinski 9 Allen Street Somerville, MA 02143
11 Allen Street	George Loadwick 11 Allen Street Somerville, MA
250-256 Somerville Avenue	Alex Steinbergh RCG LLC 17 Ivaloo Street, Suite 100 Somerville, MA 02143
13 Allen Street	Horace Cetoute 13 Allen Street Somerville, MA 02143
258 Somerville Avenue	John J. & Erika Carpenter 126 Babcock Street, Apt 8 Brookline, MA 02446
4 Milk Place	Antonia Shelzi PO Box 440320 Somerville, MA 02144



Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854

978.970.5600 PHONE
978.453.1995 FAX

www.TRCSolutions.com
July 20, 2009

TRC Reference Number: 13338.0010.0000

Honorable Joseph A. Curtatone
Somerville City Hall
93 Highland Avenue
Somerville, Massachusetts 02143

**RE: Implementation of Immediate Response Actions
Former Kiley Barrel Site Off-Property Locations
RTN 3-28512**

Dear Mr. Curtatone:

On behalf of the City of Somerville's Office of Strategic Planning and Community Development, and pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), TRC Environmental Corporation (TRC) has prepared this letter to inform you that Immediate Response Action (IRA) activities, including soil sample analysis, an Imminent Hazard (IH) Evaluation, and temporary ground covering, are being conducted at seven residential properties (5-7, 9, 11, and 13 Allen Street, 4 Milk Place, and 250-256 and 258 Somerville Avenue) located adjacent to the Former Kiley Barrel Site. A site location map and site plan showing the Former Kiley Barrel Site and adjacent properties are provided in the attached Figures 1 and 2, respectively. A temporary ground covering plan is attached as Figure 3.

During the IH Evaluation conducted in May of 2009, TRC determined that an IH condition exists at the residential properties. The purpose of the IRA is to address this IH condition by means of additional assessment and the elimination of the potential for direct-contact exposures to human receptors at the seven residential properties adjacent to the Site.

The IRA activities being conducted at the Former Kiley Barrel Site and adjacent properties are described in an IRA Plan, which is being submitted to the Massachusetts Department of Environmental Protection (MassDEP) on or about July 20, 2009. The IRA Plan may be viewed at the Massachusetts Department of Environmental Protection Northeast Region Office located at 205B Lowell Street in Wilmington, Massachusetts 01887. Appointments for file reviews can be made by calling 978-694-3200. Alternatively, the IRA Plan may be reviewed by visiting MassDEP's web site at: <http://www.mass.gov/dep/cleanup/>

If you have any questions concerning the IRA Plan, please do not hesitate to contact Frank Calandra at TRC at (978) 970-5600.

Sincerely,
TRC Environmental Corporation



Frank Calandra, PE
Project Manager

cc: Massachusetts DEP, Northeast Regional Office
Enclosures





Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854

978.970.5600 PHONE
978.453.1995 FAX

www.TRCSolutions.com
July 20, 2009

TRC Reference Number: 113338.0010.0000

Paulette Renault Caragianes
Health Department
City Hall Annex
50 Evergreen Avenue
Somerville, Massachusetts 02143

**RE: Implementation of Immediate Response Actions
Former Kiley Barrel Site Off-Property Locations
RTN 3-28512**

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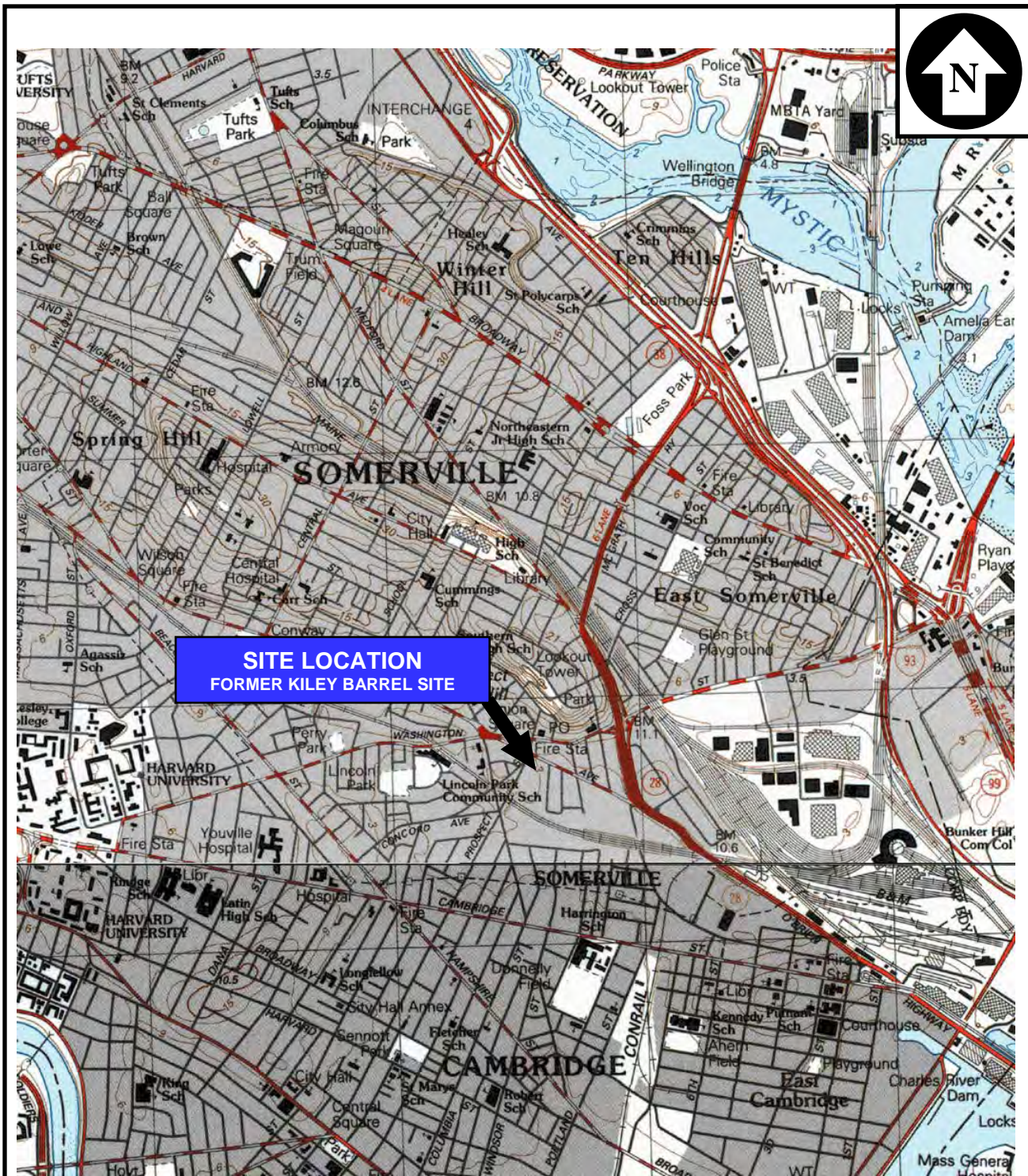
Sincerely,
TRC Environmental Corporation

A handwritten signature in black ink, appearing to read "Frank Calandra". The signature is fluid and cursive, with the first name "Frank" being more prominent than the last name "Calandra".

