

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: Former Robertshaw Controls Facility
Facility Address: 155 Hill Street, Milford, CT
Facility EPA ID #: CT D075397943

RDMS DocID



107874

1. Has all available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?

- If yes - check here and continue with #2 below.
- If no - re-evaluate existing data, or
- If data are not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

RCRA CORRECTIVE ACTION CLUSTER
FACILITY Robert Shaw
ID. NO. CTD075397943
FILE # R-18
UT. # 107874

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)**

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **"contaminated"**¹ above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater	<u>X</u>	___	___	<u>See discussion below</u>
Air (indoors) ²	<u>X</u>	___	___	<u>See discussion below</u>
Surface Soil (<2 ft)	<u>X</u>	___	___	<u>See discussion below</u>
Surface Water	___	___	<u>IN</u>	<u>See discussion below</u>
Sediment	___	___	<u>IN</u>	<u>See discussion below</u>
Subsurf. Soil (>2 ft)	<u>X</u>	___	___	<u>See discussion below</u>
Air (outdoors)	___	<u>X</u>	___	<u>See discussion below</u>

___ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

X If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

___ If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

Groundwater: Results of onsite groundwater samples collected and analyzed as part of the RCRA Groundwater Monitoring program exceed appropriately protective human health risk based levels and are summarized in the attached Table 1.

Air (Indoors): Results of indoor air samples collected and analyzed during 2004 are displayed in the attached table. Although indoor air concentrations exceed the CT DEP Target Air Concentrations (TAC), they do not exceed the OSHA Permissible Exposure Limits (PEL). The OSHA PEL is considered an appropriately protective human health risk-based level for the current uses of the Site, which are commercial and light industrial. In addition, in 2007, a soil vapor extraction (SVE) sub-slab vapor recovery system was installed and is currently operational for soils beneath the building.

Sample I.D. Date Sampled	CT Target Air Concentration (TAC)	OSHA Exposure Limit (PEL)	AFF-1A 23-Nov-04 N	BW-1A 23-Nov-04 N	HAB1 09-Dec-04 N	HAB2 09-Dec-04 N	HAB3 13-Dec-04 N	HAB-E12E 23-Nov-04 N	HAB-W5E 23-Nov-04 N	INV-1A-9H 23-Nov-04 N	VS-E 9B 23-Nov-04 N	VS-W8C 23-Nov-04 N
Volatile Organic Compounds (VOCs) (TO15) ug/m3												
Benzene	22	3,190	-	-	-	-	-	2.1	2.03	1.64	1.96	-
Chloroform	3	240,000	-	-	4.1	-	3.05	-	-	-	-	-
Chloromethane	NS	210,000	1.1	1.09	1.33	1.36	-	1.12	1.12	1.16	1.1	1.18
cis-1,2-Dichloroethene	NS	790,000	-	-	-	-	-	-	21.9	-	-	-
Dichlorodifluoromethane	NS	NS	13.3	-	-	-	-	-	-	-	-	-
Dichloromethane (Methylene Chloride)	45	86,750	-	-	54.2	20.8	33	-	-	-	-	-
o-Xylene	438	435,000	-	-	2.32	-	-	-	-	-	-	-
p/ m-Xylene	438	435,000	2.77	-	8.48	7.04	7.93	2.94	2.77	2.19	4.86	4.7
Tetrachloroethene	11	678,000	-	-	12.4	4.98	6.17	5.42	4.33	16.4	-	-
Toluene	584	754,000	6.99	3.97	11.2	9.76	10.5	7.96	87.2	9.76	7.11	7.19
Trichlorofluoromethane	NS	NS	6.58	-	5.2	5.59	2.85	13	10.8	7.16	2.84	3.6

Notes

- = Analytical result below the method detection limit.

ug/m³ = micrograms per cubic meter (parts per billion (ppb))

N = Normal environmental sample

Surface Water and Sediment: Surface water and sediment samples have not been collected at the Robertshaw Site because surface water bodies do not exist on the property. In addition, the Site is located in a mixed residential and commercial neighborhood that does not contain surface water or sediment that could be directly impacted by site operations. Based on these results, surface water and sediment are not reasonably expected to be contaminated above appropriately protective human health risk-based levels from the Robertshaw Site.

