Connecticut Department of Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Remediation Division

Significant Environmental Hazard Notification

Notification under CGS 22a-6u

Please print or type to complete this form in accordance with the instructions (DEEP-REM-SEH-INS-500).

If fully completed in accord with the instructions, the information in Parts III and V of this form, with supplemental information as indicated, may meet the statutory requirement to submit a plan or report along with the notification.

Send completed form to:
SIGNIFICANT ENVIRONMENTAL HAZARD PROGRAM
REMEDIATION DIVISION
BUREAU OF WATER PROTECTION AND LAND REUSE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

WATER PROTECTION AND LAND REUSE
FEB 2 6 2018
REMEDIATION DIVISION

DEEP USE ONLY

RemGIS	RemID	SEH#

***Part I - Hazard and Site Identification:** [Connecticut General Statutes (CGS) Section 22a-6u]

Pollution in or threatening a drinking water well:		☒	Surface soil contamination poses potential direct exposure risk [6u(d)]
☐	Contamination is detected in supply well and is above groundwater protection criteria [6u(b)]	☐	Volatile Organic Chemicals in groundwater threaten interior air quality [6u(e)]
☐	Contamination is detected in supply well but is below groundwater protection criteria [6u(c)]	☐	Surface water quality threatened by groundwater contamination [6u(f)]
☐	Supply well is threatened by a groundwater contamination plume above groundwater protection criteria [6u(g)]	☐	Migrating vapors pose an explosion hazard for structures or utility conduits [6u(h)]

*1. Site identification for parcel with pollution on or emanating from the parcel, causing a significant environmental hazard:

Name of Site	Former Rockville Manufactured Gas Plant (REM ID: 12390)				
Address or Location	13 Maple Street				
City/Town	Vernon (Rockville)	State	CT	Zip Code	06066

2. Attach a copy of a topographic map with the site located thereon. MAP ATTACHED ☒

3. Date Hazard condition(s) discovered: 11/29/2017

Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Remediation Division

Significant Environmental Hazard Notification

Notification under CGS 22a-6u

Please print or type to complete this form in accordance with the instructions (DEEP-REM-SEH-INS-500).

If fully completed in accord with the instructions, the information in Parts III and V of this form, with supplemental information as indicated, may meet the statutory requirement to submit a plan or report along with the notification.

Send completed form to:

SIGNIFICANT ENVIRONMENTAL HAZARD PROGRAM
REMEDIATION DIVISION
BUREAU OF WATER PROTECTION AND LAND REUSE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

DEEP USE ONLY

RemGIS	RemID	SEH#

*Part I - Hazard and Site Identification:

[Connecticut General Statutes (CGS) Section 22a-6u]

Pollution in or threatening a drinking water well:		☒	Surface soil contamination poses potential direct exposure risk [6u(d)]
☐	Contamination is detected in supply well and is above groundwater protection criteria [6u(b)]	☐	Volatile Organic Chemicals in groundwater threaten interior air quality [6u(e)]
☐	Contamination is detected in supply well but is below groundwater protection criteria [6u(c)]	☐	Surface water quality threatened by groundwater contamination [6u(f)]
☐	Supply well is threatened by a groundwater contamination plume above groundwater protection criteria [6u(g)]	☐	Migrating vapors pose an explosion hazard for structures or utility conduits [6u(h)]

*1. Site identification for parcel with pollution on or emanating from the parcel, causing a significant environmental hazard:

Name of Site	Former Rockville Manufactured Gas Plant (REM ID: 12390)				
Address or Location	13 Maple Street				
City/Town	Vernon (Rockville)	State	CT	Zip Code	06066

2. Attach a copy of a topographic map with the site located thereon. MAP ATTACHED ☒

3. Date Hazard condition(s) discovered: 11/29/2017

4. If due to a recent spill, was spill notification made? YES ☐ NO ☐ / NOT A SPILL ☒

Date		DEEP contact	
Remarks			

5. If due to a UST system release, was DEEP notified? YES ☐ NO ☐ / NOT A UST RELEASE ☒

Date		DEEP contact	
Remarks			

6. For certain conditions only (see instructions):

Was oral notification to DEEP made [CGS 22a-6u(b), (h), & (f)(2)(A)]? N/A ☒ YES ☐ NO ☐ (Drinking water supply well above criteria, explosion hazard, free product breaking out to surface water)			
Date		DEEP contact	
Remarks:			
Was verification to TEP client made [CGS 22a-2u(b) & (h)]? N/A ☒ YES ☐ NO ☐ (Drinking water supply well above criteria, explosion hazard)			
Date		Contact	
Remarks:			

Part II – Party Identification and Contact Information

*1. Business/person submitting form: *Is this entity/person the site's owner?* YES ☒ NO ☐

Name	The Connecticut Light and Power Co. dba Eversource Energy				
Mailing Address	107 Selden Street				
City/Town	Berlin	State	CT	Zip Code	06037
Business Phone	(860) 665-3045	Ext.		Fax	NA
Authorized Rep.	James Adamik	Title	Senior Environmental Specialist		
Contact Person	James Adamik	Title	Senior Environmental Specialist		
Contact e-mail^	james.adamik@eversource.com				

2. Owner if not listed above:

Name					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

3. Additional Party for site (see instructions) NOT APPLICABLE ☒

Name/Firm					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

4. Technical Environmental Professional (TEP) who identified hazard: CHECK IF NONE ☐

Firm	Tighe & Bond, Inc.				
Mailing Address	213 Court Street, Suite 1100				
City/Town	Middletown	State	CT	Zip Code	06457
Business Phone	860-704-4761	Ext.		Fax	860-704-4775
Contact Person	James T. Olsen	Title	P.G., LEP		
Contact e-mail^	JTOlsen@tighebond.com				

5. Environmental consultant for mitigation or abatement, if not above TEP:

Firm					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

6. Supplemental Information. *If the person submitting this form is not the site owner, describe that person's relationship to the site and its owner. If an entity who is not the site owner will be acting on behalf of the owner to mitigate or abate the hazard condition provide details of this agreement and identify which party will be acting.*

Part III - Hazard Information

*The law [CGS 22a-6u(j)] requires the significant environmental hazard notification include a description of the nature of the contamination or condition, the location of such contamination or condition, and any steps being taken to abate, remediate or monitor such contamination or condition.