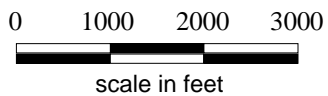
Frank Calandra, PE
Project Manager

cc: Massachusetts DEP, Northeast Regional Office
Enclosures





BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS
TOPOGRAPHIC QUADRANGLES: BOSTON, NORTH, 1985



**Former Kiley Barrel Site
SOMERVILLE, MASSACHUSETTS**

SITE LOCATION MAP



Wannalancit Mills
650 Suffolk Street
Lowell, Ma. 01854
(978) 970-5600

**FIGURE
1**

DRAWN: MAN
CHECKED: FC

SCALE: AS SHOWN
Date July 2008

LEGEND:



CMW-6



ECS-B2



EXISTING MONITORING WELL

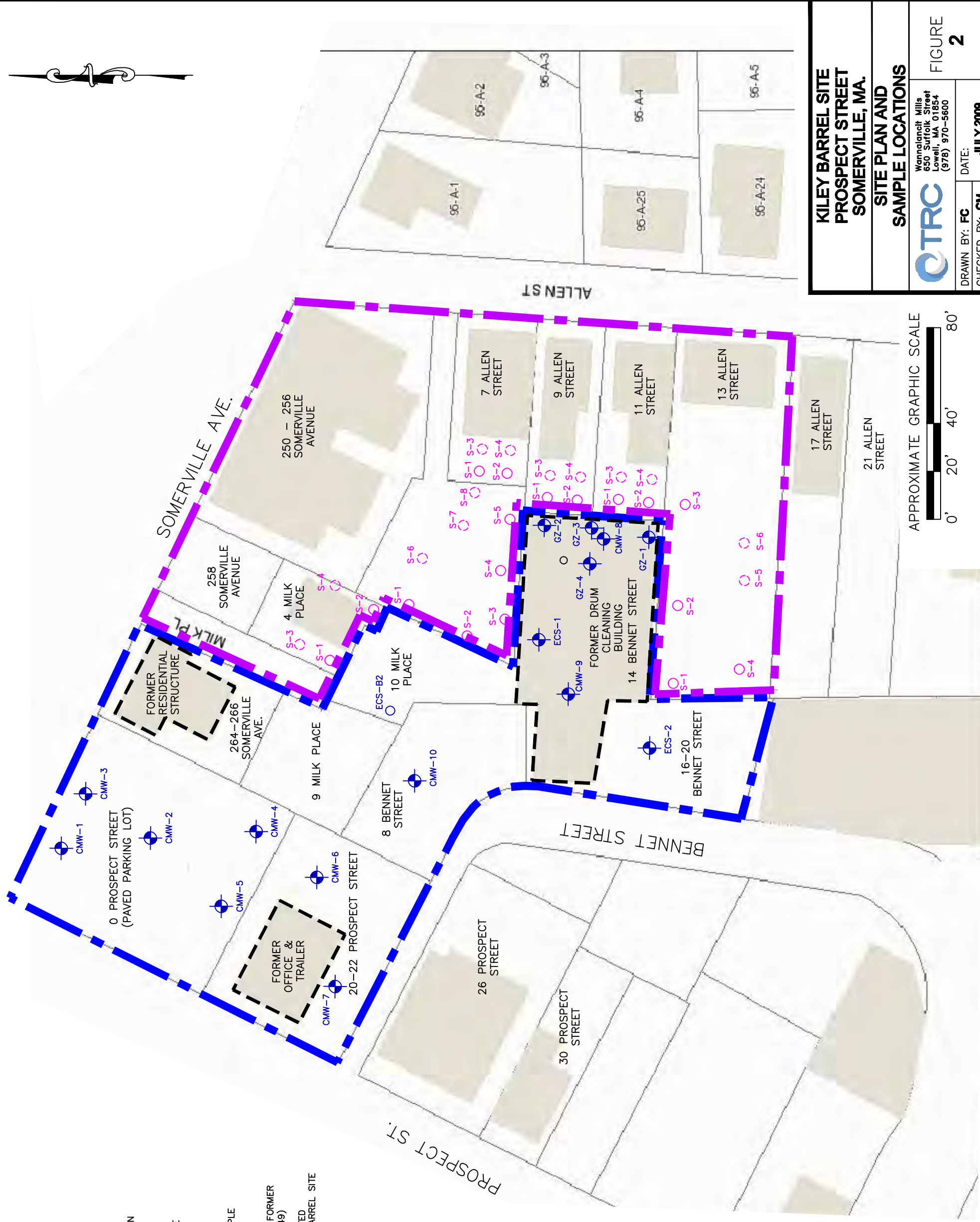
EXISTING SOIL SAMPLE LOCATION

PRIMARY SURFACE SOIL SAMPLE LOCATION FOR PCBs & METALS (0-0.5' AND 1-3')

ALTERNATE SURFACE SOIL SAMPLE LOCATION FOR PCBs & METALS (0-0.5' AND 1-3')

DISPOSAL SITE BOUNDARY FOR FORMER KILEY BARREL SITE (RTN 3-2849)

RESIDENTIAL PROPERTIES LOCATED ADJACENT TO FORMER KILEY BARREL SITE (RTN 3-28512)



APPROXIMATE GRAPHIC SCALE



**KILEY BARREL SITE
PROSPECT STREET
SOMERVILLE, MA.**

**SITE PLAN AND
SAMPLE LOCATIONS**



Worcester Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: **FC**

CHECKED BY: **CM**

DATE:

JULY 2008

FIGURE

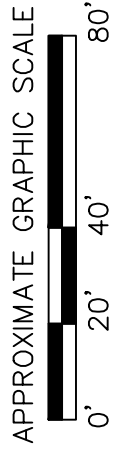
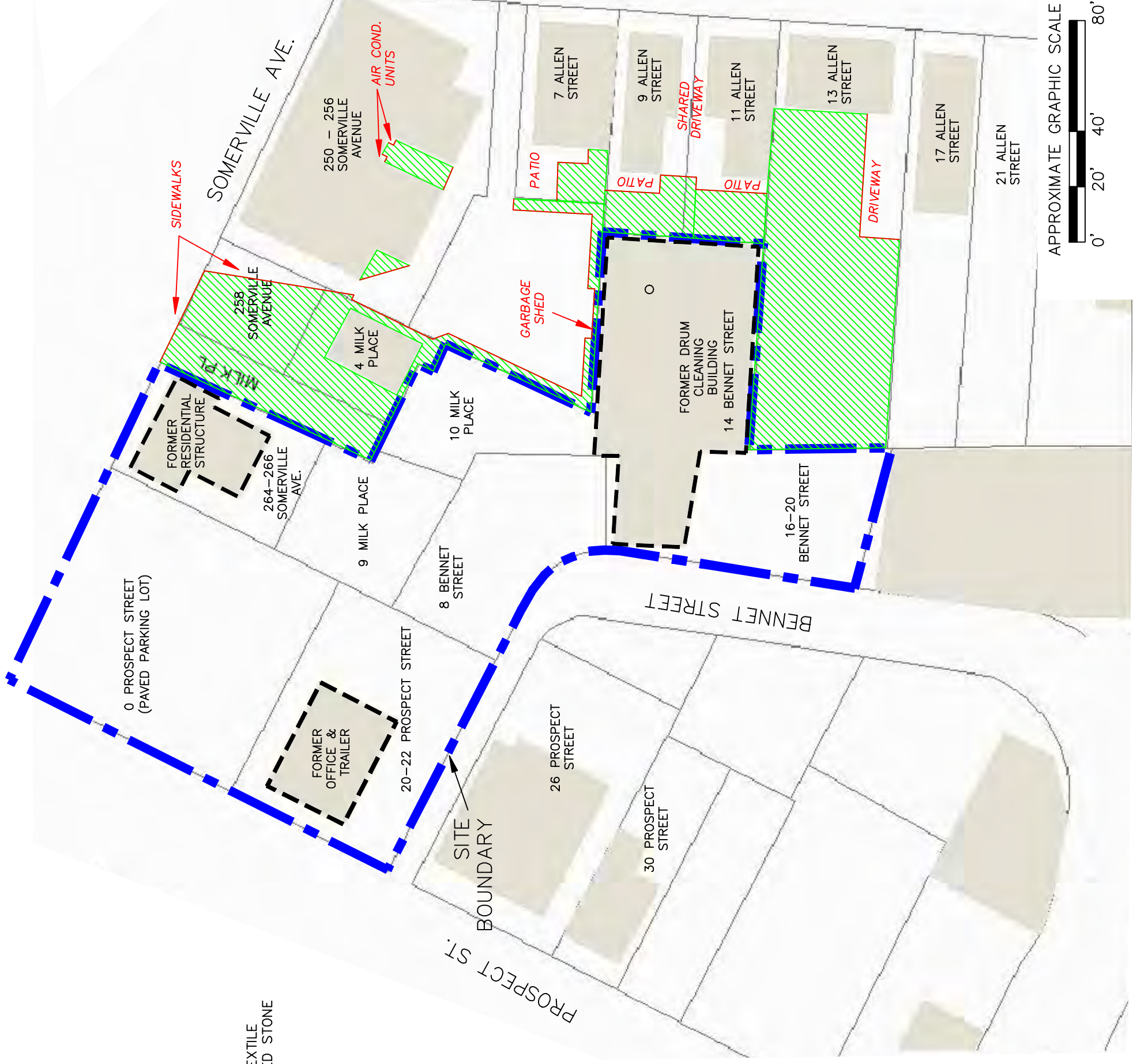
2



LEGEND:

— LANDSCAPING TIMBERS

▨ AREA TO BE COVERED WITH GEOTEXTILE FABRIC AND 6 INCHES OF CRUSHED STONE



APPROXIMATE GRAPHIC SCALE

**KILEY BARREL SITE
PROSPECT STREET
SOMERVILLE, MA.**

**PROPOSED GROUND
COVERING PLAN**



Warrancraft Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

DRAWN BY: **DP**
CHECKED BY: **FC**

DATE: **JULY 2008**

FIGURE
3



CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

July 8, 2009

Re: Former Kiley Barrel Site Environmental Assessment

Dear Community Member:

I wanted to thank those of you who could attend the Allen Street community meeting held on June 8th, 2009 at the Public Safety Building. As promised, this letter is the first in a series of updates aimed at keeping you apprised of developments relating to the Allen Street environmental assessment.

The City continues to work with the Massachusetts Department of Environmental Protection (MassDEP), the federal Environmental Protection Agency (EPA) and the City's environmental consultant TRC, Inc. to gather additional data regarding the situation and develop a strategy to address the environmental conditions. Some of the research involves reviewing historic records regarding the filling of the Millers River over a century ago. In addition, MassDEP will be undertaking soil testing on additional properties on Allen Street so that the extent of the situation can be determined. The City encourages residents on Allen Street to grant access to MassDEP to perform soil testing on your properties so that the necessary information can be collected. As a short-term strategy please find enclosed a flyer from MassDEP with an introduction from the City on how to limit your risk from exposure to lead and arsenic. For those of you with pets, 'wash your hands' becomes 'wash your paws.'

Once we better understand our options we will be communicating them to you. As always the health and safety of Somerville's residents are my top priority. Thanks for your continued patience and confidence.

If you have any questions regarding this matter, please contact Steven Azar, Senior Planner and Brownfield Program Manager at 617.625.6600 x 2500 or by email at sazar@somervillema.gov.

Sincerely,

Joseph A. Curtatone
Mayor





CITY OF SOMERVILLE, MASSACHUSETTS

JOSEPH A. CURTATONE

MAYOR

July 8, 2009

Name

Address

City, State and Zip

Re: Former Kiley Barrel Site Environmental Assessment

Dear Community Member:

I wanted to thank to those of you who could attend the Allen Street community meeting held on June 8th, 2009 at the Public Safety Building. As promised, this letter is the first in a series of updates aimed at keeping you apprised of developments relating to the Allen Street environmental assessment.

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As a first step, the City proposes to eliminate the health risk caused by the metals in the soil. This can be achieved by capping your backyards with a geotextile layer and gravel. This is only a temporary measure to protect you and your families while a permanent solution is developed. With regard to a permanent solution, the City requested TRC, Inc. to submit cost estimates for several soil remediation strategies that would remove the health risk to private properties. These estimates came back three times more expensive than the City initially anticipated and will require more deliberation before moving forward.

At this time I cordially invite you to schedule a meeting with City staff, either at City Hall or in your home, to discuss all next-step scenarios pertinent to your property. Each



property will be addressed on an individual basis with residents' health and your future objectives in mind.

To set up an individual meeting, please contact Steven Azar, Senior Planner and Brownfield Program Manager at 617.625.6600 x 2561 or by email at sazar@somervillema.gov by **July 17, 2009**. Please include in your message your name, home address, email address if applicable, and telephone number. We are hoping to conduct all meetings between **July 20 and July 24, 2009**.

If you have not already done so, please submit any outstanding City Access Agreements by mail to the following address:

Steven Azar – OSPCD
City of Somerville
93 Highland Avenue
Somerville, MA 02143

As always the health and safety of Somerville's residents are my top priority. Thank you for your continued patience and confidence.

Sincerely,

Joseph A. Curtatone
Mayor



Community Health Notice

Aviso de la Salud de la Comunidad

Aviso da Saúde da Comunidade

Avetisman Pou Sante Kominote

Allen Street • Calle de Allen • Rua Allen



The neighborhood in which you live was once home to the Millers River and a tidal marsh that fed into Boston Harbor. Over a hundred years ago, the river and marsh were filled in to make the land on which many of you now live. Unfortunately, in those days there were no environmental regulations and areas like this were often filled with whatever they could find, including industrial wastes like coal ash.

As a result of work the City of Somerville is doing to clean up the Kiley Barrel site and the corner of Somerville Avenue and Prospect Street we have discovered high concentrations of lead and arsenic in the soil of several neighboring properties. The City is working with the Massachusetts Department of Environmental Protection to assess the situation and determine the extent of the contamination. While we continue testing, we would like to offer the following suggestions on how to reduce your exposure to the lead and arsenic.



City of Somerville
Joseph A. Curtatone
Mayor



La vecindad en donde vive en una época fue el punto inicial del Río Millers y de un pantano de marea que desembocaban en el puerto de Boston. Hace más de cien años, el río y los pantanos se llenaron para construir los terrenos en los que muchos de ustedes viven ahora. Lamentablemente, en esos días no había regulaciones ambientales y las áreas de este tipo a menudo se llenaron con lo que podían encontrar, incluyendo los desechos industriales como cenizas de carbón.