Surface Soil: Results of surface soil samples (<2 feet bgs) collected and analyzed as part of RSR investigation activities exceed appropriately protective human health risk based levels and are summarized in the *Phase III Environmental Report*.

Subsurface Soil: Results of subsurface soil samples (>2 feet bgs) collected and analyzed as part of RSR investigation activities exceed appropriately protective human health risk based levels and are summarized in the *Phase III Environmental Report*.

Air (Outdoors): Outdoor air is not reasonable expected to be contaminated above appropriately protective risk based levels from the Robertshaw Site.

Footnotes:

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

² Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)**

3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

“Contaminated” Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food ³
Groundwater	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>			<u>No</u>
Air (indoors)							
Soil (surface, e.g., <2 ft)	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
Surface Water							
Sediment							
Soil (subsurface e.g., >2 ft)				<u>Yes</u>			<u>No</u>
Air (outdoors)							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
2. enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“___”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.
- If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

Groundwater: Depth to water on Site ranges from five to 15 feet below ground surface. Construction workers engaged in excavations with dewatering could contact impacted groundwater, and are therefore the only potential receptors likely to have a complete exposure pathway to impacted groundwater.

As the result of a 2007 CT DEP Groundwater Reclassification, the Site is underlain by groundwater classified as GB. Municipal water and sewer serve the Site and surrounding area. The nearest public drinking water supply is located greater than one mile upgradient of the site. There are no public or private water supply wells within one-half mile of the Site.

Surface Soil (<2 feet bgs): Construction workers engaged in subsurface excavation activities are the only likely Human Receptors to have a complete exposure pathway to contaminated surface soils. The majority of the property is covered by asphalt and buildings. The remainder of the property is landscaped preventing direct exposure to shallow soils. Therefore, a complete pathway does not exist between contamination and human receptors. In addition, as documented in the Phase III, surface soil samples collected in landscaped areas do not contain impacts above applicable regulatory criteria.

Subsurface Soil (>2 feet bgs): Construction workers engaged in subsurface excavation activities are the only likely Human Receptors to have a complete exposure pathway to contaminated subsurface soils. The majority of the property is covered by asphalt and buildings. The remainder of the property is landscaped preventing direct exposure to shallow soils. In addition, unimpacted surface soils cover subsurface soils impacted above applicable regulatory criteria.

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)

4 Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**⁴ (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

NO If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

_____ If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

_____ If unknown (for any complete pathway) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

Groundwater: Construction workers could be expected to contact contaminated groundwater. However, it is unlikely that a construction worker exposure to groundwater would reasonably be expected be significant (i.e., unacceptable) because:

- Groundwater is located five to ten feet bgs and reasonably expected construction work would occur above this zone of impacted groundwater;
- Groundwater impacts are known to exist on site, therefore construction work would be required to proceed under a health and safety plan (HASP), by OSHA-trained contractors and incorporate personal protection equipment (PPE) and monitoring; and
- It is unlikely that a construction worker would be exposed to groundwater for extended periods of time (e.g., greater than eight hours day, five days a week for six months).

Surface and Subsurface Soil: Construction worker exposure to surface and subsurface soil during excavation activities are not reasonably expected to be significant because:

- Construction workers are not likely to be involved in subsurface excavation activities for extended periods of time (e.g., greater than eight hours a day, five days a week for six months); and
- Soil impacts are known to exist on site, therefore construction work would be required to proceed under a HASP, by OSHA-trained contractors and incorporate personal protection equipment (PPE) and monitoring.