1. How was the pollutant released?

☒ unknown	☐ landfill/wastepile	☐ septic system	☐ Tank leak: UST ☐ AST ☐
☐ spill/dumping	☐ burial	☐ dry well	☐ drums
☐ agricultural activity	☐ pit	☐ lagoon	☐ discharge

2. *What is the general nature of the contamination?

☐ petroleum/oils	☐ non-aqueous phase liquid (free product)		☐ metals	☐ sodium/salt
☐ gasoline	☐ volatile organic	☒ semivolatile organic	☐ cyanide	☐ leachate
☐ fuel oil/diesel	☐ nonchlorinated	☐ polyaromatic	☐ acid/base	☐ asbestos
☐ nitrate/fertilizer	☐ chlorinated	☐ pesticide/herbicide	☐ PCB	☐ radiation

3. **Threats to Supply Wells**

If neither impact [CGS 22a-6u(b) nor (c)] or threat [CGS 22a-6u(g)] to a drinking water supply well is identified, skip to question 4. CHECK IF NONE ☒

a. **SUPPLY WELL DATA:**
For threats to supply wells, provide detail on the following, if applicable:
- contamination above groundwater protection criteria in a supply well [CGS 22a-6u(b)]:
  - *supply well test results that identify the hazard (submit within 7 days of discovery.)
  - wells polluted with non-aqueous phase liquid (free product)
- contamination in a supply well below groundwater protection criteria [CGS 22a-6u(c)]:
  - *supply well test results that identify the hazard
  - required 30-day retest results
- groundwater contamination in a monitoring well above groundwater protection criteria [CGS 22a-6u(g)]:
  - supply well test results for abutters tested in initial 30-day response

Identify affected *and/or* sampled *drinking water supply wells*. CHECK IF NONE ☐

Address/Town	Contact Name/Phone	Supply Well Analyses (if any) [List Pollutant, Concentration, and Units]	Sample Reason: Discovery	Resample	Abutter test
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

Attach additional sheets as needed.

b. **MONITORING WELL DATA:**
*For a groundwater plume that poses a threat to drinking water wells [CGS 22a-6u(g)], list ***monitoring well*** analytical data for substances with concentrations at or above the Groundwater Protection Criteria of the RSRs. CHECK IF NONE ☒

Monitoring Well ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

c. For a groundwater plume [CGS 22a-6u(g)], are hydrogeologic data/maps supporting the hazard identification included? YES ☐ NO ☐

d. Include Well Receptor Survey [CGS 22a-6u(g)(3)] (also include for [CGS 22a-6u-(b)] if available at time of notification):

i. Attach a site map/ parcel map indicating the location of the drinking water supply well(s) within 500 feet. MAP ATTACHED ☐

ii. Attach an inventory of drinking water wells within 500 feet. INVENTORY ATTACHED ☐

e. Describe any actions already taken, if any, to inform well users and ensure an alternate supply of safe water to affected receptors. CHECK IF NONE ☐

Attach additional sheets as needed.

f. Attach a report [CGS 22a-6u(c)(3) and (g)(3)] that, based on any additional testing results that includes proposals, as necessary, for any further action to identify and eliminate exposure to contaminants on an ongoing basis. PLAN ATTACHED ☐

4. For **surficial soil direct exposure risk** [CGS 22a-6u(d)]:
If none, skip to question 5. CHECK IF NONE ☐

a. *List analytical data that are the basis for determining that a hazard condition exists. (Please list only the highest concentration for each pollutant above hazard criteria.)

Soil Sample Location ID	Pollutant	Concentration (units)	Notes
SS-102	Benzo (a) pyrene [BAP]	45 (mg/Kg)	Figure 3 depicts the location. Soils are covered with 6-inches of crushed trap-rock type gravel within the fenced Rockville Substation 14W.

Attach additional sheets as needed.

b. Delineation of hazard extent:

i. Attach a site map indicating the specific location and extent [CGS 22a-6u(d)(3)] of the soil contamination that exceeds significant environmental hazard notification thresholds and applicable sampling locations. SITE MAP ATTACHED ☐

ii. Attach a table or show on the map the sampling data used to determine the extent of the soil that exceed the notification criteria [CGS 22a-6u(d)(3)]. TABLE ATTACHED ☐

iii. ☒ Extent not yet fully delineated

c. Distance from release area to nearest property currently used as a residence, school, park, playground, or day care: ~170 feet

d. Area that exceeds SEH notification thresholds is:

i. Covered by maintained pavement N/A ☐ YES ☐ NO ☒

ii. Fenced off from general public N/A ☐ YES ☒ NO ☐

iii. ☐ No longer exempt from notification because the above conditions previously present are no longer met [CGS 22a-6u(d)(1)(C)], thus notification is required.

e. Identify notification evaluation criterion used ["DEC" means Direct Exposure Criteria]:

☒ 30x Industrial/Commercial DEC (for industrial commercial use, i.e. non-residential)

☐ 15x Industrial/Commercial DEC (for metals or PCBs at industrial or commercial properties that are within 300 feet of a current residential use)

☐ 15x Residential DEC (for current residential use)

f. Describe interim control actions taken to prevent exposure to the contaminated soil exceeding the SEH notification threshold. CHECK IF NONE ☐

The SEH threshold exceedance of benzo (a) pyrene was encountered during surfical soil sampling completed as part of the Phase III ESA for the former Rockville MGP site within the active, Inner Rockville Substation 14W (Figure 2 and Figure 3). The Rockville 14W Inner Substation is secured with a chain-link fence topped with barbed wire and locked gates which are electronically monitored. The Rockville Inner Substation Fence is demarcated with no trespassing,warning signs and warning placards regarding access. Access to the Rockville 14W substation requires a formal request to Eversource, substation access training, and qualified substation escort. The Rockville Inner Substation is covered with trap-rock gravel. The Rockville Inner Substation 14W is surrounded by a second chain-link fence with locked entrances at Maple Street that surround the exterior of the property. Eversource's consultant, Tighe & Bond, has prepared a plan to delineate the extent of the surficial contamination triggering the SEH notification. Health and Safety/ substation support is being secured to complete the work.

Attach additional sheets as needed.

g. Attach a report [CGS 22a-6u(d)(3)] with recommendations for further action, including a plan, with an implementation schedule, for maintenance and monitoring of interim controls (including pavement or fences) and submittal of annual reports until the significant environmental hazard is certified abated. REPORT ATTACHED ☒

h. Voluntary notification for DEEP approval of abatement report (optional).

☐ This significant environmental hazard condition is exempt from notification under the provisions of CGS 22a-6u(e)(2)(A), (B), or (C) because abatement was completed within 90 days. However, this notification is being voluntarily submitted for approval of the abatement report and certification of hazard abatement.

Date of completion of abatement _____

Abatement achieved by:

☐ removal of soil above notification threshold

☐ rendering the soil inaccessible as defined in the RSRs

☐ remediation of the release in accordance with the RSRs

Describe actions taken to remove hazard condition REPORT ATTACHED ☐

5. For **volatilization risk** [CGS 22a-6u(e)]:
If none, skip to question 6. CHECK IF NONE ☒

a. *List analytical data that are the basis for determining that a hazard condition exists. (Please list only the highest concentration for each pollutant causing a hazard condition.)

Monitoring Well/ Soil Vapor ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

b. Site Map:

i. *Attach a site map/ parcel map indicating the location of samples identifying a hazard condition exists, please include buildings within 50 feet of the hazard condition with their use identified. SITE MAP ATTACHED ☐

ii. If available, include on the maps hydrogeologic data or additional sampling that may be available to provide better delineation of the hazard condition. Attach data tables as appropriate. DATA ATTACHED ☐

c. Identify any reason for delay (pursuant to the law) in submittal of this notification:

☐ An indoor air monitoring program was implemented [CGS 22a-6u(e)(3)] and this notification is due to a subsequently identified significant environmental hazard as a result of indoor air monitoring data or is due to a failure to complete the full extent of such monitoring.

☐ A previously vacant building was reoccupied and the significant environmental hazard is still present.

☐ The pollutant for which a significant environmental hazard was identified had been in an OSHA-regulated industrial/commercial use that has now been discontinued.

d. Describe any interim measures already implemented. CHECK IF NONE ☐
(Note: If trichloroethylene was detected DEEP recommends consulting the 2015 Guidance on Trichloroethylene Developmental Risks in evaluating the site.)

Attach additional sheets as needed.

e. Attach a plan [CGS 22a-6u(e)(4)] that describes further actions that may be necessary to fully delineate potential at-risk receptors and to identify and eliminate any exposure to contaminants. PLAN ATTACHED ☐

6. For **threats to surface water** [CGS 22a-6u(f)]:
If none, skip to next part. CHECK IF NONE ☒

a. *Is this notification for the presence of non aqueous phase liquid? YES ☐ NO ☐

b. *List analytical data establishing that the condition exists. CHECK IF NO DATA ☐

Monitoring Well ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

c. *Attach a table and site map showing the specific monitoring locations, analytical data, available hydrogeologic data, and their relationship and distance to the threatened surface water body. MAP ATTACHED ☐

d. Was a site specific dilution calculation made? YES ☐ NO ☐
If yes, attach the calculation on a separate sheet. ATTACHED ☐

e. Attach a plan [CGS 22a-6u(f)(3)] that describes further actions that may be necessary to fully delineate potential at-risk receptors and to identify and eliminate any exposure to contaminants. PLAN ATTACHED ☐

Part IV – Additional Information (optional, except #7 which is required by the law)

1. Voluntary Remediation/ECAF/Property Transfer filings: CHECK IF NONE ☐

Form	Date	Certifying/Verifying/Filing Party	DEEP Determination
ECAF	8/31/15	Connecticut Light & Power dba Eversource Energy	VRP 22a-133x- LEP lead

2. DEEP staff involved with assessment or remediation of the site: CHECK IF NONE ☐

Time Period	DEEP Section	Name
2015-Present	Remediation Division	Robert Robinson
2017-Present	Remediation Division	Maurice Hamel

3. Reports to DEEP Emergency Response and Spill Prevention Division: CHECK IF NONE ☒

Date	UST Release or other spill?	Material Released	Quantity

4. Describe other relevant DEEP permitting or enforcement involvement: CHECK IF NONE ☒

EPA ID#: CT	DEEP-WPC #:	DEEP Inventory #:
RCRA Notifier Status:	RCRA Permit Status:	
Remarks:		

5. What environmental reports exist for the site and are available to DEEP? CHECK IF NONE ☐

Report Type	Date (mo/yr)	Preparer (Firm)	Attached? (Y/N)	Previously submitted?	DEEP Unit to which sent
Phase 1	03/2017	Tighe & Bond, Inc.	N	Yes	Remediation
Phase 2	03/1992 05/1993 04/1994 12/1994 05/1995	Northeast Utilities Service Co.- Environmental Services Department (See attached sheet for list of reports)	N	Yes	Remediation
Phase 3	On-going				
2016 Annual Report	01/2017	Tighe & Bond, Inc.	N	Yes	Remediation
2017 Annual Report	01/2018	Tighe & Bond, Inc.	N	Yes	Remediation

Do not list routine monitoring reports in this section. Attach additional sheets as needed.

Significant Environmental Hazard Notification Addendum:
Former Rockville Manufactured Gas Plant (REM ID: 12390), 13 Maple Street Vernon (Rockville), CT

5. What environmental reports exist for the site and are available to DEEP?

Report Type	Date	Report Title	Attached? (Y/N)	Previously Submitted?	DEEP Unit which sent
Phase 2	March 1992	*Manufactured Gas Plant Site Investigation: Rockville*. Prepared by Northeast Utilities Service Company-Environmental Services Company.	N	Y	Remediation
	May 1993	*Manufactured Gas Plant Site Off-Site Investigation: Rockville* Phase 1 Interim Report	N	Y	Remediation
	April 1994	*Manufactured Gas Plant Site Off-Site Investigation: Rockville*. Prepared by Northeast Utilities Service Company-Environmental Services Company	N	Y	Remediation
	Undated	*Analytical Results of Environmental Sampling [Through September 6, 1995], Maple Street Substation, CL&P, Rockville MGP Site, Vernon, CT* Northeast Utilities Service Company-Environmental Services Company.	N	Y	Remediation
	December 1994	*Human Health Risk Assessment, Rockville Manufactured Gas Plant Site.* Prepared by Northeast Utilities Service Company-Environmental Services Company.	N	Y	Remediation
	April 1995	*Rockville MGP Site Field Summary Report (1994)*, Prepared by Northeast Utilities Service Company-Environmental Services Company. Submitted to CDM Federal Programs Corporation/ CTDEP.	N	Y	Remediation

6. Recurring periodic monitoring:

   a. Is this notification the result of data obtained through a periodic, recurring groundwater monitoring program being conducted at the site? YES ☐ NO ☒

   b. If yes, please identify the reason for this monitoring and the DEEP unit to which reports are made, if any.

      i. Reason: _____

      ii. DEEP Unit: _____

   c. DEEP requests that a tabular summary for the location and constituent triggering a hazard notification of historic monitoring data from the past three years is provided to better evaluate future actions that DEEP may prescribe or no action, related to this notification. DATA TABLE ATTACHED ☐

*7. Identify any *other* affected properties: CHECK IF NONE AFFECTED ☒

Address/Town	Contact Name/Phone	How is Property Affected?

Attach additional sheets as needed.

8. Describe the land use of the site and surrounding area, and identify any sensitive land uses within 1/4 mile of the site (i.e., schools, day care, public water supply wells, wetlands, etc.):

The site is currently developed as Eversource Substation 14W enclosed by a gated and locked fence limiting access to authorized personnel. The active Rockville Substation 14W is located within a 3.43-acre parcel which surrounds the Rockville 14W substation (Figure 2). The Hockanum River transverses the southern portion of the site. Wetlands and Natural Diversity Database (NDDB) listings were not identified at the site. The surrounding land use is a mix of commercial, residential and educational facilities. Residential properties are located along the western site boundary, northern site boundary and to the east across Maple Street. The former Hockanum Mill is located to the east beyond the residential properties on Maple Street. St. Joseph's Church, former St. Joseph School and Strong Foundations for children with autism spectrum disorders educational facility are located to the northwest. The Maple Street Elementary School is located to the northeast. Commercial properties including a liquor store and commercial building are located to the south and the Gottier Fuel Co. fuel oil company is located on the southeast. Multiple gasoline service stations and commercial businesses are located to the northwest, south and north of the site. No public water supply wells were located within 0.25 mile of the site. A water supply well installation record was identified at 13 Windsor Street, approximately 690 feet to the west.

9. Additional comments regarding the hazard condition(s):

The site is enrolled in the VRP and the Phase III ESA is on-going. The SEH was identified during suficial soil sampling within the footprint of the former coal shed inside the Rockville 14W Inner Substation. One sample, SS-102, contained benzo(a)pyrene above the threshold limit. Fill (i.e., large pieces of coal) was encountered at the SS-102 location. Concentrations of PAHs including benzo(a)pyrene were detected below the SEH limit at SS-103 ~45 feet to the south within the former coal shed footprint. Coal was not observed in other surficial soil sample locations within Inner Substation. Surficial soils are covered by approximately 6-inches of trap rock gravel inside the Inner Substation and is secured by locked gates.

Attach additional sheets as needed.

Part V – Reports, Plans, and Implementation Schedule for Proposed Actions

* The law [CGS 22a-6u(j)] requires the significant environmental hazard notification include a description of any steps being taken to mitigate abate, remediate or monitor the contamination or condition. In addition the law provides for submittal (contemporaneously with the notification except for supply wells polluted above criteria) of a report of initial actions taken, as specified by law, and a plan of recommended actions. Completion of this form, accompanied by attachments as necessary for specific hazard conditions, can meet this requirement

CHECK IF PLAN OR REPORT ATTACHED ☒

Provide an implementation schedule for additional evaluation, mitigation or abatement actions:

Action or Step	Completion Date
Tighe & Bond has prepared a scope of work to delineate the extent of the suficial soil impacts (within the top- 2 feet) above the SEH Notification Threshold surrounding SS-102 (Figure 3 attached). Eversource and Tighe & Bond are actively working to secure health and safety substation escort sevices to complete the soil delineation scope of work. The SEH condition is controlled and addressed through the 6 inches of trap rock and the two layers of locked fencing. Remediation of the SEH will be addressed through the overall Remedial Action Plan (RAP) for the site. The Phase III ESA for the site is being completed this year to provide the data needed to evaluate site remedial alternatives and to develop the RAP. It is anticipated that the RAP will be completed in 2019 and implemented in 2020.	April 30, 2018

Attach additional sheets as needed.

Describe the implementation frequency for proposed monitoring and maintenance activity:

Monitoring/Maintenance program	Frequency

Attach additional sheets as needed.

***Part VI – Signature of Notifying Party**

"I have personally examined and am familiar with the information submitted in this document and all attachments, and certify that based on reasonable investigation the submitted information is true and accurate to the best of my knowledge and belief. I certify that this form is complete and accurate as prescribed by the Commissioner without alteration of the text."

Name (print or type)	James T. Adamik	Title (if applicable)	Senior Environ. Spec.
Signature	James T. Adamik As Agent for Eversource	Date	2/26/2018

* Signifies information required by CGS Section 22a-6u.

Please remember to check your security settings to be sure you can receive e-mails from “ct.gov” addresses. Please notify DEEP if your e-mail address changes.

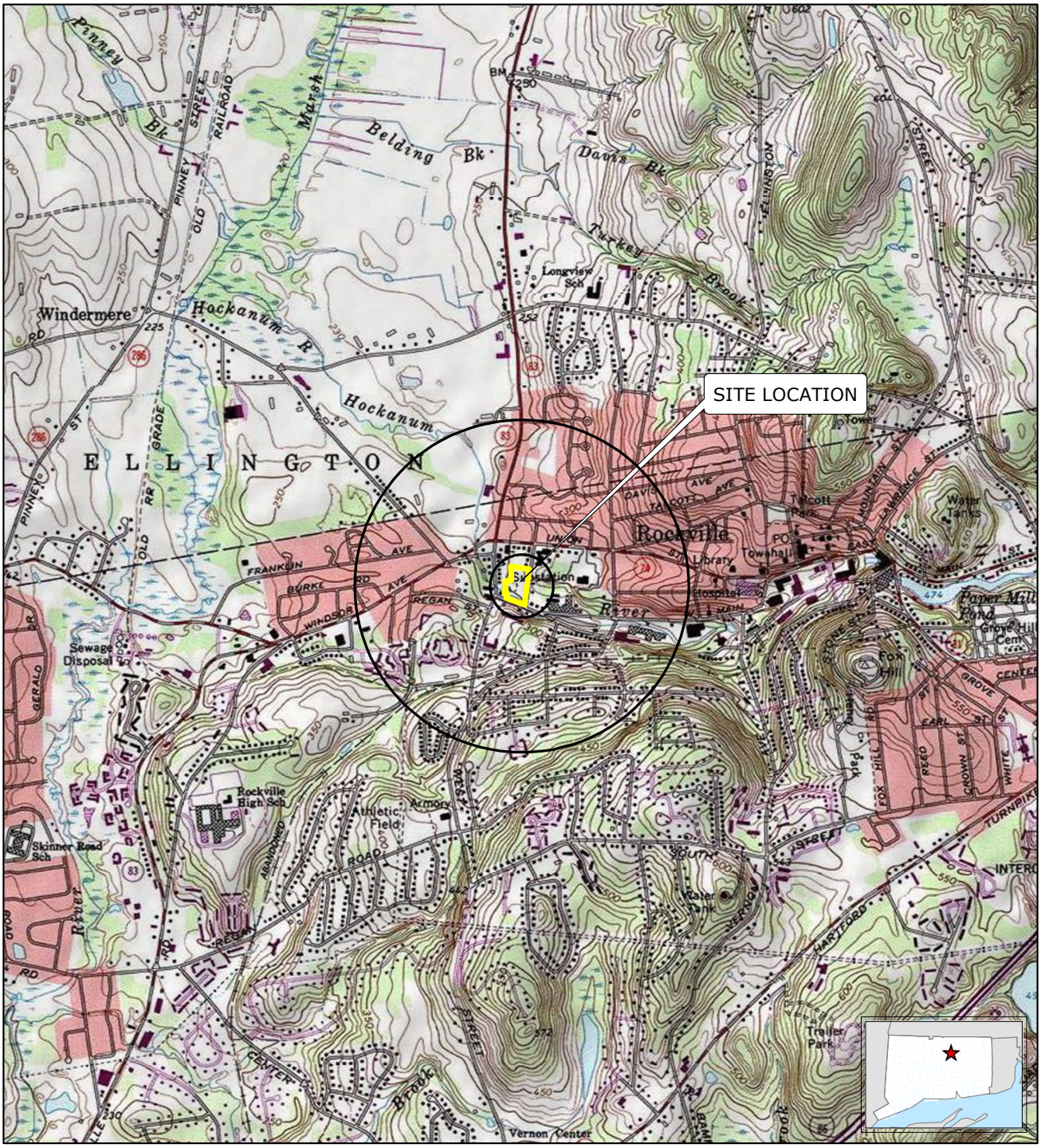
Significant Environmental Hazard Notification Addendum:
Former Rockville Manufactured Gas Plant (REM ID: 12390), 13 Maple Street Vernon (Rockville), CT

Figures

Figure 1: Site Location

Figure 2: Current Site Conditions and Historic Structures

Figure 3: Significant Environmental Hazards Proposed Sample Locations



Legend

Site Boundary

Tighe&Bond
Engineers | Environmental Specialists

Based on USGS Topographic Map for Rockville, CT Revised 1984.
Contour Interval Equals 10 Feet.
Circles indicate 500-foot and half-mile radii

1:24,000
0 1,000 2,000
Feet

N

FIGURE 1
SITE LOCATION MAP
Eversource Rockville
Former MGP Site
Rockville, Connecticut

December 2017

G:\GIS\CT\EversourceEnergy\N0915\N915_61_RockvilleMGP\MXD\85x11_SiteLocation.mxd

N-0915

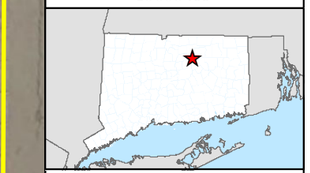


FIGURE 2:
CURRENT SITE CONDITIONS AND HISTORIC STRUCTURES

LEGEND

- Stream
- Fence Line
- Historic Structure
- Sanitary Sewer Manhole
- Sanitary Sewer
- Site Boundary
- Approximate Parcel Boundary

LOCUS MAP



0 20 40 Feet

1 inch = 40 feet

REFERENCES

1. Based on 2016 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Piezometer Locations in the Hockanum River. Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html

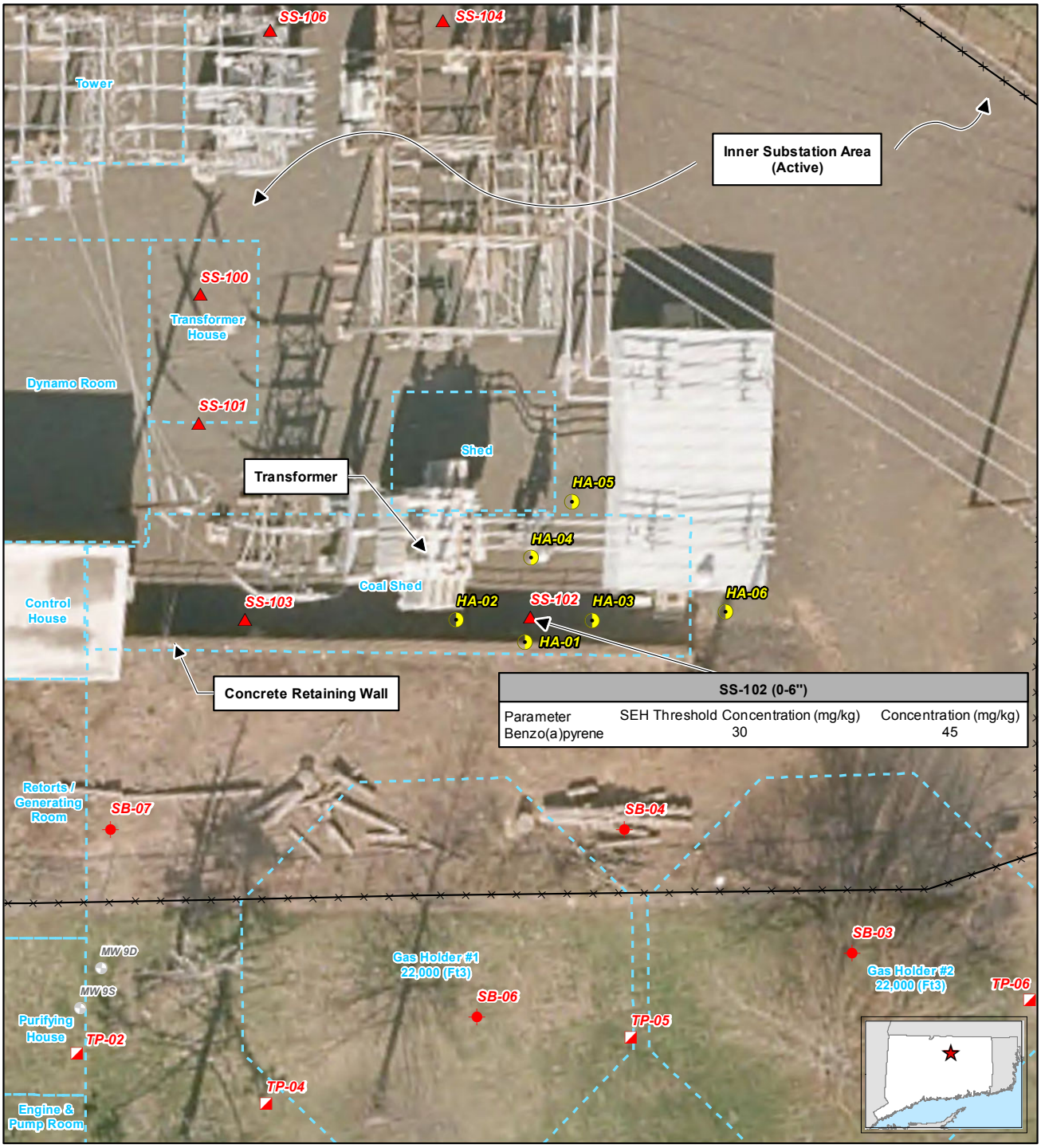
NOTES

SWPC - Surface Water Protection Criteria
RES VC - Residential Voltalization Criteria
I/C VC - Industrial Commercial Voltalization Criteria
* - Additional Polluting Substance Criteria

Eversource
Former Rockville MGP Site
Rockville, Connecticut
December 2017

Tighe&Bond
Engineers | Environmental Specialists

G:\GIS\CT\EversourceEnergy\E0755\E0755_44_RockvilleMGP\MXD\SiteFeatures_11x17.mxd



Legend

- Existing Monitoring Well
- Proposed Hand Auger Sample Location

Phase III ESA

- Soil Boring
- Surface Soil Sample
- Test Pit
- Fence Line
- Historic Structure
- Site Boundary

1:240
0 10 20
Feet

Tighe&Bond
Engineers | Environmental Specialists

Based on 2016 Statewide Leaf-Off Orthophotography, Courtesy of CTECO.

FIGURE 3
SIGNIFICANT ENVIRONMENTAL HAZARD PROPOSED SAMPLE LOCATIONS
Eversource
Rockville Former MGP Site
Rockville Substation 14W
Rockville, Connecticut

December 2017

G:\GIS\CT\EversourceEnergy\N0915\N915_61_RockvilleMGP\MXD\Aerial_SS102.mxd

N-0915

Significant Environmental Hazard Notification Addendum:
Former Rockville Manufactured Gas Plant (REM ID: 12390), 13 Maple Street Vernon (Rockville), CT

Tables

Table 1: Soil Analytical Data Summary, Significant Environmental Hazard Notification, Rockville MGP Site.

Table 1
Soil Analytical Data Summary
Significant Environmental Hazard Notification
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID (Depth) Laboratory ID Sample Date Duplicate	CT DEEP RSRs				**SS-102 (0-6")** BZ39900 11/10/2017 -
	RES DEC^	I/C DEC^	GB PMC**	10X GWPC	
CT ETPH (mg/Kg)	500	2,500	2,500	NA	**3,700**
SPLP CT ETPH (mg/L)	NA	NA	NA	2,500	-
VOCs (mg/Kg)					
1,2,4-Trimethylbenzene	500*	1000*	28*	NA	ND <0.0044
1,3,5-Trimethylbenzene	500*	1000*	28*	NA	ND <0.0044
2-Isopropyltoluene	NE	NE	NE	NA	ND <0.0044
4-Isopropyltoluene (cymene)	500*	1000*	5*	NA	ND <0.0044
Benzene	21	200	0.2	NA	ND <0.0044
Butylbenzene, n-	500*	1000*	70*	NA	ND <0.0044
Butylbenzene, sec-	500*	1000*	70*	NA	ND <0.0044
Ethylbenzene	500	1,000	10.1	NA	ND <0.0044
Isopropylbenzene (cumene)	500*	1000*	5*	NA	ND <0.0044
m,p-Xylene[1]	NE	NE	NE	NA	ND <0.0044
Methylene chloride	82	760	1	NA	ND <0.0088
n-Propylbenzene	500*	1000*	10*	NA	ND <0.0044
o-Xylene[1]	NE	NE	NE	NA	ND <0.0044
Styrene	500	1,000	20	NA	ND <0.0044
Toluene	500	1,000	67	NA	ND <0.0044
Total Xylenes	500	1,000	19.5	NA	ND <0.0044
Naphthalene	1,000	2,500	56	NA	ND <0.0044
SPLP VOCs (µg/L)					
1,2,4-Trimethylbenzene	NA	NA	NA	1,400*	-
1,3,5-Trimethylbenzene	NA	NA	NA	1,400*	-
2-Isopropyltoluene	NA	NA	NA	NE	-
4-Isopropyltoluene (cymene)	NA	NA	NA	250*	-
Benzene	NA	NA	NA	10	-
Butylbenzene, n-	NA	NA	NA	3,500*	-
Butylbenzene, sec-	NA	NA	NA	3,500*	-
Ethylbenzene	NA	NA	NA	7,000	-
Isopropylbenzene (cumene)	NA	NA	NA	250*	-
m,p-Xylene[1]	NA	NA	NA	NE	-
n-Propylbenzene	NA	NA	NA	500*	-
o-Xylene[1]	NA	NA	NA	NE	-
Styrene	NA	NA	NA	1,000	-
Toluene	NA	NA	NA	10,000	-
Total Xylenes	NA	NA	NA	5,300	-
Naphthalene	NA	NA	NA	2,800	-
PCBs (mg/Kg)					
Aroclor-1268	1	10	NA	NA	0.38
Total PCBs	1	10	NA	NA	0.38
Total Cyanide (mg/Kg)	1,400	41,000	NA	NA	ND <0.53
SPLP Cyanide (mg/L)	NA	NA	2	NA	-

Table 1
Soil Analytical Data Summary
Significant Environmental Hazard Notification
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID (Depth)	CT DEEP RSRs				**SS-102 (0-6")**
Laboratory ID					BZ39900
Sample Date					11/10/2017
Duplicate					-
	RES DEC^	I/C DEC^	GB PMC**	10X GWPC	
Semi-VOCs (mg/Kg)					
2-Methylnaphthalene	270*	1000*	5.6*	NA	ND <2.4
Acenaphthene	1000*	2500*	84*	NA	ND <2.4
Acenaphthylene	1,000	2,500	84	NA	9.6
Anthracene	1,000	2,500	400	NA	7.2
Benz(a)anthracene	1	7.8	1	NA	**40**
Benzo(a)pyrene	1	1	1	NA	**45**
Benzo(b)fluoranthene	1	7.8	1	NA	**35**
Benzo(g,h,i)perylene	8.4*	78*	1*	NA	**24**
Benzo(k)fluoranthene	8.4	78	1	NA	**37**
Carbazole	31*	290*	1*	NA	ND <3.5
Chrysene	84*	780*	1*	NA	**44**
Dibenz(a,h)anthracene	1*	1*	1*	NA	**3.9**
Dibenzofuran	68*	1000*	1.4*	NA	ND <2.4
Fluoranthene	1,000	2,500	56	NA	**60**
Fluorene	1,000	2,500	56	NA	ND <2.4
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	NA	**25**
Naphthalene	1,000	2,500	56	NA	ND <2.4
Pentachlorophenol	5.1	48	1	NA	ND <1.3
Phenanthrene	1,000	2,500	40	NA	18
Pyrene	1,000	2,500	40	NA	**74**
SPLP Semi-VOCs (µg/L)					
2-Methylnaphthalene	NA	NA	NA	280*	ND <0.09
Acenaphthene	NA	NA	NA	4,200*	0.28
Acenaphthylene	NA	NA	NA	4,200	0.73
Anthracene	NA	NA	NA	20,000	0.38
Benz(a)anthracene	NA	NA	NA	0.6	**1.5**
Benzo(a)pyrene	NA	NA	NA	2	1.5
Benzo(b)fluoranthene	NA	NA	NA	0.8	**1.4**
Benzo(g,h,i)perylene	NA	NA	NA	4.8*	0.91
Benzo(k)fluoranthene	NA	NA	NA	5	1.2
Chrysene	NA	NA	NA	48*	1.6
Dibenz(a,h)anthracene	NA	NA	NA	1*	0.33
Fluoranthene	NA	NA	NA	2,800	5.5
Fluorene	NA	NA	NA	2,800	ND <0.09
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1*	0.81
Naphthalene	NA	NA	NA	2,800	ND <0.09
Phenanthrene	NA	NA	NA	2,000	0.19
Pyrene	NA	NA	NA	2,000	4.4
Metals (mg/Kg)					
Antimony	27	8,200	NA	NA	ND <3.2
Arsenic	10	10	NA	NA	4.28
Barium	4,700	140,000	NA	NA	68
Beryllium	2	2	NA	NA	0.28
Cadmium	34	1,000	NA	NA	1.03
Chromium			NA	NA	10.2
Copper	2,500	76,000	NA	NA	34.9
Lead	400	1,000	NA	NA	**568**
Mercury	20	610	NA	NA	0.07
Nickel	1,400	7,500	NA	NA	12.3
Silver	340	10,000	NA	NA	ND <0.32
Vanadium	470	14,000	NA	NA	51.9
Zinc	20,000	610,000	NA	NA	111

Table 1
Soil Analytical Data Summary
Significant Environmental Hazard Notification
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID (Depth) Laboratory ID Sample Date Duplicate	CT DEEP RSRs				**SS-102 (0-6")** BZ39900 11/10/2017 -
	RES DEC^	I/C DEC^	GB PMC**	10X GWPC	
SPLP Metals (mg/L)					
Antimony	NA	NA	0.06	NA	0.008
Arsenic	NA	NA	0.5	NA	ND <0.004
Barium	NA	NA	10	NA	ND <0.010
Beryllium	NA	NA	0.04	NA	ND <0.001
Cadmium	NA	NA	0.05	NA	ND <0.005
Chromium	NA	NA	0.5	NA	ND <0.010
Copper	NA	NA	13	NA	ND <0.010
Lead	NA	NA	0.15	NA	**0.277**
Mercury	NA	NA	0.02	NA	ND <0.0005
Nickel	NA	NA	1	NA	ND <0.010
Silver	NA	NA	0.36	NA	ND <0.010
Vanadium	NA	NA	0.5	NA	ND <0.010
Zinc	NA	NA	50	NA	ND <0.010

Notes:

Only detected compounds are summarized on this table

CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations

RES DEC - Residential Direct Exposure Criteria

I/C DEC - Industrial/Commercial Direct Exposure Criteria

GB PMC - Pollutant Mobility Criteria for groundwater class GB

10XGWPC - Ten Times the Groundwater Protection Criteria

mg/Kg - milligrams per kilogram

mg/L - milligrams per liter

CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons

VOCs - Volatile Organic Compounds

SVOCs - Semi-Volatile Organic Compounds

PCB - Polychlorinated Biphenyl

SPLP - Synthetic Precipitation Leaching Procedure

ND - Not detected above laboratory limits

NE - CTDEEP RSR Criteria not established

NA - Not Applicable

* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.

** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.

[1] - Xylene criteria apply to Total Xylenes only

Concentration exceeds Significant Environmental Hazard Threshold

Bolded and boxed - Concentration exceeds RSR Criteria

Bolded Only - Concentration exceeds APS Criteria

- Sample not analyzed

Significant Environmental Hazard Notification Addendum:
Former Rockville Manufactured Gas Plant (REM ID: 12390), 13 Maple Street Vernon (Rockville), CT

Proposed Significant Environmental Hazard Surficial Soil Delineation Plan

Attached is the work plan to delineate to assess and delineate detections of benzo(a)pyrene exceeding the SEH Notification Threshold Concentration of 30 mg/Kg contained in Tighe & Bond's proposal to Eversource entitled *Proposal for Significant Environmental Hazard Soil Delineation, Former Rockville Manufactured Gas Plant, Rockville Substation 14W, 13 Maple Street, Rockville, CT, Purchase Order #02283431, Release #00044*.

Work Plan

Six hand auger locations (HA-01 through HA-06) are proposed to assess and delineate detections of benzo(a)pyrene exceeding the SEH Notification Threshold Concentration of 30 mg/Kg. The delineation information will be used to develop a localized interim shallow soil remediation to abate the SEH condition.

HA-01 will be advanced adjacent to the SS-102 location to assess soil conditions from 6-inches to 24-inches (2-feet) below grade. Three hand auger locations (HA-02 through HA-04) will be collected within the footprint of the former coal house to assess shallow subsurface soils causing the SEH condition. Two hand auger locations (HA-05 and HA-06) will be completed outside the footprint of former coal house to delineate the SEH condition soils.

Prior to completing work, Tighe and Bond will place a ticket with Call-Before-You-Dig (811) to have public utilities marked out. Eversource has been provided electric conduit and grounding grid plans for the substation. Because the work is within the Rockville 14W Inner Substation Area, the proposed work will be completed under the supervision of a Qualified Substation Escort. Because of the timeframe of that work, we are coordinating with BHI Energy/ Power Services, LLC (BHI) to provide qualified substation escort support.

Soil sampling will be completed using hand tools, either a hand auger or shovel. At each location, the gravel ground cover will be removed with a shovel to expose the soil surface. Samples will be collected with a hand auger and/ or shovel. Soil samples will be collected from each location in six-inch intervals to a maximum depth of two feet below grade. Three additional samples will be collected from HA-01 at the location of SS-102 starting at six inches to 2-feet below grade to delineate the vertical extent of the SEH condition in soils. We have budgeted the collection of 24 soil samples including one blind duplicate quality control soil sample. The sample equipment will be decontaminated between each sample prior to the collection of each soil sample.

Each soil sample will be placed in laboratory-provided soil jars. Samples will be labeled and placed in an ice-filled cooler once collected and maintained under a chain-of-custody prior to delivery to the analytical laboratory. Samples will be analyzed by a Connecticut Department of Health-approved Environmental Laboratory. Samples will be analyzed in a 48-hour turnaround time to enable analysis of additional samples within hold time. Each sample will be analyzed for PAHs via EPA Method 8270 using reasonable confidence protocols (RCP). The shallowest soil samples will be analyzed for PAHs, initially. Based on the shallow results, the deeper samples will be activated, if necessary, to assess concentrations above the SEH threshold levels.