Como resultado de los trabajos que la ciudad de Somerville está haciendo para limpiar la zona de “Kiley Barrel” y la esquina de la avenida de Somerville con la calle Prospect hemos descubierto altas concentraciones de plomo y arsénico en la tierra de varias propiedades vecinas. La Ciudad está trabajando con el Departamento de Protección del Medio Ambiente de Massachusetts para evaluar la situación y determinar el grado de la contaminación. Mientras continuamos examinando, quisiéramos ofrecer las siguientes sugerencias sobre cómo reducir su exposición al plomo y al arsénico.

A vizinhança em que você mora uma vez foi o origem do Rio Millers e a um pântano de maré que alimentaram ao porto de Boston. Mais de cem anos atrás, o rio e o pântano foram preenchidos para criar a terra em que muitos de vocês moram hoje. Infelizmente, naqueles dias, não houve a regulamentação ambiental e áreas como esta foram frequentemente preenchidas com tudo o que podia encontrar, incluindo desperdícios industriais como a cinza de carvão.

Como resultado do trabalho a cidade de Somerville está fazendo para limpar o local “Kiley Barrel” e na esquina da Avenida Somerville com a rua Prospect temos descoberto altas concentrações de chumbo e arsênio nas terras de várias propriedades vizinhas. A cidade está trabalhando com o Departamento de Proteção Ambiental de Massachusetts para avaliar a situação e determinar a extensão da contaminação. Enquanto continuamos a análise da terra, gostaríamos de oferecer as seguintes sugestões sobre como reduzir sua exposição ao chumbo e arsênico

Gen yon epok katye ke ou abite a te kay Miller Rivers ak yon marekaj kite konn al koule nan Boston Harbor. Apre kek san tan konsa, rivyê a ak marekaj la te vinn konble e yo te vinn tounen tê kote wap viv koulye a. Malerezman nan tan sa pat gen lwa sou fatra nan katye yo, se konsa moun tê konn jete nenpot bagay nan dlo yo, men'm fatra ki soti nan izin yo, tankou sann chabon.

Se konsa nan travay otorite vil Somerville ap fê pou netwaye zonn kiley Barrel ansanm avek kalfou Somerville Avni ak Prospect Street yo jwenn ke gen anpil plon nan plizyê pwopwyete nan zonn nan. Vil Somerville ak depatman pou pwoteje katye nan Massachusetts ap travay pou yo jwenn yon solityon a pwoblem nan epi tou pou yo wê ki jan moun ka kontamine. Pandan ke nap kontinye,tyeke nou ta renmen ofri ou kek konsey sou fason pou redwi chans pou ta pran nan pwazon ki nan plon

STEPS TO PREVENT EXPOSURE

- If you have lead in your yard, here are some things you can do:
- Discourage children from playing on bare soil -- provide a sandbox, if possible -- and make sure they wash their hands after playing outside, especially before eating.
- Wash toys before bringing them into the house or leave them outside.
- Keep your pets clean. Dogs and cats can bring dirt inside on their paws or fur.
- Clean up any dirt that is tracked into the house. Use a wet mop whenever you can, since sweeping or vacuuming can stir up dust in the air.
- Wash clothing that is heavily soiled with dirt from the yard separately from other laundry.
- Improve or replace the soil in areas of your yard that are used for gardening or use raised beds. Keep in mind that vegetables grown above ground (e.g., tomatoes and squash) are safer for eating than root vegetables (e.g., potatoes and carrots).
- During the summer months, when dust is a problem, clean window sills with a damp cloth or sponge once a week.
- Keep exterior house paint in good condition. Old paint can peel and flake off into the soil.



Medidas para prevenir la exposición

- Si usted tiene plomo en su jardín, aquí están algunas cosas que usted puede hacer:
- Desaliente los niños de jugar en la tierra--mantenga una caja de arena, si es posible-- y asegúrese de que se laven las manos después de jugar afuera, especialmente antes de comer.
- Lave los juguetes antes de traerlos a la casa o déjelos afuera.
- Mantenga a sus mascotas limpias. Los perros y los gatos pueden traer la suciedad adentro en sus patas o piel.
- Limpie cualquier suciedad que entre en la casa. Utilice un trapeador húmedo siempre que usted pueda, ya que el barrer o el limpiar con la aspiradora puede suscitar el polvo en el aire.
- Lave la ropa que está muy sucia con tierra del jardín por separado de la otra ropa sucia.
- Mejore o sustituya la tierra en las zonas de su jardín que se utilizan para cultivar o utilice un cantero levantado. Tenga en cuenta que los vegetales cultivados sobre la tierra (por ejemplo, los tomates y las calabazas) son más saludables para comer que los vegetales de raíz (por ejemplo, las patatas y las zanahorias).
- Durante los meses del verano, cuando el polvo es un problema, limpie los marcos de las ventanas con un paño húmedo o una esponja una vez a la semana.
- Mantenga la pintura exterior de la casa en buenas condiciones. La pintura vieja se puede pelar y descascar sobre la tierra.

Medida para evitar a exposição

- Se você tem chumbo em seu quintal, aqui estão algumas coisas que você pode fazer:
- Desencorajar as crianças de jogar na terra -- forneça uma caixa de areia, se possível -- e certifique-se que eles lavem as mãos depois de jogar fora, especialmente antes de comer.
- Lave os brinquedos antes de trazê-los a casa ou deixe-os fora.
- Mantenha seus animais limpos. Os cães e os gatos podem trazer a sujeira para dentro da casa em suas patas ou pele.
- Limpe qualquer sujeira que entre na casa. Use um esfregão molhado sempre que puder, porque a vassoura ou aspirador de limpeza pode levantar o pó no ar.
- Lave a roupa que está muito suja com sujeira do jardim separada da outra roupa.
- Melhore ou substitua a terra nas áreas de seu quintal que são usadas para jardinagem ou use canteiros levantados. Tenha em mente que os vegetais cultivadas sobre a terra (por exemplo, tomates e abóboras) são mais saudáveis para comer que os vegetais de raiz (por exemplo, batatas e cenouras).
- Durante os meses do verão, quando o pó é um problema, limpe o peitoril das janelas com um pano úmido ou uma esponja uma vez por semana.
- Manter a pintura exterior da casa em boas condições. A pintura velha pode descascar e lascas na terra.



Mwayen pou evite pwazon nan penti

- **Si ou genyen penti kii gen plon nan lakou ou, men enpe bagay ou kapba fe`**
- Annou dekouraje tout timoun pou yo pa jwe nan te, sil posib fe tout timoun lave men yo apre yo fini jwe deyo a, espesyalman anvan yo manje
- Lave tout jwet anvan ou antre yo nan kay la, oswa kite tout jwet yo deyo
- Kenbe bet domestic yo pwop. Chen ak chat pote anpil pousye anba pye yo ak nan po yo.
- Netwaye tout pousye ki antre andedan kay ou. Itilize yon mop ki mouye pou netwaye kay ou. Paske le ou itilize bale oswa vacuum, sa leve pousye.
- Le ou wap fe lesiv, lave tout rad ki sal avek te apa.
-
- Ramplase te nan zonn lakou ou itilize pou fe jaden. Sonje ke legim vet ki grandi anle te ya (tomat,joumou)pi bon pou manje pase sa ki grandi anba te ya (pomdete avek kawot)
- Pandan mwa ete, netwaye fenet ou yo avek yon eponj mouye chak semen.
- soil.Kenbe penti deyo kay ou nan bon kondisyon. Ansyen penti kon dekale, epi kal yo tonbe nan te a.