⁴ If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)

5 Can the “significant” exposures (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

_____ If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code

Rationale and Reference(s): _____

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)**

11.6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

- YE** - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Former Robertshaw Controls facility, EPA ID # CT D075397943, located at 155 Hill Street in Milford, CT under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
- NO** - "Current Human Exposures" are NOT "Under Control."
- IN** - More information is needed to make a determination.

Reviewed
Completed by (signature) David Lim
(print) David Lim
(title) project manager

Date 9/26/08

Supervisor (signature) James S. Chow
(print) JAMES S. CHOW
(title) Chief, RCRA Corrective Action
(EPA Region or State) US EPA Region I

Date 9/26/08

Locations where References may be found:

Phase III Report

Contact telephone and e-mail numbers

(name) David Lim
(phone #) 617-918-1367
(e-mail) Lim.David@EPA.GOV

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	TILL WELLS - SHALLOW									
		CRITERIA									
		RFW-1S 27-Oct-05 N	RFW-4S 12-Jan-05 N	RFW-4S 28-Apr-05 N	RFW-4S 20-Jul-05 N	RFW-4S 27-Oct-05 N	RFW-6S 27-Oct-05 N	RFW-9S 11-Jan-05 N	RFW-9S 11-Jan-05 FD	RFW-9S 28-Apr-05 N	RFW-9S 28-Apr-05 FD
Biochemical Oxygen Demand (BOD) (5210B) mg/L											
Biochemical Oxygen Demand (BOD)		NA	NA	NA							
Volatile Organic Compounds (VOCs) (E624) ug/L											
Tetrachloroethene		-					-			53	47
Trichloroethene		-	30	31	34	27	-	120	130	4.3	4.2
cis-1,2-Dichloroethene		-	240	340	300	270	-	300	340	11	10
Trans-1,2-Dichloroethene		-	-	4.8	5.1	-	-	-	-	-	-
Vinyl Chloride		-					-	-	-	-	-
Acetone		NA	NA	NA	-	NA	NA	NA	NA	NA	NA
Dissolved Metals (6010) mg/L											
Chromium		-	-	-	-	-	-	-	-	-	-
Copper		-	-	-	-	-	-	-	-	-	-
Iron		-	-	-	-	-	-	-	-	-	-
Manganese		-	0.81	1.1	1.1	1	0.35	0.21	0.3	-	-
Chromium (Hexavalent) (7196A) mg/L											
Chromium (Hexavalent)		-	-	-	-	-	-	-	-	-	-

Notes:

- = Analytical result below the method detection limit.

NA = Not Analyzed

ug/L = micrograms per liter (parts per billion (ppb))

mg/L = milligrams per liter (parts per million (ppm))

ALPWE = Alpha Analytical Laboratories Westboro, MA

Only compounds with detectable results are tabulated

N = Normal Environmental sample

FD = Field Duplicate sample

NE = Guideline values not established

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	CRITERIA	TILL WELLS - SHALLOW						RED OUTWASH WELLS - INTERMEDIATE			
			RFW-9S	RFW-9S	RFW-9S	RFW-9S	RW-6	RW-8	EW-2	EW-2	EW-2	EW-2
			20-Jul-05	20-Jul-05	27-Oct-05	27-Oct-05	27-Oct-05	27-Oct-05	12-Jan-05	28-Apr-05	19-Jul-05	26-Oct-05
		N	FD	N	FD	N	N	N	N	N	N	
Biochemical Oxygen Demand (BOD) (5210B) mg/L			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Biochemical Oxygen Demand (BOD)												
Volatile Organic Compounds (VOCs) (E624) ug/L												
Tetrachloroethene						39						
Trichloroethene				82	80	-	110	-	-	-	-	-
cis-1,2-Dichloroethene			740	720	160	150	-	47	89	100	100	66
Trans-1,2-Dichloroethene			-	-	-	-	-	-	-	-	-	-
Vinyl Chloride			-	-	-	-	-	-	-	-	-	-
Acetone			-	-	NA	NA	NA	NA	NA	NA	-	NA
Dissolved Metals (6010) mg/L												
Chromium			-	-	-	-	1.1	-	NA	NA	NA	NA
Copper			-	-	0.01	-	-	-	NA	NA	NA	NA
Iron			-	-	0.06	-	-	-	NA	NA	NA	NA
Manganese			3.1	3.2	0.11	0.19	0.74	0.13	NA	NA	NA	NA
Chromium (Hexavalent) (7196A) mg/L												
Chromium (Hexavalent)			-	-	-	-	-	-	NA	NA	NA	NA

Notes:

- = Analytical result below the method detection limit.
- NA = Not Analyzed
- ug/L = micrograms per liter (parts per billion (ppb))
- mg/L = milligrams per liter (parts per million (ppm))
- ALPWE = Alpha Analytical Laboratories Westboro, MA
- Only compounds with detectable results are tabulated
- N = Normal Environmental sample
- FD = Field Duplicate sample
- NE = Guideline values not established

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	RED OUTWASH WELLS - INTERMEDIATE									
		EW-3		EW-3		EW-4		EW-4		MW-3	MW-3
		12-Jan-05	28-Apr-05	19-Jul-05	26-Oct-05	12-Jan-05	28-Apr-05	19-Jul-05	26-Oct-05	12-Jan-05	28-Apr-05
		N	N	N	N	N	N	N	N	N	
Biochemical Oxygen Demand (BOD) (5210B) mg/L		-	-	-	-	8.7	-	9.8	12	NA	NA
Biochemical Oxygen Demand (BOD)		-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs) (E624) ug/L											
Tetrachloroethene						8.6	-	-	-	4.6	6.7
Trichloroethene		180				140	3.5	-	1.2	-	-
cis-1,2-Dichloroethene		930	820	830	370	69	1.6	-	-	-	-
Trans-1,2-Dichloroethene		-	-	-	-	8.9	-	5.8	6.7	-	-
Vinyl Chloride		-	-	-	-			-	2	-	-
Acetone		NA	NA	-	NA	NA	NA	-	NA	NA	NA
Dissolved Metals (6010) mg/L											
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (Hexavalent) (7196A) mg/L											
Chromium (Hexavalent)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

-- Analytical result below the method detection limit.

NA = Not Analyzed

ug/L = micrograms per liter (parts per billion (ppb))

mg/L = milligrams per liter (parts per million (ppm))

ALPWE = Alpha Analytical Laboratories Westboro, MA

Only compounds with detectable results are tabulated

N = Normal Environmental sample

FD = Field Duplicate sample

NE = Guideline values not established

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	CRITERIA		RED OUTWASH WELLS - INTERMEDIATE							
		MW-3	MW-3	RFW-9M	RFW-9M	RFW-9M	RFW-9M	RW-3	RW-3	RW-3	RW-3
		19-Jul-05	26-Oct-05	11-Jan-05	28-Apr-05	20-Jul-05	26-Oct-05	12-Jan-05	28-Apr-05	20-Jul-05	26-Oct-05
Biochemical Oxygen Demand (BOD) (5210B) mg/L		NA	NA	16	9.9	8.9	5.8	NA	NA	NA	NA
Biochemical Oxygen Demand (BOD)											
Volatile Organic Compounds (VOCs) (E624) ug/L											
Tetrachloroethene		3.2	4								
Trichloroethene		-	-					140	190		160
cis-1,2-Dichloroethene		-	-	9,600	4,800	12,000	8,200	460	920	1,300	590
Trans-1,2-Dichloroethene		-	-	-	-	-	-	-	-	-	-
Vinyl Chloride		-	-								
Acetone		-	NA	NA	NA	-	NA	NA	NA	-	NA
Dissolved Metals (6010) mg/L											
Chromium		NA	NA	NA	NA	-	NA	NA	NA	-	NA
Copper		NA	NA	NA	NA	-	NA	NA	NA	-	NA
Iron		NA	NA	25	21	24	26	-	-	-	-
Manganese		NA	NA	8.9	8.3	9.1	8.3	0.75	1.2	1.5	1.1
Chromium (Hexavalent) (7196A) mg/L											
Chromium (Hexavalent)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- = Analytical result below the method detection limit.

NA = Not Analyzed

ug/L = micrograms per liter (parts per billion (ppb))

mg/L = milligrams per liter (parts per million (ppm))

ALPWE = Alpha Analytical Laboratories Westboro, MA

Only compounds with detectable results are tabulated

N = Normal Environmental sample

FD = Field Duplicate sample

NE = Guideline values not established

Table †
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	CRITERIA										
		GRAY OUTWASH WELLS - DEEP										
		RFW-7D 26-Oct-05 N	RFW-8D 11-Jan-05 N	RFW-8D 29-Apr-05 N	RFW-8D 19-Jul-05 N	RFW-8D 26-Oct-05 N	RFW-9D 11-Jan-05 N	RFW-9D 28-Apr-05 N	RFW-9D 19-Jul-05 N	RFW-9D 26-Oct-05 N	RFW-12D 12-Jan-05 N	
Biochemical Oxygen Demand (BOD) (5210B) mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Biochemical Oxygen Demand (BOD)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Volatile Organic Compounds (VOCs) (E624) ug/L												
Tetrachloroethene		-	-	-	-	-	-	-	-	-	-	
Trichloroethene		-	-	-	-	-	-	-	-	-	-	
cis-1,2-Dichloroethene		2.9	-	-	-	-	-	-	-	-	-	
Trans-1,2-Dichloroethene		-	-	-	-	-	-	-	-	-	-	
Vinyl Chloride		-	-	-	-	-	-	-	-	-	-	
Acetone		NA	NA	NA	-	NA	NA	NA	-	NA	NA	
Dissolved Metals (6010) mg/L												
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Iron		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium (Hexavalent) (7196A) mg/L												
Chromium (Hexavalent)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:
 - = Analytical result below the method detection limit.
 NA = Not Analyzed
 ug/L = micrograms per liter (parts per billion (ppb))
 mg/L = milligrams per liter (parts per million (ppm))
 ALPWE = Alpha Analytical Laboratories Westboro, MA
 Only compounds with detectable results are tabulated
 N = Normal Environmental sample
 FD = Field Duplicate sample
 NE = Guideline values not established

Table I
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample ID, Date Sampled Sample Type	CRITERIA	GRAY OUTWASH WELLS - DEEP									
			RFW-4D	RFW-4D	RFW-4D	RFW-6D	RFW-6D	RFW-6D	RFW-6D	RFW-7D	RFW-7D	RFW-7D
			29-Apr-05	19-Jul-05	27-Oct-05	12-Jan-05	29-Apr-05	20-Jul-05	26-Oct-05	11-Jan-05	28-Apr-05	20-Jul-05
Biochemical Oxygen Demand (BOD) (5210B) mg/L			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Biochemical Oxygen Demand (BOD)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds (VOCs) (E624) ug/L												
Tetrachloroethene			-	6.3	7.9					3.7	5.8	-
Trichloroethene			-	-	-	150	32	99	100	-	1.2	-
cis-1,2-Dichloroethene			-	3.4	2.7	680	40	82	88	1.2	3.4	-
Trans-1,2-Dichloroethene			-	-	-	-	-	-	-	-	-	-
Vinyl Chloride			-	-	-					-	-	-
Acetone			NA	-	NA	NA	NA	-	NA	NA	NA	24
Dissolved Metals (6010) mg/L												
Chromium			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (Hexavalent) (7196A) mg/L												
Chromium (Hexavalent)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- = Analytical result below the method detection limit.

NA = Not Analyzed

ug/L = micrograms per liter (parts per billion (ppb))

mg/L = milligrams per liter (parts per million (ppm))

ALPWE = Alpha Analytical Laboratories Westboro, MA

Only compounds with detectable results are tabulated

N = Normal Environmental sample

FD = Field Duplicate sample

NE = Guideline values not established

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample I.D. Date Sampled Sample Type	CRITERIA	RED OUTWASH WELLS - INTERMEDIATE						GRAY OUTWASH WELLS - DEEP			
			RW-7	RW-7	RW-7	RW-7	RW-7	RW-7	RW-7	RFW-1D	RFW-3D	RFW-4D
			11-Jan-05	11-Jan-05	28-Apr-05	28-Apr-05	20-Jul-05	26-Oct-05	26-Oct-05	27-Oct-05	27-Oct-05	12-Jan-05
Biochemical Oxygen Demand (BOD) (5210B) mg/L												
Biochemical Oxygen Demand (BOD)			-	-	11	-	-	-	NA	NA	NA	
Volatile Organic Compounds (VOCs) (E624) ug/L												
Tetrachloroethene			7.7	6.5			6	7.4	-	3.5	7.6	
Trichloroethene			7.7	9.3	25	24	29	8.3	9.9	-	-	
cis-1,2-Dichloroethene			17	23	160	140	42	26	31	-	2	
Trans-1,2-Dichloroethene			-	-	-	-	-	-	-	-	-	
Vinyl Chloride												
Acetone			NA	NA	NA	NA	-	NA	NA	NA	NA	
Dissolved Metals (6010) mg/L												
Chromium			NA	NA	NA	NA	-	NA	NA	NA	NA	
Copper			NA	NA	NA	NA	-	NA	NA	NA	NA	
Iron			1.7	1.6	0.13	0.13	2.9	9.1	4.4	NA	NA	
Manganese			0.3	0.28	0.13	0.12	0.42	0.57	0.52	NA	NA	
Chromium (Hexavalent) (7196A) mg/L												
Chromium (Hexavalent)			NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:

- = Analytical result below the method detection limit.

NA = Not Analyzed

ug/L = micrograms per liter (parts per billion (ppb))

mg/L = milligrams per liter (parts per million (ppm))

ALPWE = Alpha Analytical Laboratories Westboro, MA

Only compounds with detectable results are tabulated

N = Normal Environmental sample

FD = Field Duplicate sample

NE = Guideline values not established

Table 1
Summary of Groundwater Analytical Results
Former Robertshaw Facility, 155 Hill St.
Milford, Connecticut

Parameter	Sample ID (Field Sample) Sample Type	CRITERIA	GRAY OUTWASH WELLS - DEEP		
			RFW-12D	RFW-12D	RFW-12D
			2-Apr-05	19-Jul-05	26-Oct-05
			N	N	N
Biochemical Oxygen Demand (BOD) (5210B) mg/L					
Biochemical Oxygen Demand (BOD)			NA	NA	NA
Volatile Organic Compounds (VOCs) (E624) ug/L					
Tetrachloroethene			2.4	2.5	-
Trichloroethene			-	-	-
cis-1,2-Dichloroethene			-	-	-
Trans-1,2-Dichloroethene			-	-	-
Vinyl Chloride			-	-	-
Acetone			NA	-	NA
Dissolved Metals (6010) mg/L					
Chromium			NA	NA	NA
Copper			NA	NA	NA
Iron			NA	NA	NA
Manganese			NA	NA	NA
Chromium (Hexavalent) (7196A) mg/L					
Chromium (Hexavalent)			NA	NA	NA

Notes:

- = Analytical result below the method detection limit.
- NA = Not Analyzed
- ug/L = micrograms per liter (parts per billion (ppb))
- mg/L = milligrams per liter (parts per million (ppm))
- ALPWE = Alpha Analytical Laboratories Westboro, MA
- Only compounds with detectable results are tabulated
- N = Normal Environmental sample
- FD = Field Duplicate sample
- NE = Guideline values not established