MassDEP

APPENDIX B
MASSDEP NOTICES



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE
205B Lowell Street, Wilmington, MA 01887 • (978) 694-3200

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

URGENT LEGAL MATTER: PROMPT REPLY NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Certified Mail
7007149000001016053

January 16, 2009

City of Somerville
93 Highland Avenue
Somerville, MA 02143

Attn: Honorable Mayor Curtatone

RE: SOMERVILLE:
Former Kiley Barrel
20-22 Prospect Street
RTN 3-2849
NOTICE OF RESPONSIBILITY/
NOTICE OF RESPONSE ACTION
/NOTICE OF COMMENCEMENT
OF WORK PURSUANT TO M.G.L.
C.21E

Dear Mayor Curtatone:

The purpose of this letter is to provide the City of Somerville with a Notice of Responsibility, Notice of Response Action, and Notice of Commencement of Work for the property at 20-22 Prospect Street, Somerville. On April 10, 2006, the City of Somerville submitted to the Massachusetts Department of Environmental Protection (MassDEP) a Phase II Comprehensive Site Assessment Report for the Site. On May 25, 2007, the City of Somerville submitted to MassDEP a supplemental Phase II scope of work to determine if volatile organic compounds (VOCs) in groundwater from the subject site are impacting neighboring residences via vapor intrusion. The supplemental Phase II scope of work was never conducted. Extremely high levels of VOCs, vinyl chloride in particular, have been detected in groundwater monitoring wells on the subject site that are within thirty feet of residential properties on Allen Street. The elevated levels of vinyl chloride detected in shallow groundwater (<15 below ground surface) near residential properties has the potential to create a Critical Exposure Pathway and/or an Imminent Hazard condition as defined at 310 CMR 40.0006.

NOTICE OF RESPONSIBILITY

Statement of Conclusions/Statutory Liabilities

Based upon the aforementioned information, a condition of environmental contamination has been documented at the subject site.

Be advised that such conditions constitute a release/threat of release of oil/hazardous materials at the site. The prevention and/or mitigation of such a release or threat of release is governed by Massachusetts General Law, Chapter 21E, the "Massachusetts Oil and Hazardous Material Release Prevention and Response Act".

Chapter 21E identifies as responsible parties the current owner or operator of a site at which there has been a release or a threat of release of oil or hazardous material; the past owner or operator of a site where a release of hazardous material has occurred; any person who directly or indirectly arranged for the transport, disposal, storage or treatment of hazardous materials to or at such a site; and any person who caused or is legally responsible for a release or a threat of release of oil or hazardous material at such a site. Such parties are liable without regard to fault; the nature of this liability is joint and several. (M.G.L. Chapter 21E, Section 5a).

This letter is to inform you in writing that:

1. MassDEP has determined that a release/threat of release of oil/hazardous materials has occurred at the subject site;
2. Information available to MassDEP indicates that the City of Somerville is a potentially liable and "responsible" party pursuant to Section 5(a) of Chapter 21E;
3. Additional investigation and assessment is needed to adequately define the impact of this release/threat of release on public health and the environment and to determine what remedial/clean up measures, if any, are necessary;
4. Should you fail to implement those actions required by M.G.L.c.21E and the MCP 310 CMR 40.0000, MassDEP may, pursuant to M.G.L. Chapter 21E, take or arrange for any and all necessary actions at the site. If public funds are expended under such conditions, Chapter 21E, Section 11 stipulates that the Attorney General of the Commonwealth of Massachusetts may initiate legal action against the responsible party(s) to recover all costs incurred by MassDEP in the assessment, containment, and removal of any release or threat of release of oil or hazardous materials.
5. The liability of responsible parties in (4) above includes up to three times the cost of:
 - a. all response costs incurred by the Department due to the release/threat of release, including all contract, administrative, and personnel costs, and

all damages for any injury to, destruction, or loss of natural resources due to the release/threat of release;**Draft**

b.

NOTICE OF RESPONSE ACTION

To comply with the requirements of M.G.L. c. 21E and the MCP, the following response actions must be conducted:

1. Engage the services of a Licensed Site Professional (LSP) to conduct indoor air sampling within the residential space at 7, 9, and 11 Allen Street and 250-256 Somerville Avenue.
2. Indoor air samples must be collected using evacuated stainless steel canisters (e.g. SUMMA) and be collected on a time-weighted average of no less than four hours. Samples shall be analyzed by EPA Method TO-14A or TO-15.
3. A minimum of one indoor air sample within the basement (if applicable) and first floor/occupied level shall be collected from each property in addition to one ambient air sample from an up-wind location.
4. Collect groundwater samples from key monitoring wells on the subject site for laboratory analysis of VOCs via EPA Method 8260.
5. Install groundwater monitoring wells between the existing wells on the site and the abutting residences on Allen Street and Somerville Avenue and collect groundwater samples for laboratory analysis for VOCs via EPA Method 8260.

INTERIM DEADLINE FOR NOTIFICATION OF YOUR INTENT TO CONDUCT RESPONSE ACTIONS

To perform Response Actions in lieu of MassDEP, the City of Somerville must comply with the following:

1. Provide verbal notice to MassDEP of your intent to conduct response actions as required by this notice by **January 23, 2009**.
2. Complete the required response actions in this notice by **February 20, 2009**. Please refer to MassDEP's policy, WSC Policy 02-43 "Indoor Air Sampling and Evaluation Guide", for guidance on indoor air sampling.
3. Provide the results of the required response actions to MassDEP in an Imminent Hazard Evaluation report by **March 20, 2009**.

Please note, pursuant to 310 CMR 40.0167, these deadlines have been established by MassDEP as Interim Deadlines.

NOTICE OF COMMENCEMENT OF WORK

If you do not provide the commitment to conduct response actions as specified above by **January 23, 2009**, MassDEP will secure the services of one or more of its contractors to perform the necessary response actions. Mass DEP reserves the right to conduct additional response actions necessary to achieve a level of No Significant Risk at the site without providing additional notice to you.

Regardless of who performs the necessary work at the site, you may be liable for all MassDEP's response action costs. Response action costs include the cost of direct hours for work performed by MassDEP employees in overseeing or arranging for response actions, any expenses incurred by the MassDEP in support of those direct hours, as well as payments to MassDEP's contractors (for more detail see the cost recovery regulations at 310 CMR 40.600 et seq.).

If you have any questions, you may contact Valerie Thompson of this office at the letterhead address or telephone (978) 694-3348. Please reference the DEP Release Tracking Number 3-2849 in any correspondence with the MassDEP.

Sincerely,

The Department of Environmental Protection is providing this final document copy to you electronically. A signed copy of the original document is on file at the DEP's Northeast Region records office located in Wilmington, Massachusetts.

Stephen M. Johnson
Regional Director,
Bureau of Waste Site Cleanup

cc: Data Entry/File: C&E/IDL/NORA/NOR
Maureen Vallantini, MassDEP NERO, Counsel, maureen.vallantini@state.ma.us
Anne Thomas, City of Somerville, Special Counsel, athomas@somervillema.gov
Harry Vaughan, Somerville Board of Health, hvaughan@somervillema.gov
Michael Lambert, City of Somerville, Executive Director of OSPCD,
mlambo@somervillema.gov
John Gannon, City of Somerville, City Solicitor, jgannon@somervillema.gov
Rob May, City of Somerville, Director of OSPCD, rmay@somervillema.gov
Steven Azar, City of Somerville, Senior Planning, OSPCD, sazar@somervillema.gov
Nancy Busnach, City of Somerville, Chair of SRA, nbusnach@verizon.net



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
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NORTHEAST REGIONAL OFFICE
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DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

Certified Mail
70081830000460901886

April 1, 2009

City of Somerville
93 Highland Avenue
Somerville, MA 02143

RE: SOMERVILLE:
Former Kiley Barrel
20-22 Prospect Street
RTN 3-2849

Attn: Joseph A. Curtatone, Mayor

**AMENDED NOTICE OF RESPONSE
ACTION INTERIM DEADLINE
EXTENSION**

Honorable Mayor Curtatone:

The purpose of this letter is to provide the City of Somerville (the City) with an extension to the Interim Deadlines established by the Massachusetts Department of Environmental Protection (MassDEP) in a January 16, 2009 Notice of Responsibility, Notice of Response Action, and Notice of Commencement of Work (NORA) for the site at 20-22 Prospect Street, Somerville. On January 23, 2009, the City provided MassDEP with verbal affirmation that they would perform the necessary response actions outlined within the January 16, 2009 NORA. However, the necessary response actions were not conducted within the timeframes specified by MassDEP because the City required additional time to obtain access from private property owners to perform sampling activities on their properties. In addition, MassDEP identified the need to assess surface soils at the residential properties for PCBs and metals. The City has proposed the following deadlines for conducting the necessary response actions at the site which include conducting assessment activities at abutting residential properties.

INTERIM DEADLINES

To comply with the requirements of M.G.L. c. 21E and the MCP, the following response actions must be conducted within the following timeframes:

1. Engage the services of a Licensed Site Professional (LSP) to conduct indoor air sampling within the residential space at 7, 9, and 11 Allen Street and 250-256 Somerville Avenue **during the week of March 15, 2009**. This work has been completed.

2. Install groundwater monitoring wells between the existing wells on the site and the abutting residences on Allen Street and Somerville Avenue and collect groundwater samples for laboratory analysis for volatile organic compounds (VOCs) via EPA Method 8260 **during the week of March 15, 2009**. This work has been completed.
3. Collect groundwater samples from key monitoring wells on the subject site for laboratory analysis for VOCs via EPA Method 8260 **by March 31, 2009**. This work has been completed.
4. Conduct surficial soil sampling on abutting residential properties on 7, 9, 11, and 13 Allen Street, 4 Milk Street, 250-256 Somerville Avenue and the Bennett Street Right-of Way for PCBs and metals (arsenic, barium, cadmium, chromium, lead, nickel, and zinc) for laboratory analysis via EPA Methods 3540C/8082 and 6010B/7471A, respectively **during the week of April 26, 2009**.
5. Provide the results of the indoor air and groundwater sampling to MassDEP in an Imminent Hazard Evaluation report pursuant to 310 CMR 40.0959 **by May 4, 2009**.
6. Provide the results of the residential soil sampling to MassDEP in an Imminent Hazard Evaluation report pursuant to 310 CMR 40.0950 **by June 5, 2009**.

Please note, pursuant to 310 CMR 40.0167, these deadlines have been established by MassDEP as Interim Deadlines.

If you have any questions, you may contact Valerie Thompson of this office at the letterhead address or telephone (978) 694-3348. Please reference the DEP Release Tracking Number 3-2849 in any correspondence with MassDEP.

Sincerely,

The Department of Environmental Protection is providing this final document copy to you electronically. A signed copy of the original document is on file at the DEP's Northeast Region records office located in Wilmington, Massachusetts.

Joanne Fagan
Section Chief, Brownfields/Permits
Bureau of Waste Site Cleanup

cc: Data Entry/File: C&E/ INTLET
Maureen Vallantini, MassDEP NERO, Counsel, maureen.vallantini@state.ma.us
Anne Thomas, City of Somerville, Special Counsel, athomas@somervillema.gov
Harry Vaughan, Somerville Board of Health, hvaughan@somervillema.gov
Michael Lambert, City of Somerville, Executive Director of OSPCD,
mlambo@somervillema.gov
John Gannon, City of Somerville, City Solicitor, jgannon@somervillema.gov
Rob May, City of Somerville, Director of OSPCD, rmay@somervillema.gov
Steven Azar, City of Somerville, Senior Planning, OSPCD, sazar@somervillema.gov
Joe Ferrari, Environmental Protection Agency, ferrari.joe@epa.gov
Nancy Busnach, City of Somerville, Chair of SRA, nbusnach@verizon.net
Frank Calandra, TRC Solutions, FCalandra@TRCSolutions.com

**COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the matter of:)	Somerville-Former Kiley Barrel
)	0 Prospect Street, 20-22 Prospect Street,
City of Somerville)	264-266 Somerville Ave, 9 and 10
)	Milk Place, 8, 14, and 16-20 Bennett Street
Somerville Redevelopment Authority))	RTN: 3-2849
)	File No.: ACO-NE-09-3C001
)	

**ADMINISTRATIVE CONSENT ORDER
AND
NOTICE OF NONCOMPLIANCE**

I. THE PARTIES

1. The Department of Environmental Protection (“Department” or “MassDEP”) is a duly constituted agency of the Commonwealth of Massachusetts established pursuant to M.G.L. c. 21A, § 7. MassDEP maintains its principal office at One Winter Street, Boston, Massachusetts 02108, and its Northeast Regional Office at 205B Lowell Street, Wilmington, Massachusetts.
2. The City of Somerville (“the City”) is a Municipality with its principal offices located at 93 Highland Avenue, Somerville, Massachusetts 01887.
3. The Somerville Redevelopment Authority (“the SRA”) is a Redevelopment Authority with its principal offices located at 93 Highland Avenue, Somerville, Massachusetts. The SRA’s mailing address for purposes of this Consent Order is 93 Highland Avenue, Somerville, Massachusetts.
4. The SRA and the City are collectively the Respondents.
5. MassDEP is responsible for the implementation and enforcement of:

M.G.L. c. 21E and the Massachusetts Contingency Plan (“MCP”) at 310 CMR 40.0000;

MassDEP has authority under M.G.L. c. 21A, § 16 and the Administrative Penalty Regulations at 310 CMR 5.00 to assess civil administrative penalties to persons in noncompliance with the laws and regulations set forth above.

II. STATEMENT OF FACTS AND LAW

6. The City is the current owner of the property located at 0 Prospect Street, Somerville, Massachusetts, and the SRA is the current owner of the properties located at 20-22 Prospect Street, 264-266 Somerville Avenue, 9 and 10 Milk Place, 8,14, and 16-20 Bennett Street, Somerville, Massachusetts at or from which there is or has been a release and/or threat of release of oil and/or hazardous material pursuant to M.G.L. c. 21E (collectively referred to as the “Property”). For purposes of this Consent Order, “Site” shall mean the Property, and any other place or area where the release of oil and/or hazardous material at or from the Property has come to be located.

7. The following facts and allegations have led MassDEP to issue this Consent Order:

- A. On October 29, 1989, MassDEP received knowledge of a release of oil and/or hazardous material at the Site and subsequently assigned Release Tracking Number (RTN) 3-2849.
- B. On February 28, 1990, MassDEP granted a “Waiver of Approvals” for the Site, allowing the former owner, the Estate of J. M. Kiley, to conduct comprehensive response actions without MassDEP oversight or approval.
- C. On January 5, 1995, MassDEP notified the Estate of J. M. Kiley that the Waiver of Approvals for the Site expired and that the Site was now classified as a “Tier II” Site with designated Interim Deadlines to conduct additional response actions.
- D. On July 13, 1999, MassDEP was notified of a potential Imminent Hazard condition due to the detection of elevated levels of arsenic in surficial soil at the Site. Immediate Response Actions were initiated under RTN 3-18513.
- E. On August 19, 1999, MassDEP issued a Notice of Responsibility to Massachusetts General Hospital for RTN 3-18513.
- F. On September 9, 1999, MassDEP received a Tier II Transfer for RTNs 3-18513 and 3-2849 to change parties undertaking response actions from Massachusetts General Hospital to Somerville Avenue LLC.
- G. On September 27, 1999, MassDEP received an Immediate Response Action Completion Report from Massachusetts General Hospital for RTN 3-18513.
- H. On July 6, 2000, RTN 3-18513 was linked to RTN 3-2849. All further response actions would be conducted under RTN 3-2849.

- I. On May 31, 2002, MassDEP received a second Tier II Transfer for the Site to change parties undertaking response actions from Somerville Avenue LLC to SRA.
- J. On April 10, 2006, the City submitted a Phase II Comprehensive Site Assessment Report and a Tier II Extension Submittal for the Site.
- K. On May 25, 2007, the City submitted another Tier II Extension Submittal for the Site. The Tier II Extension expired on July 9, 2008.
- L. On May 25, 2007, the City submitted a supplemental Phase II scope of work to determine if volatile organic compounds in groundwater from the Site are impacting neighboring residences via vapor intrusion.
- M. On October 9, 2007, MassDEP issued a Notice of Noncompliance (NON) to the City for failing to comply with the response action deadlines established for Tier II disposal sites provided at 310 CMR 40.0560. The NON required the submittal of a Phase III Remedial Action Plan, a Phase IV Remedy Implementation Plan and a Response Action Outcome Statement or Remedy Operation Status Submittal by July 9, 2008.
- N. On June 30, 2008, the City responded to the October 9, 2007 NON proposing an alternate schedule for completion of MCP response actions at the Site.
- O. On July 9, 2008, the Tier II Extension expired. Pursuant to 310 CMR 40.0560(7) Tier II Extensions must be submitted on a yearly basis until a Response Action Outcome Statement or a Remedy Operations Status is received by MassDEP. To date, Respondents have failed to submit a new Tier II Extension to MassDEP.
- P. On July 28, 2008, the City submitted a Release Abatement Measure (RAM) Plan for the Site. The RAM Plan proposed the off-site transportation and disposal of approximately 470 tons of polychlorinated biphenyl (PCB)-impacted soil that was stockpiled on site.
- Q. On August 27, 2008, MassDEP issued a draft Administrative Consent Order (ACO) to the City.
- R. On October 8, 2008, the City declined to enter into the draft ACO.
- S. On December 4, 2008, the City submitted a RAM Completion Report for the Site.
- T. On January 16, 2009, MassDEP issued a Notice of Responsibility/Notice of Response Action/Notice of Commencement of Work (NORA) to Respondents. The NORA requires the completion of specific assessment activities to determine if volatile organic compounds in groundwater from the Site are impacting

abutting residences via vapor intrusion. If Respondents fail to conduct these response actions by the deadlines established in the NORA, MassDEP will conduct the work and seek to recover its costs from Respondents.

- U. On April 1, 2009, MassDEP issued an Amended NORA to Respondents. The Amended NORA established Interim Deadlines for completing assessment activities at the Site and on abutting residential properties and for submitting Imminent Hazard Evaluation Reports to MassDEP pursuant to 310 CMR 40.0950.

III. DISPOSITION AND ORDER

For the reasons set forth above, MassDEP hereby issues, and Respondents hereby consent to, this Order:

8. The parties MassDEP and the Respondents collectively (“the parties”) have agreed to enter into this Consent Order because they agree that it is in their own interests, and in the public interest, to proceed promptly with the actions called for herein rather than to expend additional time and resources litigating the matters set forth above. Respondents enter into this Consent Order without admitting or denying the facts or allegations set forth herein. However, Respondents agree not to contest such facts and allegations for purposes of the issuance or enforcement of this Consent Order.

9. MassDEP’s authority to issue this Consent Order is conferred by the Statutes and Regulations cited in Part II of this Consent Order.

10. Respondents shall perform the following actions:

- A. Address any Imminent Hazard conditions at the Site as required by the MCP at 310 CMR 40.0410.
- B. By May 11, 2009, and yearly thereafter, submit a Tier II Extension application pursuant to 310 CMR 40.0560(7) until a Response Action Outcome or Remedy Operation Status is submitted.
- C. By November 25, 2009, submit a supplemental Phase II Report that meets the requirements of 310 CMR 40.0835.
- D. By May 25, 2010, submit a Phase III Remedial Action Plan as described in 310 CMR 40.0861.
- E. By November 25, 2010, submit a Phase IV Remedy Implementation Plan as described in 310 CMR 40.0874.

- F. By June 25, 2011, submit either an RAO Statement which meets the requirements of 310 CMR 40.1000 or a Remedy Operation Status Submittal which meets the requirements of 310 CMR 40.0893.

11. Except as otherwise provided, all notices, submittals and other communications required by this Consent Order shall be directed to:

Stephen M. Johnson, Deputy Regional Director
Department of Environmental Protection
205B Lowell Street
Wilmington, MA 01887

Such notices, submittals and other communications shall be considered delivered by Respondents upon receipt by MassDEP.

12. Actions required by this Consent Order shall be taken in accordance with all applicable federal, state, and local laws, regulations and approvals. This Consent Order shall not be construed as, nor operate as, relieving Respondents or any other person of the necessity of complying with all applicable federal, state, and local laws, regulations and approvals.

13. For purposes of M.G.L. c. 21A, § 16 and 310 CMR 5.00, this Consent Order shall also serve as a Notice of Noncompliance for Respondents' noncompliance with the requirements cited in Part II above. MassDEP hereby determines, and Respondents hereby agree, that the deadlines set forth above constitute reasonable periods of time for Respondents to take the actions described.

14. Respondents understand, and hereby waive, its right to an adjudicatory hearing before MassDEP on, and judicial review of, the issuance and terms of this Consent Order and to notice of any such rights of review. This waiver does not extend to any other order issued by the MassDEP.

15. This Consent Order may be modified only by written agreement of the parties hereto.

16. The provisions of this Consent Order are severable, and if any provision of this Consent Order or the application thereof is held invalid, such invalidity shall not affect the validity of other provisions of this Consent Order, or the application of such other provisions, which can be given effect without the invalid provision or application, provided however, that MassDEP shall have the discretion to void this Consent Order in the event of any such invalidity.

17. Nothing in this Consent Order shall be construed or operate as barring, diminishing, adjudicating or in any way affecting (i) any legal or equitable right of MassDEP to issue any additional order or to seek any other relief with respect to the subject matter covered by this Consent Order, or (ii) any legal or equitable right of MassDEP to pursue any other claim, action, suit, cause of action, or demand which MassDEP may have with respect to the subject matter covered by this Consent Order, including, without limitation, any action to: (a) enforce this Consent Order in an

administrative or judicial proceeding; (b) recover costs incurred by MassDEP in connection with response actions conducted at the Site; and (c) recover damages for injury to and for destruction or loss of natural resources pursuant to M.G.L. c. 21E, § 5 or 42 U.S.C. 9601, et seq.

Nothing in this Consent Order shall be construed or operate as barring, diminishing, adjudicating or in any way affecting MassDEP's authority to: (a) perform response actions at the Site or (b) require Respondents to conduct response actions at the Site or take other actions beyond those required by this Consent Order in order to comply with all applicable laws and regulations including, without limitation, M.G.L. c. 21E and the MCP.

18. This Consent Order shall not be construed or operate as barring, diminishing, adjudicating, or in any way affecting, any legal or equitable right of MassDEP or Respondents with respect to any subject matter not covered by this Consent Order.

19. This Consent Order shall be binding upon Respondents and upon Respondents' heirs, successors and assigns. Respondents shall not violate this Consent Order and shall not allow or suffer Respondents' employees, agents, contractors or consultants to violate this Consent Order. Until Respondents have fully complied with this Consent Order, Respondents shall provide a copy of this Consent Order to each successor or assignee at such time that any succession or assignment occurs.

20. If Respondents violate any provision of the Consent Order, Respondents shall pay stipulated civil administrative penalties to the Commonwealth in the amount of \$1,000 per day for each day, or portion thereof, each such violation continues.

Stipulated civil administrative penalties shall begin to accrue on the day a violation occurs and shall continue to accrue until the day Respondents corrects the violation or completes performance, whichever is applicable. Stipulated civil administrative penalties shall accrue regardless of whether MassDEP has notified Respondents of a violation or act of noncompliance. All stipulated civil administrative penalties accruing under this Consent Order shall be paid within thirty (30) days of the date MassDEP issues to Respondents a written demand for payment. If a court judgment is necessary to execute a claim for stipulated penalties under this Consent Order, Respondents agree to assent to the entry of such judgment. If simultaneous violations occur, separate penalties shall accrue for separate violations of this Consent Order. The payment of stipulated civil administrative penalties shall not alter in any way Respondents' obligation to complete performance as required by this Consent Order. MassDEP reserves its right to elect to pursue alternative remedies and alternative civil and criminal penalties which may be available by reason of Respondents' failure to comply with the requirements of this Consent Order. In the event MassDEP collects alternative civil administrative penalties, Respondents shall not be required to pay stipulated civil administrative penalties pursuant to this Consent Order for the same violations.

Respondents reserve whatever rights they may have to contest MassDEP's determination that Respondents failed to comply with the Consent Order and/or to contest the accuracy of MassDEP's calculation of the amount of the stipulated civil administrative penalty.

21. Force Majeure

A. MassDEP agrees to extend the time for performance of any requirement of this Consent Order if MassDEP determines that such failure to perform is caused by a Force Majeure event. The failure to perform a requirement of this Consent Order shall be considered to have been caused by a Force Majeure event if the following criteria are met: (1) an event delays performance of a requirement of this Consent Order beyond the deadline established herein; (2) such event is beyond the control and without the fault of Respondents and Respondents' employees, agents, consultants, and contractors; and (3) such delay could not have been prevented, avoided or minimized by the exercise of due care by Respondents or Respondents' employees, agents, consultants, and contractors.

B. Financial inability and unanticipated or increased costs and expenses associated with the performance of any requirement of this Consent Order shall not be considered a Force Majeure Event.

C. If any event occurs that delays or may delay the performance of any requirement of this Consent Order, Respondents shall immediately, but in no event later than 5 days after obtaining knowledge of such event, notify MassDEP in writing of such event. The notice shall describe in detail: (i) the reason for and the anticipated length of the delay or potential delay; (ii) the measures taken and to be taken to prevent, avoid, or minimize the delay or potential delay; and (iii) the timetable for taking such measures. If Respondents intend to attribute such delay or potential delay to a Force Majeure event, such notice shall also include the rationale for attributing such delay or potential delay to a Force Majeure event and shall include all available documentation supporting a claim of Force Majeure for the event. Failure to comply with the notice requirements set forth herein shall constitute a waiver of Respondents' right to request an extension based on the event.

D. If MassDEP determines that Respondents' failure to perform a requirement of this Consent Order is caused by a Force Majeure event, and Respondents otherwise comply with the notice provisions set forth in paragraph C above, MassDEP agrees to extend in writing the time for performance of such requirement. The duration of this extension shall be equal to the period of time the failure to perform is caused by the Force Majeure event. No extension shall be provided for any period of time that Respondents' failure to perform could have been prevented, avoided or minimized by the exercise of due care. No penalties shall become due for Respondents' failure to perform a requirement of this Consent Order during the extension of the time for performance resulting from a Force Majeure event.

E. A delay in the performance of a requirement of this Consent Order caused by a Force Majeure event shall not, of itself, extend the time for performance of any other requirement of this Consent Order.

22. Failure on the part of MassDEP to complain of any action or inaction on the part of Respondents shall not constitute a waiver by MassDEP of any of its rights under this Consent

Order. Further, no waiver by MassDEP of any provision of this Consent Order shall be construed as a waiver of any other provision of this Consent Order.

23. To the extent authorized by the current owner, Respondents agree to provide MassDEP, and MassDEP's employees, representatives and contractors, access at all reasonable times to 0 Prospect Street, 20-22 Prospect Street, 264-266 Somerville Avenue, 9 and 10 Milk Place, 8,14, and 16-20 Bennett Street, in Somerville, Massachusetts for purposes of conducting any activity related to its oversight of this Consent Order. Notwithstanding any provision of this Consent Order, MassDEP retains all of its access authorities and rights under applicable state and federal law.

24. Respondents' obligations under this Consent Order shall cease upon Respondents' completion of all actions and payments required pursuant to this Consent Order.

25. The undersigned certify that they are fully authorized to enter into the terms and conditions of this Consent Order and to legally bind the party on whose behalf they are signing this Consent Order.

26. This Consent Order may be executed in one or more counterpart originals, all of which when executed shall constitute a single Consent Order.

27. This Consent Order does not relieve Respondents' obligation to pay Annual Compliance Assurance Fees pursuant to 310 CMR 4.00 et. seq.

28. All applicable transmittal fees shall accompany any submission(s) required by this Consent Order.

29. The Respondents shall comply with all applicable Public Involvement activities regarding the Site, as described in 310 CMR 40.1400.

30. This Consent Order shall become effective on the date that it is executed by MassDEP.

**Consented To:
City of Somerville
Somerville Redevelopment Authority**

By: _____
Nancy Busnach, Chairwoman
Somerville Redevelopment Authority
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143
Federal Employer Identification No.:

By: _____
Mayor Joseph A. Curtatone
City of Somerville
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143
Federal Employer Identification No.:

Date:

Date:

**Issued By:
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

By: _____
Richard J. Chalpin, Regional Director
Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
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Date: