

**U.S. ENVIRONMENTAL PROTECTION AGENCY - REGION I AND  
CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
STATEMENT OF BASIS  
FOR A CORRECTIVE ACTION COMPLETION DETERMINATION**

**Former Risdon Corporation  
15 Old Newtown Road  
Danbury, Connecticut  
EPA Identification Number CTD001168558  
Stewardship Permit DEP/HWM/CS-034-006**

**August 5, 2014**

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**BASED UPON INVESTIGATION ACTIVITIES CONDUCTED AT THE FORMER RISDON CORPORATION FACILITY LOCATED AT 15 OLD NEWTOWN ROAD IN DANBURY, CONNECTICUT, THE ENVIRONMENTAL PROTECTION AGENCY-REGION I (EPA) AND CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CT DEEP) PROPOSE A COMPLETION DETERMINATION REMEDY PROPOSAL THAT CORRECTIVE ACTION OBLIGATIONS UNDER THE HAZARDOUS AND SOLID WASTE AMENDMENTS (HSWA) OF THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) ARE “COMPLETE WITH CONTROLS.”**

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**15 Old Newtown Road**



**Groundwater Treatment System**



**Vapor Extraction-System-Blowers on Roof**

## **INTRODUCTION**

The U.S. Environmental Protection Agency - Region I (“EPA”) and the Connecticut Department of Energy & Environmental Protection (“CT DEEP”) are announcing their Completion Determination remedy proposal under HSWA of RCRA.<sup>1</sup> This proposal states that Corrective Action obligations at the

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<sup>1</sup> “Completion Determination” is a regulatory phrase that refers to a final disposition of a facility subject to Corrective Action obligations

former Risdon Corporation facility, located at 15 Old Newtown Road in Danbury, Connecticut (hereafter, “Facility” or “Site”) are “Complete with Controls.” Investigation activities conducted at the Facility demonstrate that releases of hazardous wastes or hazardous constituents do not pose a threat to human health or the environment for the proposed risk exposure and current and future land use assumptions. EPA’s and CT DEEP’s proposed Completion Determination is based on the results of investigation and remediation activities conducted by the Facility.

This document, which EPA and CT DEEP call a “Statement of Basis,” summarizes the regulatory status of the Facility, the results of various investigation and remediation activities performed at the Facility, and the reasons for proposing that a “Completion with Controls” determination is appropriate. EPA and CT DEEP are publishing this document to provide an opportunity for public review and comment on this proposal. EPA and CT DEEP will consider public comments as part of its decision making process.

This document also outlines suggested steps to satisfy Connecticut Remediation Standard Regulations (see Glossary, page 14) requirements.

This Statement of Basis is intended to:

- I. Explain the opportunities for public participation, including how the public may comment on this proposed Completion Determination and where the public can find more detailed information (Page 2);
- II. Provide a description and history of the Facility, a summary of the investigations and cleanup performed to date and the results and conclusions (Page 4);
  - A. On-Property (page 6)
  - B. Off-Property (page 9)
- III. Present EPA's and CT DEEP’s rationale for proposing that Corrective Action obligations under HSWA of RCRA are Complete with Controls for the proposed current and future land use of the Site (Page 11);
- IV. Present EPA’s and CT DEEP’s proposal for any subsequent Corrective Action steps (Page 13);
- V. Provide a Glossary to explain terms used in the document (Page 14); and
- VI. Provide References (Page 16).

## **I. THE PUBLIC’S ROLE IN EVALUATING THIS CORRECTIVE ACTION PROPOSAL/RECOMMENDATION**

The EPA and CT DEEP are issuing this Statement of Basis as part of its public participation

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under the Resource Conservation and Recovery Act. In this case, the Completion Determination proposed for the Facility is one that is “Complete with Controls.” More information on this category of Completion Determination can be found in the Federal Register notice entitled, Final Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 Fed. Reg. 8757 (Proposed Rule; Tuesday, February 25, 2003). This proposed rule is summarized for convenience on EPA’s website [http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/gen\\_ca/compfedr.pdf](http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/gen_ca/compfedr.pdf) (accessed June 2014).

responsibilities under RCRA. The purpose of the Statement of Basis is to present the public a summary of the assessment activities, remediation activities, and risk assessment conclusions in support of site closure. All interested persons are invited to express their views on this proposal. Public comment on all potential Corrective Action proposals or measures, and supporting information, is an important contribution to EPA's and CT DEEP's decision making process.

### Public Comment Period

Written comments on this proposal will be accepted throughout a **forty-five (45) day** public comment period from **August 7 through September 20, 2014**. During this public comment period, the public is invited to review this Statement of Basis and supporting information, and to offer comments to EPA.

### Written Comments

If, after reviewing the information in this statement of basis and the administrative record, you would like to comment in writing on the **Off-Property Site Investigation and associated results and conclusions starting in Section II.B. (pages 9-14)** you should mail your written comments (postmarked no later than September 20, 2014) to:

Carolyn Casey  
U.S. Environmental Protection Agency  
5 Post Office Square, Suite 100  
Mail Code: OSRR 07-3  
Boston, Massachusetts 02109-3912

Please be sure to clearly indicate that you are commenting on this proposal. A comment form and mailer is included at the end of this document.

Questions may be directed to Carolyn Casey at (617) 918-1368, or [casey.carolyn@epa.gov](mailto:casey.carolyn@epa.gov)  
Toll Free Phone: 1-888-EPA-REG1 (1-888-372-7341), ext. 81368

A final decision regarding this proposed Completion Determination will not be made until the public comment period has closed and all comments received by EPA have been evaluated and addressed. EPA and CT DEEP may modify this proposal based on any new information or substantive comments from the public.

### EPA's and CT DEEP's Review of Public Comments and Decision Making Process

EPA and CT DEEP will review comments received from the public as part of the process of reaching a final decision regarding the most appropriate action at the Facility. If EPA receives comments, then a brief Response to Comments and Decision Document will be prepared by EPA and CT DEEP to address all significant comments received during the public comment period. If the comments result in

significant changes to this proposal, EPA and CT DEEP will seek additional public comments on a revised proposal. If no comments are received a Decision Document will be prepared and sent to the Facility and interested parties of record.

### Additional Public Information

This Statement of Basis provides only a summary description of the Facility investigation and remediation performed at the Facility. Therefore, the public is encouraged to consult the **Administrative Record**. The Administrative Record is that collection of information (including data, reports, etc.) that EPA and CT DEEP relied upon for its proposed remedy decision. In this case, the Administrative Record contains this Statement of Basis and several reports which describe the investigation and remediation activities conducted at the site.

For convenience, excerpts from the administrative record are available for review on EPA's website: <http://www.epa.gov/NE/cleanup/rcra/index.html> or [www.epa.gov/region1/cleanup](http://www.epa.gov/region1/cleanup) Type in 'Risdon' in the 'Find a Cleanup Site' box and click 'Go.'

The complete Administrative Record is available for viewing at the following locations.

Danbury Public Library  
170 Main Street  
Danbury, Connecticut 06810  
(203) 797-4505

*Hours: Monday, Tuesday, Thursday 10 – 7 pm,  
Wednesday 1 – 7 pm, Friday 10 – 5 pm,  
Saturday 10 – 2 pm, Sunday Closed*

US EPA Records Center  
5 Post Office Square  
Boston MA 02109  
(617) 918-1420  
Contact us by [E-mail](mailto:r1.records-osrr@epa.gov)  
([r1.records-osrr@epa.gov](mailto:r1.records-osrr@epa.gov))

*The EPA Records Center hours are Monday-Friday  
9:00 a.m. to 1:00 p.m. and 2:00 p.m. to 5:00 p.m.  
Closed on Federal Holidays*

## **II. FACILITY DESCRIPTION, HISTORY, SUMMARY OF INVESTIGATIONS, REMEDIATION, RESULTS AND CONCLUSIONS**

### **Facility Description and Environmental Setting**

The Risdon Corporation Site consists of a former industrial facility located on approximately 8-acres of land at 15 Old Newtown Road in the City of Danbury, Connecticut. The Facility is bordered to the north by Old Newtown Road and an industrial property, to the east by Newtown Road and industrial/commercial property, to the south by commercial property and to the west by an industrial/commercial property and private residences. The perimeter of the property is fenced and gated. The remaining areas of the property surrounding the building include paved parking and

driveways to the rear and sides of the building, and a vegetated landscaped area in front of the building. The building is constructed as slab-on-grade and is approximately 121,000 square feet in size.

The surrounding area is generally industrial/commercial with a few scattered residential properties. The Still River is located approximately 100 feet northwest of the Facility and flows northward past the site. A large wetland area is located approximately 700 feet northeast of the Facility. The Still River is classified by the State as a Class B river, which means that it is not suitable for use as a drinking water supply, although suitable for agricultural and industrial water supply, recreational uses, and fish and wildlife habitat.

In general, there are two interconnected aquifer systems in the vicinity of the Site. The upper unconfined aquifer is comprised of the glaciolacustrine deposits. The lower aquifer occurs in the upper fractured portions of the bedrock. Groundwater flow in the bedrock is restricted to the fractures and joints within the bedrock. The restriction of groundwater flow results in significantly lower hydraulic conductivity and reduced potential for migration of groundwater within the bedrock. Depth to groundwater on the property varies between 3-feet and 15-feet below the ground surface (bgs).

Shallow groundwater in the upper unconfined aquifer generally flows in a northerly direction across the former Risdon Facility from the topographic high south of the Facility traveling down Augusta Drive. Groundwater flow is influenced by the on-site groundwater extraction system with groundwater flow along the property boundaries inferred towards the six recovery wells. Leaving the former Risdon Facility, groundwater flow is to the north/northwest down Augusta Drive until it is influenced by the Still River, wetland areas, and topographic highs in the area. Groundwater discharges into the River at approximately 750 to 1,650 feet downstream from the bridge over Old Newtown Road.

### **Facility History and Operations**

The former Risdon Facility was utilized for the manufacturing of cosmetics containers from 1956 to 2005. The manufacturing processes included electroplating, acid/solvent stripping, degreasing, chromating, silver plating, pickling, buffing, polishing, lacquering, hot-stamping, silk-screening, and assembly. The metal finishing operations consisted of silver plating, pickling, degreasing, and lacquering. These operations were restricted to the southeastern portion of the Facility, referred to as the metal finishing area (MFA). The remainder of the building was used for assembly, product storage, packing, shipping, and office space. Operations ceased in 2005 and the building has been vacant until the property was purchased in April 2014 for commercial use.

The Facility formerly operated 3 hazardous waste surface impoundments (two sludge lagoons and a sludge drying bed), and an incinerator. A RCRA Part A Hazardous Waste Permit Application was submitted to EPA in November 1980 which allowed the Facility to continue to operate these units under Interim Status until a RCRA operating permit was issued. The surface impoundments were certified-closed in 1983 and the incinerator was certified closed in 1985. A Part B Permit Application was submitted on November 2, 1990, but an operating permit was never issued.

A CT DEEP administered Stewardship Permit (**DEP/HWM/CS-034-006**) was issued on September 29, 2009, thereby terminating the interim status of the Facility. The public notice for the closure of the surface impoundments and incinerator was completed with the public notice of the Stewardship Permit. The permit requires post-closure groundwater monitoring for the surface impoundments and to perform site-wide environmental investigation and cleanup at the hazardous waste treatment, storage and disposal Facility in accordance with Connecticut General Statutes, Sections 22a-6, 22a-449(c) and 22a-454 and Section 22a-449(c)-110 of the Regulations of Connecticut State Agencies. The permit expires at the end of September in 2019 and may be reissued prior to that date.

The site investigation identified thirty Areas of Concern (AOCs) based on their historical material and waste management operations at the Facility. A list of these AOCs, including a description of the AOC, waste managed, and period of operation was presented in the March 2008 *Remedial Action Plan On-Property Conditions* (2008 RAP). Subsequently, in January 2010, a summary of all known AOCs at the Facility and the investigation and mitigation activities conducted to date was submitted to the EPA and CT DEEP as part of the 2009 Stewardship Permit submittal and for convenience is provided at the end of this document.

### **Plans for Future Use of Facility**

The property recently transferred from Risdon (a.k.a. CR USA Inc.) to 15 Old Newtown Rd. Ocon, LLC. As part of the transfer, CR USA, Inc. is the certifying party responsible for the completing the remaining Corrective Action obligations in accordance with the CTDEEP Property Transfer Act and the Remediation Standard Regulations. The property will be restricted to commercial/industrial uses with an Environmental Land Use Restriction (ELUR) to be recorded in accordance with the revisions to the ELUR Regulations, [section 22a-133q-1](http://www.ct.gov/DEEP/lib/DEEP/regulations/22a/22a-133q-1through3.pdf) of the Regulations of Connecticut State Agencies, as revised on June 27, 2013 (<http://www.ct.gov/DEEP/lib/DEEP/regulations/22a/22a-133q-1through3.pdf>). The current property owner will provide access to the property as needed for O&M of the remediation systems and for continued monitoring.

## **Environmental Investigation and Cleanup**

### **A. On Property**

The On-Property information included in this section is being provided to present a complete and site-wide understanding of the Facility and the investigation and remediation completed to date. The on-property investigation and remedy selection was public noticed in March 2008 with the submittal of the On-Property Remedial Action Plan.

**Investigation:** Investigation and remediation activities have been on-going at the site since 1981 with the most recent activities being conducted in accordance with the 2009 Stewardship Permit under EPA technical oversight. Investigations completed to-date include collection of numerous soil samples, installation of groundwater monitoring wells, 33 years of groundwater quality data (1981 to 2014), soil

vapor surveys, indoor air sampling, and surface water and sediment sampling. The earlier investigations conducted in the late 1980's and early 1990's focused on the Surface Impoundment Area, located in the open area west of the building (currently a paved parking lot). Based on the findings, additional investigations were conducted across the rest of the site with focus on the MFA. In January 1999, the investigation data was compiled and presented in a January 1999 RCRA Facility Investigation Report.

These investigations concluded that subsurface soils, soil vapor, and groundwater have been impacted by past releases of volatile organic compounds (VOCs) primarily 1,1,1-trichloroethane (1,1,1-TCA) and trichloroethene (TCE) and their degradation products 1,1-dichloroethane and 1,1-dichloroethene. In addition, these investigations concluded that inorganics including arsenic, beryllium, cadmium, cyanide, copper, lead, mercury, nickel, silver and zinc have impacted soils and groundwater (refer to Table 1).

The March 2008 RAP includes a summary of analytical data collected and compares that data to the CT DEEP Remediation Standard Regulations (RSRs) to determine where additional remedial response actions were warranted.

**Remediation:** The following remedial approach for the Facility is from the 2008 RAP for On-Property Conditions. For 23 years a combination of active groundwater and soil vapor remediation has been conducted. The Surface Impoundment Area, located on the western portion of the Facility, was used for the dewatering of metal hydroxide process wastes from approximately 1956 to 1982. The impoundments were closed by sludge/soil excavation and off-site disposal in 1982 and 1983. Closure Certification was determined to be acceptable by EPA 12/23/1983 and public noticed with the 2009 Stewardship Permit.

In 1990 an Interim Corrective Measure (ICM) was implemented. The ICM consisted of groundwater extraction and treatment to hydraulically contain VOC contaminated groundwater from the former Surface Impoundment Area in conjunction with air sparge/vapor extraction (AS/VE) to remove adsorbed-phase VOCs from saturated soils. Operation of the AS component ceased in 1995 and operation of the VE component ceased in 2000.

In 1993, an ICM, consisting of a dual groundwater and soil vapor extraction and treatment system, was installed in the former MFA located inside the southern portion of the site building. The sources of VOCs and metals from this area included several degreasers and process/plating lines. The system was installed as a source removal mechanism and to contain/prevent the migration of contaminants from the source area via groundwater flow. This system operated until 2005.

The groundwater extraction and treatment system was upgraded in 2005 to its current status, extracting groundwater from six on-property recovery wells at a design flow rate of 25 to 30 gallons per minute. Three additional recovery wells were installed to enhance the groundwater extraction and treatment system along the northeastern property boundary downgradient of the MFA. The existing recovery wells were rehabilitated, submersible pumps replaced, and the wells tied into a larger system which included a new groundwater treatment system and building.

In 2004 and 2005, vapor control measures were implemented at two downgradient residential properties to eliminate potential migration pathways from the subsurface to indoor air. In 2008 a zoned sub-slab vapor control system was installed in the former MFA within the Risdon building to eliminate potential migration pathways from the subsurface to indoor air.

### **Results and Conclusions:**

Soils - The 2008 RAP proposed an engineering control for soils contaminated with inorganics above the CT DEEP RSRs Industrial Commercial (I/C) Direct Exposure Criteria (DEC). The control consists of existing barriers (concrete building floor slab) to prevent direct contact with and ingestion of soil located beneath a portion of the MFA. In addition, the floor slab will prevent migration of inorganics in soils that are present at concentrations above the GB Pollutant Mobility Criteria (PMC). The 2008 RAP also proposed the use of an institutional control (ELUR) that will restrict the property to non-residential activities and ensure that the current building floor slab, or equivalent cap, above the former MFA is maintained.

Groundwater - Specific remedial action objectives for groundwater are to prevent migration of impacted groundwater off-site at levels in excess of the Surface Water Protection Criteria (SWPC). Groundwater at the site is classified by the CT DEEP as GB and therefore, presumed not suitable for use as a drinking water supply without treatment. Groundwater surrounding the site is GB to the north, east, and west and GA to the south. As indicated above, south of the site is hydraulically upgradient (i.e., groundwater generally flows from the south to the north). No properties have been identified within ½ mile downgradient (generally to the north) of the site that are not serviced by public water. The closest properties (2 locations) that are not supplied with public water and may potentially be serviced by private wells are located approximately 300 feet upgradient of the site to the southwest and southeast. The closest municipal well (Osborne Well, Danbury Water Department) is located approximately 1.2 miles west of the site.

The enhanced groundwater hydraulic containment system currently operates continuously, twenty-four hours a day. This system treats VOC impacted groundwater at average total flow rates that have ranged from 5 to 18 gallons per minute (gpm). Treated groundwater is discharged to the local publically owned treatment works. Since the start of the enhanced system in August 2005, the system has removed approximately 2,900 pounds of VOCs. Monitoring of the hydraulic containment system has shown that the treatment system continues to perform as designed by capturing the VOC impacted plume and treating the extracted groundwater. Contaminated groundwater is effectively being contained on the Facility.

Soil Vapor and Indoor Air - Specific remedial action objectives on-site for soil vapor are to prevent migration of soil vapor in excess of the Soil Vapor Volatilization Criteria (SVVC) to indoor air and prevent exposure to indoor concentrations exceeding the RSRs target indoor air concentrations. A combination of a zoned sub-slab vapor control system, hydraulic containment via groundwater

extraction at the downgradient property line, and long-term monitoring is proposed as the source reduction and migration control remedial alternative for the Former MFA. This approach is proposed to effectively eliminate the vapor intrusion pathway and subsequently reduce the VOC concentrations in indoor air. Operation of the sub-slab soil vapor control system is required until concentrations of VOCs in groundwater and/or soil vapor have been reduced sufficiently to prevent vapor intrusion at unacceptable levels and/or when indoor air levels have been reduced and maintained at the appropriate regulatory levels.

Surface Water and Sediments - No surface water or sediments are located on-property. Refer to the Off- Property Section below.

## **B. Off-Property**

Public comments on this Statement of Basis are currently limited to the following Off-Property Investigation and associated results and conclusions stating in this Section II.B., on pages 9-14.

**Investigation:** The final phase of investigation is detailed in the Updated Off-Property Investigation Summary Report and Screening Level Ecological Risk Assessment, dated August 2014. The report describes the off-property investigation activities conducted between 2010 and 2014 to evaluate potential off-property impacts from the former Risdon Facility. The report provides:

- a consolidation into one document of each of the recent phases of the off-property investigation activities, including the recently conducted comprehensive groundwater sampling activities in September 2013, and supplemental sampling activities in March and June 2014;
- a screening level ecological risk assessment (SLERA) for the Still River;
- the updated Conceptual Site Model (CSM) for the site; and
- the results and conclusions drawn from these activities.

The first off-property investigation phase included monitoring well data, soil gas points, and stream piezometers previously installed by CR USA and soil borings and monitoring wells installed by other adjacent property owners, as summarized in the February 2010 Draft Off-Property Workplan. The second off-property investigation phase focused on determining the nature and extent of potential off-property groundwater impacts and the only off-site AOC. The off-site AOC is associated with a storm water drain-pipe from the closed surface impoundment area. The investigation of the off-property groundwater impacts focused on three main off-property areas: the Still River; the bedrock valley beneath Augusta Drive; and the wetlands behind 4 Old Newtown Road. Investigation activities included replacement of two piezometers, sediment and surface water sampling, installation of additional monitoring wells, and subsequent groundwater gauging, sampling, and analysis. The results of this first phase of investigation activities were summarized in the October 2011 Off-Property Report.

The second phase of the investigation was presented in the July 2012 Off-Property Work Plan Investigation Addendum. The main tasks outlined in this addendum included the Still River Sediment Assessment and Still River Groundwater Discharge Survey, including a river walk and reconnaissance,

installation of overburden monitoring wells to evaluate groundwater quality further downgradient, and quarterly off-property groundwater elevation monitoring in the vicinity of the wetlands north of 4 Old Newtown Road. All data from this investigation phase are presented in the March 2013 Off-Property Status Update.

The final investigation phase was implemented, including the installation of piezometers within the Still River at the point of presumed groundwater discharge and subsequent gauging and sampling. The data identified an area of groundwater discharge to the river and this information was summarized in the July 2013 Off-Property Status Update No. 2. The January 2014 report is a consolidation of each of these recent phases of the off-property investigation activities, a SLERA for the Still River, and the updated CSM for the site. This report was updated in July 2014 following sediment sampling and revised August 2014. The final version is called the Updated Off-Property Investigation Summary Report and Screening Level Ecological Risk Assessment, dated August 4, 2014.

The new and existing monitoring well data was utilized to assess potential groundwater discharge pathways in the vicinity of the wetlands. The analytical results from the sampling of shallow and deeper overburden wells in the vicinity of the wetland areas yielded detections of VOCs and inorganics; however, all concentrations were below SWPC and the CT Water Quality Standards (WQS), where applicable. These data demonstrate that site constituents of concern (COCs) are not present in groundwater at concentrations that would adversely impact the adjacent wetlands. Furthermore, groundwater flow is observed to the northwest for three of the four quarters and to the west during the remaining quarter (March), demonstrating the groundwater flow in this area is not towards the wetlands north of 4 Old Newtown Road. Based on these results, it has been concluded that no further investigation is warranted with the wetlands on and adjacent to the 4 Old Newtown Road property.

**Remediation:** Off-site remediation consisted of the installation of sub-slab depressurization systems at two homes located in the immediate vicinity of the site and impacted by the western edge of the groundwater contaminant plume. No further remediation is needed or proposed off-property.

**Results and Conclusions:** The results of investigation and remediation performed off-property demonstrate that conditions are protective of human health and the environment, as determined by comparison with the CT DEEP RSRs and other applicable state and federal policy and guidance. This section summarizes the conditions of off-property soil, groundwater, indoor air, and surface water and sediment impacts.

Soils – Since no release of hazardous waste contamination occurred directly to off-site soils, soils are not a media of concern off-site.

Groundwater - No further remediation is proposed beyond that required for the control of contaminated groundwater from the site (i.e., operation of the groundwater extraction and treatment system). Each of the potential migration pathways has been investigated and evaluated. The stretch of the Still River where VOC-impacted groundwater discharges has been identified; the groundwater

sampling data indicates that VOCs in groundwater are not adversely impacting the surface water quality in this stretch of the river. Further the SLERA indicated minimal likelihood for adverse ecological impacts to the Still River as a result of releases from groundwater discharge. Given the findings of the off-property evaluation and with the continued operation of the property line groundwater extraction and treatment system and sub-slab vapor control system beneath the building, concentrations of VOCs in off-property groundwater are expected to continue to decrease over time. Monitoring of the plume stability will be performed in accordance with the RSRs and incorporated into the Operation and Maintenance (O&M) program as part of the approved on-site Remedial Action Plan.

Select inorganics were detected in off-property groundwater samples, but at concentrations below the SWPC and the CT DEEP Water Quality Standards (where applicable such as in the wetlands area); therefore, do not require remediation or further monitoring.

Indoor Air - Indoor air sampling and installation of vapor reduction systems at two adjacent residential properties was completed in July 2004 and December 2005, with routine monitoring ongoing. Further details are provided in semi-annual status reports and are discussed in the August 2014 Off-Property Investigation Summary Report. Continued operation of the two off-property sub-slab depressurizations systems will be required until further indoor air sampling is conducted to determine that the systems are no longer needed as a result of the continued groundwater cleanup.

All VOCs in groundwater within the shallowest overburden wells on all other adjacent off-site industrial/commercial (I/C) properties were detected at concentrations below the CT DEEP RSRs I/C volatilization criteria in the latest sampling round; therefore, it was concluded that no further evaluation of vapor intrusion was warranted off-property.

Surface Water and Sediments -The results of the SLERA (contained in the August 2014 Updated Off-Property Investigation Summary Report and SLERA) conclude that based on the results of the off-property investigation, there is a better understanding of groundwater flow and VOC distribution hydraulically downgradient of the Facility. Each of the potential migration pathways has been investigated and evaluated. Collectively, the data indicate that VOCs are not discharging to surface water and sediment in the river at levels that are likely to cause adverse effects in aquatic or benthic receptors, based on the present information. The SLERA indicates minimal likelihood for adverse ecological impacts to the Still River as a result of releases from the former Risdon Facility. However, additional monitoring will be conducted and the data will be utilized to evaluate plume stability and trends, as well as to demonstrate that there are no impacts to surface water and sediment in the river at levels that are likely to cause adverse effects in aquatic or benthic receptors over time (refer to Section 9 of the SLERA contained in the August 2014 report).

### **III. EPA's and CT DEEP's RATIONALE FOR PROPOSED DECISION**

Based on the above information, EPA and CT DEEP are proposing a Completion with Controls Determination for the Facility. In accordance with EPA guidance on Completion Determinations, EPA and

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CT DEEP believe a Completion with Controls Determination is appropriate because:

- (1) a full set of corrective measures has been defined;
- (2) the Facility completed construction and installation of all necessary remedial actions; and
- (3) site-specific media cleanup objectives have not been met.

**Notwithstanding this Completion Determination, EPA or CT DEEP may conclude additional cleanup is needed if, subsequent to this Completion Determination, EPA or CT DEEP discovers evidence of unreported or misrepresented releases.**

#### Evaluation of Proposal with Respect to Standards and Decision Factors

In addition to the rationale presented above, EPA and CT DEEP have evaluated the effectiveness of the proposal using Remedy Selection Criteria set forth in EPA guidance.<sup>2</sup> These criteria provide a framework for measuring the effectiveness of a proposed Remedy. These Remedy Selection Criteria are presented below.

#### **Threshold Criteria:**

Overall Protection. This completion determination proposal provides protection of human health and the environment. Specifically, the investigative and remedial work conducted by the Facility demonstrate protection of human health and the environment for current and future use consistent with the requirements of the CT DEEP RSRs.

Attainment of Media Cleanup Standards. The proposed completion determination indicates that the CT DEEP RSRs have not yet been fully attained. Subsequent monitoring of groundwater soil gas and/or indoor air will document when the RSRs have been attained. Refer to Section IV on page 14.

Controlling Sources of Releases. The installation and continued operation of the groundwater extraction and treatment system is controlling the release at the property boundary and preventing the further migration of contaminated groundwater. The source is further controlled by maintaining the building in place to prevent surface water infiltration that could further mobilize contamination.

Compliance with Waste Management Standards. The proposed remedy complies with all applicable requirements for the management of solid wastes.

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<sup>2</sup> The Remedy selection criteria are described in Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule. 61 Fed. Reg. 19432, 19449 (proposed May 1, 1996) found at the following page of EPA's website: <http://www.epa.gov/fedrgstr/EPA-WASTE/1996/May/Day-01/pr-547.pdf>

## **Balancing Criteria:**

Long-term Reliability and Effectiveness. This remedy is effective and reliable with respect to the long-term since continued groundwater monitoring will be required until the applicable CT DEEP RSRs have been achieved. Continued operation and monitoring of the sub-slab depressurization systems will be required until the CT DEEP RSRs have been achieved. Engineering Controls and an ELUR are required to maintain the reliability and effectiveness of this proposed Completion Determination.

Reduction of Toxicity, Mobility, or Volume of Wastes. The toxicity, mobility and volume of waste impacting the environment as a result of Facility operations has been reduced through active remediation and will continue to be reduced with operation of the groundwater extraction and treatment system and sub-slab depressurization systems until the CT DEEP RSRs are achieved.

Short-term Effectiveness. The proposed remedy is comprehensive in the short-term since there are no immediate risks to human health or the environment.

Implementability. This remedy is easily implemented since the extensive investigation and cleanup work completed to date is appropriate and effective so that no further actions are required to protect human health and the environment other than the following:

- continued operation of the existing groundwater extraction and treatment system;
- continued operation of the existing, off-site and on-site, sub-slab depressurization systems; and
- establishing and ensuring compliance with an ELUR and engineering controls.

Cost. The Facility has spent significant time and money to investigate and remediate the site. Based on the above EPA and CT DEEP rationale for the proposed decision and the threshold and balancing criteria, a Completion with Controls determination is appropriate for the Facility.

In summary, EPA and CT DEEP, using all available information, are announcing this Corrective Action “Completion with Controls” Completion Determination proposal. Since investigations performed at the Facility demonstrate that releases of hazardous wastes will be remediated to levels which do not pose a threat to human health or the environment under current and future site uses, a Completion with Controls Determination is reasonable and appropriate.

## **IV. EPA’S AND CT DEEP’S PROPOSAL FOR SUBSEQUENT CORRECTIVE ACTION STEPS – OPERATION & MAINTENANCE, GROUNDWATER MONITORING, ENGINEERING CONTROLS AND ELUR**

Continued operation and maintenance (O&M) of the groundwater extraction and treatment system and on-site sub-slab depressurization system is required until compliance with CT DEEP RSRs is achieved.

O&M will be in accordance with the December 2008, Revised Operations, Maintenance and Monitoring Plan (OM&M Plan), On Property Conditions with subsequent modifications to the monitoring program, as most recently outlined in Section 9 of the August 2014 Updated Off-Property Investigation Summary Report.

The following presents the proposed monitoring program going forward. The groundwater data will be utilized to evaluate plume stability and trends, as well as to demonstrate that there are no adverse impacts to surface water over time. The objectives for this program include monitoring to ensure groundwater conditions continue to support plume stability and that concentrations in groundwater at point of compliance (POC) wells meet the SWPC and applicable volatilization criteria. All identified groundwater monitoring wells and piezometers (refer to the Table included in Attachment 2) will be sampled at a minimum on an annual basis (September timeframe) unless a reduction in sampling frequency is justified and approved by CT DEEP. Surface water samples will be collected concurrently with the adjacent piezometer groundwater sample collection during two to three quarters the first year. Results from these monitoring activities will be presented in the subsequent semi-annual remedy operation status reports.

Continued O&M of the off-site sub-slab depressurization systems will take place until monitoring determines that the systems are no longer needed as a result of the continued groundwater cleanup. At that time, a proposed sub-slab vapor depressurization system shutdown plan will be submitted to CT DEEP for review and approval.

The ELUR will be filed in accordance with the ELUR Regulations, [section 22a-133q-1](#) of the Regulations of Connecticut State Agencies, as revised on June 27, 2013. Upon satisfaction of all conditions required by this Statement of Basis for Corrective Action and upon a final decision by EPA and CT DEEP, the Facility will execute the ELUR per Section 22a-133q-1 of the RSRs to restrict the use and activity of the Facility until such time that an ELUR is no longer required under Section 22a-133q-1 of the RSRs. No engineering controls are proposed for off-property.

## V. GLOSSARY

**Administrative Record:** The collection of information (including data, reports, etc.) that EPA and CT DEEP relied upon for its proposed remedy decision.

**Completion with Controls Determination:** A “Corrective Action Complete with Controls determination” signifies that investigation and remediation obligations under RCRA Corrective Action have been completed at a facility and that one or more controls is necessary to ensure that the cleanup is protective of human health and the environment. Controls could include engineered controls, designed to physically control migration of contaminants or to prevent exposure to contaminants, or institutional controls, which are administrative or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. Completion with Controls determination is described more fully in the 68 Federal Register 8757 at 8761, *Final Guidance on Completion of Corrective Action*

*Activities at RCRA Facilities*, February 25, 2003 available at:

[http://www.epa.gov/correctiveaction/resource/guidance/gen\\_ca/compfedr.pdf](http://www.epa.gov/correctiveaction/resource/guidance/gen_ca/compfedr.pdf)

**Connecticut Remediation Standard Connecticut's Remediation Standard Regulations (RSRs):**

The CT RSRs provide detailed guidance and standards that may be used at any site to determine whether or not remediation of contamination is necessary to protect human health and the environment. The RSRs are found in Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies, adopted January 30, 1996, amended June 27, 2013. The RSRs can be found on the following page of the CT DEEP website:

[http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325012&DEEPNav\\_GID=1626](http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325012&DEEPNav_GID=1626).

CT RSR Criteria discussed in this document include the following:

- Direct Exposure Criteria (DEC): The DEC are designed to protect human health and the environment from potential risks associated with direct exposure to contaminated soils.
- Pollutant Mobility Criteria (PMC): The PMC are designed to protect groundwater from contaminants that may leach from the soil to the groundwater.
- Volatilization Criteria (VC): The VC are designed to protect occupants of buildings near polluted groundwater from volatile contaminants (chemicals that evaporate easily) that could evaporate and enter these buildings as a gas.
- Surface Water Protection Criteria (SWPC): The SWPC are designed to ensure that polluted groundwater discharging to surface water does not adversely affect surface water quality.

**Corrective Action:** Corrective Action refers to obligations for facilities regulated under the Resource Conservation and Recovery Act to investigate and remediate releases of hazardous waste or hazardous constituents at or from the facility to soil, groundwater, surface water, sediments, or air. The Corrective Action program in Connecticut has been delegated from EPA to CT DEEP and is administered according to the Regulations for Connecticut State Agencies (RCSA) Section 22a-449(c)-104(a)(2)(O) (Corrective action for solid waste management units), incorporating 40 CFR 264.101, available on CT DEEP's website: [http://www.ct.gov/DEEP/lib/DEEP/regulations/22a/22a-449\(c\)100through119.pdf](http://www.ct.gov/DEEP/lib/DEEP/regulations/22a/22a-449(c)100through119.pdf).

**Environmental Land Use Restriction (ELUR):** An ELUR is a restrictive covenant that is recorded on the municipal land records for a property and runs with the land. The purpose of an ELUR is to prevent certain types of uses of a property, to limit specific activities on a contaminated property or to minimize the risk of exposure to the pollutants. ELURs are described in Section 22a-133q-1 of the Regulations of Connecticut State Agencies (R.C.S.A.) found on CT DEEP's website: <http://www.ct.gov/DEEP/lib/DEEP/regulations/22a/22a-133k-1through3.pdf>

**Interim Status:** Interim Status was granted to facilities that notified EPA that they were already treating, storing, or disposing of hazardous waste when Resource Conservation and Recovery Act provisions requiring permits for facilities to treat, store, or dispose of hazardous waste were enacted in 1980. Interim Status allows a facility to operate without a permit, provided it complies with certain standards, until the overseeing agency can make a final permit determination,

**Point of Compliance:** As a general definition, the point of compliance for groundwater is where a facility should monitor groundwater quality and/or achieve specified cleanup levels to meet facility-specific goals. Progress toward meeting a particular cleanup goal is typically measured at the point of compliance using groundwater monitoring wells. The locations of these monitoring wells may change during different stages of a groundwater cleanup action.

**Resource Conservation and Recovery Act (RCRA):** The Resource Conservation and Recovery Act (RCRA), an amendment to the Solid Waste Disposal Act, was enacted in 1976 to address municipal and industrial solid waste with the goals of protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally safe manner. The term “RCRA” is often used interchangeably to refer to the laws enacted by the U.S. Congress and the U.S. EPA regulations which carry out the congressional intent by providing explicit, legally enforceable requirements for waste management. The laws include the Solid Waste Disposal Act, Resource Conservation and Recovery Act, and Hazardous, Solid Waste Amendments and subsequent amendments and can be found at 42 U.S.C §§ 6901 et seq. The regulations can be found at Title 40 of the Code of Federal Regulations (CFR) Parts 239 through 282.

**Screening Level Ecological Risk Assessment (SLERA):** Screening-Level Ecological Risk Assessments are conservative assessments that provide a high level of confidence in determining a low probability of adverse risk, and they incorporate uncertainty in a precautionary manner. The purpose of SLERAs is to assess the need, and if required, the level of effort necessary, to conduct a detailed or “baseline” ecological risk assessment for a particular site or facility. SLERAs provide a general indication of the *potential* for ecological risk (or lack thereof) and may be conducted for several purposes including: 1) to estimate the likelihood that a particular ecological risk exists, 2) to identify the need for site-specific data collection efforts, or 3) to focus site-specific ecological risk assessments where warranted.

## **VI. REFERENCES**

The following information has been used in developing this Statement of Basis:

1. State of Connecticut Department of Energy and Environmental Protection Stewardship Permit. DEP/HWM/CS-034-006
2. Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule. 61 Fed. Reg. 19432, 19449 (proposed May 1, 1996) found at the following page of EPA’s website: <http://www.epa.gov/fedrgstr/EPA-WASTE/1996/May/Day-01/pr-547.pdf>
3. RCRA Orientation Manual 2006 found at <http://www.epa.gov/epaoswer/general/orientat/>
4. Remediation Standard Regulations Fact Sheet found at [http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325014&DEEPNav\\_GID=1626](http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325014&DEEPNav_GID=1626)

5. Final Guidance on Completion of Corrective Action Activities at RCRA Facilities 68 Federal Register 8757 at 8761, February 25, 2003 available at:  
[http://www.epa.gov/correctiveaction/resource/guidance/gen\\_ca/compfedr.pdf](http://www.epa.gov/correctiveaction/resource/guidance/gen_ca/compfedr.pdf)
6. CTDEEP. 2013. State of Connecticut Water Quality Standards Regulations, Sections 22a-426-1 to 22a-426-9. Effective Date October 10, 2013. <http://www.ct.gov/deep/cwp/view.asp?a=2719&q=325618>
7. The State of Connecticut Remediation Standard Regulations Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies (RCSA), adopted January 30, 1996, amended June 27, 2013. [http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325012&DEEPNav\\_GID=1626](http://www.ct.gov/DEEP/cwp/view.asp?a=2715&q=325012&DEEPNav_GID=1626).
8. Buchman, M.F., 2008. NOAA Screening Quick Reference Tables, NOAA OR&R Report 08-1, Seattle, WA. Office of Response and Restoration Division, National Oceanic and Atmospheric Administration.
9. Clarke, J.W., 1958. The bedrock geology of the Danbury quadrangle. Connecticut Geology and Natural History Survey Quarterly Report, 7, 47 p.
10. Connecticut Department of Energy and Environmental Protection (CTDEEP), 2010. Tissue Contaminant Monitoring, 2006-2010. Bureau of Water Protection and Land Reuse, Hartford, Connecticut.  
[http://www.ct.gov/deep/lib/deep/water/water\\_quality\\_management/monitoringpubs/tissue\\_report\\_06\\_2010.pdf](http://www.ct.gov/deep/lib/deep/water/water_quality_management/monitoringpubs/tissue_report_06_2010.pdf).
11. CTDEEP, 2011. Fish Stocking Map for Still River (website).  
[http://www.ct.gov/deep/lib/deep/fishing/stockingmaps/still\\_river,\\_danbury.pdf](http://www.ct.gov/deep/lib/deep/fishing/stockingmaps/still_river,_danbury.pdf) Website accessed 11/25/13.
12. CTDEEP, 2012. State of Connecticut Integrated Water Quality Report, Final. December 17, 2012. Bureau of Water Protection and Land Reuse, Hartford, Connecticut.  
[http://www.ct.gov/deep/lib/deep/water/water\\_quality\\_management/305b/2012\\_iwqr\\_final.pdf](http://www.ct.gov/deep/lib/deep/water/water_quality_management/305b/2012_iwqr_final.pdf)
13. CTDEEP. 2013. State of Connecticut Water Quality Standards Regulations, Sections 22a-426-1 to 22a-426-9. Effective Date October 10, 2013. <http://www.ct.gov/deep/cwp/view.asp?a=2719&q=325618>
14. ERM-Northeast, Inc. 1997. Current Conditions Report, DuPont Photomasks, Inc., Danbury, Connecticut, October 31.
15. MacDonald, D.D., C.G. Ingersoll, and T.A. Berger, 2000. Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Arch. Environ. Contam. Toxicol. 39: 20-31.
16. SE Technologies. 2006. Interim Corrective Measures Report, Former Pumice Lagoon, GAR Electroforming Division, Danbury, Connecticut. November 21.
17. SE Technologies. 2007. Interim Corrective Measures Report, Former Pumice Lagoon, GAR Electroforming Division, Danbury, Connecticut. December 18.
18. Still River Alliance of Danbury, 2013. Website. <http://stillriveralliance.wix.com/danbury>. Accessed November 25, 2013.
19. Suter, G.W. and Tsao, C.L. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. Oak Ridge National Laboratory, Tennessee.
20. Thomson, W., 1971. The drainage and glacial history of the Still River Valley, southwestern Connecticut. U.S.G.S. Open File Report 71-283, November 12.

21. USEPA, 1989. Risk Assessment Guidance for Superfund, Volume II, Environmental Evaluation Manual, Interim Final. Office of Emergency and Remedial Response. EPA/540/1-89/001.
22. USEPA, 1997. Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments. Solid Waste and Emergency Response. EPA/540/R/97/006, OSWER 9285.7.25.
23. USEPA, 1998. Guidelines for Ecological Risk Assessment. Risk Assessment Forum. EPA/630/R-95/002F.
24. United States Environmental Protection Agency (USEPA), 2010 Low-Flow Ground Water Sampling Procedure; EPA/540/5-95/504, 1996, revised January 2010.

## **FACILITY DOCUMENTS**

1. Woodard & Curran, Inc. 1999. RCRA Facility Investigation Report. Risdon Corporation, Danbury, Connecticut. January.
2. Woodard & Curran, Inc. 2002. Off-Property Soil Vapor and Groundwater Sampling Report, Risdon Corporation, Danbury, Connecticut. April 18.
3. Woodard & Curran, Inc. 2006. Groundwater Investigation Report, Risdon Corporation, Danbury, Connecticut. June 5.
4. Woodard & Curran, Inc. 2008. Remedial Action Plan, Risdon Corporation, Danbury, Connecticut. March.
5. Woodard & Curran, Inc. 2008a. Revised Operations, Maintenance and Monitoring Plan, On Property Conditions. Risdon Corporation, Danbury Connecticut. December.
6. Woodard & Curran, Inc. 2009. Remedial Action Completion Report, Risdon Corporation, Danbury, Connecticut. June 19.
7. Woodard & Curran, Inc. 2009a. Revised Post Closure Care Plan, Risdon Corporation, Danbury, Connecticut. November.
8. Woodard & Curran, Inc. 2010. Stewardship Permit Submittal – DEP/HWM/CS-034-006 List of AOCs and Summary of Investigation and Mitigation Activities – On-property Former Risdon Facility - 15 Old Newtown Road, Danbury, CT. January 29.
9. Woodard & Curran, Inc. 2010a. Off-Property Investigation Work Plan. February 26.
10. Woodard & Curran, Inc. 2010b. Revised Draft Quality Assurance Project Plan. February 26.
11. Woodard & Curran, Inc. 2011. Off-Property Investigation Report. October 13.
12. Woodard & Curran, Inc. 2012a. Off-Property Work Plan Investigation Addendum. July 2.
13. Woodard & Curran, Inc. 2012b. Summary and Recommendations of the July 2012 Still River Survey/ Walk Through. August 16.
14. Woodard & Curran, Inc. 2013a. Off-Property Investigation Status Update. March 4.
15. Woodard & Curran, Inc. 2013b. Off-Property Investigation Status Update No. 2. July 3.
16. Woodard & Curran, Inc. June 2007- January 2014. Semi-Annual Operation and Post Closure Status Reports – On Property Conditions. Former Risdon Corporation, Danbury, Connecticut.
17. Woodard & Curran, Inc. 2014. Off-Property Investigation Summary Report. Former Risdon Corporation, Danbury, Connecticut. January.
18. Woodard & Curran, Inc. 2014a. Updated Off-Property Investigation Summary Report and

Screening Level Ecological Risk Assessment. Former Risdon Corporation, Danbury, Connecticut. July.  
19. Woodard & Curran, Inc. 2014b. Updated Off-Property Investigation Summary Report and  
Screening Level Ecological Risk Assessment. Former Risdon Corporation, Danbury, Connecticut.  
August.





**Table 1**

**Summary of Areas of Concern and Associated Investigations**

**TABLE 1: SUMMARY OF AREAS OF CONCERN AND ASSOCIATED INVESTIGATIONS**

15 Old Newtown Road  
Danbury, Connecticut

AOC		Description	Wastes Managed	Period of Operation	COCs	Investigated By	Exploration Identifications (Soil and Concrete)
1	Former Lacquer storage area	The lacquer storage is located inside the building on the south side of the facility. It was used primarily for the storage of flammable raw materials, as the building is constructed as a fire-proof room (fire doors, grounded drums/containers, concrete floor and concrete block walls, etc.). The lacquer storage area consists of a 12 ft by 80 ft room with a roof and was reportedly in use since around 1970 until the facility closed in 2005. A 10 ft by 10 ft portion of the northern area of the room was used for the short term storage of waste in a drum (less than 3 days). Upon filling of the drum, it was moved to the adjacent hazardous waste storage area (AOC-17). According to facility personnel, the concrete floor in this entire room was power washed in the spring of 2007 by Clean Harbors.	waste lacquer	1970 to 2005	VOCs	GTI, W&C	B-518, AOC1-CC01
2	Former manual silver plating line SCA	The former manual silver plating line spill containment area (SCA) is located in the former MFA. The manual silver plating line was utilized for the silver plating of cosmetic cases from 1956 to 1992 when it was replaced by a dual contained, semi-automatic line. AOC 2 consisted of a 32 ft. by 28 ft. area enclosed by a five inch high berm to contain spills.	silver plating solutions	1956 to 1992	Metals, VOCs	H&A	B-520, B-101, HA1 through HA4, HA25, HA28; SV101 through SV104
3	Former brass plating line SCA	The former brass plating line SCA consisted of a 19 ft. by 45 ft. area containing the former brass plating line surrounded by a 9 inch berm. Brass plating operations were conducted at this location from 1960 to 1994.	brass plating solutions	1960 to 1994	Metals, VOCs	H&A	B-520, 301, HA5 through HA10, HA12, HA23, HA29 through HA34
4	Former nickel plating line SCA	The former nickel plating spill containment area, located in the MFA near the former brass plating line, was in use between 1981 and 1992. The area consisted of a 6 ft. by 46 ft. area surrounded by a 6-inch containment berm.	nickel plating solutions	1981 to 1992	Metals, VOCs	H&A	B-302, B-103, HA11, HA13 through HA15, HA35
5	Former dip and pickle line	Dip and pickle operations were conducted at this location from 1970 to 1992. In 1992, the dip and pickle line was replaced by a dual-containment system. The former dip and pickle line encompasses an area of approximately 7 ft. by 23 ft.	acid solutions	1970 to 1992	Metals, VOCs	H&A	B-302, HA22
6	Former acid stripping of silver plating racks	Acid stripping of silver plating racks was conducted at this location from 1956 to 1992. The acid stripping was converted to a polypropylene dual-contained system and relocated to the southeastern portion of the former brass plating line in 1992.	acid solutions	1956 to 1992	Metals, acids, cyanide	H&A	B-402, B-403, HA20, HA21
7	Former solvent pit degreaser SCA	The former solvent pit degreaser SCA consisted of a 8.5 ft. by 14.5 ft. area surrounded by a concrete berm.	spent solvents	~1960 to 1993	VOCs	H&A	B-104, B-401
8	Former Department 6 degreaser	The Department 6 degreaser was located within a concrete berm around an area 8 ft. by 24 ft. The degreaser was decommissioned in 1993 when all degreasing operations were relocated to one central environmentally isolated room.	spent solvents	~1960 to 1993	VOCs	GTI, H&A	3, B-503,503A,108A,108,109,404
9	Former chain degreasers	The former R1 and R2 degreasers were located in a 20 ft. by 40 ft. area surrounded by a concrete berm. The R1 and R2 degreasing operations were shut down in 1993. The R1 degreaser was relocated at that time to an environmentally isolated room where all facility degreasing operations occurred. The R1 degreaser was also upgraded to recycle and reuse chlorinated solvents in an enclosed, dual-contained environment.	spent solvents	1970 to 1993	VOCs	GTI, H&A	5, 9, B-105, B-106, B-106A, B-401, B-402, B-403
10	Former R1 still	The former R1 still includes a 6 ft. by 8 ft. area surrounded by a fiberglass berm located in the boiler room adjacent to AOC 9. Normal operation of the R1 still ceased in 1993 concurrent with the removal of the degreasers to an environmentally isolated room. The area was then utilized for storage of solvents for the R1 degreaser as needed until the close of the facility.	spent solvents	1970 to 1993	VOCs	GTI	15, B-401, B-402
11	Former lacquer incinerator	The former lacquer incinerator, located at the southwestern corner of the facility, was used to incinerate waste lacquer, waste oil, and other flammable waste liquids. The exact dimensions of this AOC are unknown.	waste lacquers, waste oil and other flammable waste liquids	~1980 to 1985	VOCs	H&A	B-602

**TABLE 1: SUMMARY OF AREAS OF CONCERN AND ASSOCIATED INVESTIGATIONS**

15 Old Newtown Road  
Danbury, Connecticut

AOC		Description	Wastes Managed	Period of Operation	COCs	Investigated By	Exploration Identifications (Soil and Concrete)
12	Historical release near mineral spirits tank	An area of the suspected release of mineral spirits to the subsurface was designated AOC 12. An area of soil beneath the asphalt of approximately 6 ft. by 4ft. and of unknown depth was suspected to be the site of a historical release from the operation of the mineral spirits tank. The time-frame of the suspected release is not known.	mineral spirits	unknown	Mineral Spirits	H&A	B-519
13	Former surface impoundments (former Lagoon Area)	Two former surface impoundments were located in the current parking lot west of the facility building. The surface impoundments were utilized between 1956 to 1982 for the dewatering of process wastewater containing metal hydroxide. The land disposal unit was approximately 100 ft. by 125 ft and was a recognizable feature on topographic maps of the area. The process water lagoons were closed under regulatory oversight in 1982. Engineering Science, Inc. (ESI) conducted the lagoon closure activities in 1982. In 1987, subsurface investigations were initiated by Buonicore-Cashman Associates, Inc. (BCA) in response to the then newly adopted USEPA post-closure permitting process. In 1989 and 1990, Groundwater Technology, Inc. (GTI) conducted investigations to further evaluate the former lagoons and a downgradient extraction system installed. W&C enhanced the treatment system in 2005 and currently operates the system.	metal hydroxide sludge	~1956 to 1982	VOCs, metals	GTI, H&A	MW-2 through MW-15, B-304, B-305, RW-1 through RW-3
14	Former strip room	Methylene chloride and formic acid were utilized in the strip room from 1970 to the close of the facility.	methylene chloride and formic acid	1970 to 2005	VOCs, formic acid	GTI, H&A	MW-107
15	Former drains to wastewater treatment plant	Former drains from the MFA to the wastewater treatment plant were utilized from 1956 to 1985. The drains consisted of two types , a 1ft. by 240 ft. tile drain and a 1ft. by 160 ft. PVC pipe within a concrete trench.	acid/cyanide rinses and alkaline solutions	1956 to 1985	VOCs, metals, acids	GTI, H&A	HA19, HA27
16	Former chemical storage area	The chemical storage area located adjacent to the former silver plating line in the northeast corner of the building was utilized since approximately 1956 to the close of the facility. The area is approximately 15 ft. by 30 ft. and is used for drum storage of alkaline cleaners and silver brighteners. No waste materials have been or are currently stored in this area.	alkaline cleaners and silver brighteners	~1956 to 2005	Metals	H&A	B-520
17	Former hazardous waste storage area	The hazardous waste storage area consists of drums and containers located within a concrete berm of approximate dimensions of 10 ft. wide by 85 long. AOC 17 is located along the outside wall of the south end of the facility. The area has been surrounded by a concrete berm since 1984. Area closed via concrete removal in 2008.	spent acids, alkalines, and flammable liquids	1970 to 2005	VOCs, metals, acids	H&A, W&C	B521, AOC17-SS01, AOC17-CC01 through AOC17-CC07
18	Former dip lacquer vats	The former dip lacquer vats were located in the northeast corner of the facility within the MFA. Virgin lacquer was utilized in dip lacquering operation at this AOC from around 1956 to 1992. When lacquer spilled onto the concrete floor, it hardened, therefore, a potential release pathway for virgin lacquer to the subsurface does not appear to be present.	lacquer	~1956 to 1992	VOCs	None	Lacquer hardens on concrete when spilled, no pathway
19	Former methylene chloride strip area	The former methylene chloride strip area in the MFA encompasses an area of approximately 6 ft. by 50 ft.	methylene chloride solutions	~1956 to 1970	VOCs	H&A	B-302, HA17, HA18, HA36
20	Former TCA storage tanks	Two 1,1,1-TCA aboveground storage tanks (6,000 and 8,000 gallon capacity) were located in a 20 ft by 25 ft area surrounded by a concrete berm. The berm was placed around the tanks as containment in 1984. In 1993, concurrent with the removal of all but one degreaser, the solvent used within the degreaser was changed from TCA to TCE.	1,1,1-trichloroethane	~1960 to 1993	VOCs	H&A	B-517
21	Former acid storage area	The former acid storage area was located to the south of the main building within a secure fenced and roofed area. The storage area was surrounded by a concrete berm and stored sulfuric, hydrochloric, and nitric acids used in on-site processes. The acid storage area was used from around 1960 to 1993.	acids	~1960 to 1993	Acids	H&A	B-515

**TABLE 1: SUMMARY OF AREAS OF CONCERN AND ASSOCIATED INVESTIGATIONS**

15 Old Newtown Road  
Danbury, Connecticut

AOC		Description	Wastes Managed	Period of Operation	COCs	Investigated By	Exploration Identifications (Soil and Concrete)
22	Former empty drum storage area	An asphalt covered area located south of the main building was utilized for the storage of empty drums. No wastes are handled or are known to have been handled in this area.	None	~1956 to 2005	VOCs, metals, acids	H&A	B-514
23	Former waste treatment plant	During facility operations, a wastewater treatment plant was utilized to treat plating and other process wastewater prior to discharge under an NPDES permit to the Still River and later to the POTW. The sludge filter cake generated at the plant was transported and disposed of off-site under manifest.	plant wastewaters (metals, solvents, cyanide)	~1956 to 2005	VOCs, metals, acids, cyanide	H&A	- Former treatment plant - B-513 - Former piping to surface impoundments - MW-7, MW-13, MW-507, and B-521
24	Pit to sanitary sewer	The pit to the sanitary sewer is a concrete pit approximately 5 ft. by 7 ft. in size. The wastes managed in this area include acid rinses and alkaline solutions.	acid rinses and alkaline solutions	~1956 to 2005	alkalines, acids	H&A	B-516
25	Former cyanide storage area	A small storage room located within the MFA was used for the storage of powdered cyanide. The 13.5 ft by 8 ft room was locked during facility operation. No known release of regulated material to the subsurface has occurred at this location. In addition, the cyanide was stored in powder form, therefore, there is no known subsurface release pathway.	powdered cyanide solutions	~1956 to 2005	Cyanide	None	No known release of regulated material to subsurface
26	Paved loading area	No known handling of regulated materials, nor any releases, occurred at the two paved loading areas along the northern side of the facility.	None	through 2005	None	None	No known release or use of regulated material in this area.
27	Former mineral spirits tank	The former mineral spirits storage tank was located along the western outside wall of the facility near the loading dock in the southwest corner of the facility. The steel tank (1,000 gallon capacity) was surrounded by a 5 ft by 10 ft concrete berm (constructed in 1984).	mineral spirits	1970 to 1992	Mineral Spirits	H&A	B-519
28	Former acid storage tank	Two sulfuric and nitric storage tanks, located outside the east wall of the building, were present within a 10 x 20 ft. concrete berm (erected in 1984).	sulfuric and nitric acid	~1960 to 2005	sulfuric/ nitric acid	H&A	B-512, HA16
29	Former lacquer incinerator staging area	This small drum staging area formerly located near the current rear loading dock had a 16 drum capacity and consisted of a fenced, curbed concrete pad. There was no evidence suggesting any spills or releases from this area.	waste lacquer	1970 to 1993	Metals, VOCs	W&C	B-602
30	Boiler Room (excluding RI still)	The boiler room encompasses an area approximately 58' x 32' and houses a series of steam generators powered by natural gas. In addition to the RI still (included as AOC 10), the boiler blowdown area and floor sump are included within AOC 30. Prior to the conversion to natural gas, the boilers located inside the facility were formerly fueled with bunker c oil that came from a tank located within the building beneath the existing concrete floor slab. This 10,000 gallon tank was decommissioned in the late 1970's/ early 1980's when the boilers were converted to natural gas. During decommissioning, the tank was emptied, cleaned, filled in, and covered with the current concrete floor slab.	Bunker c oil	~1960 to present	VOCs	H&A, W&C	RVW-104, RW-401, RW-402 and B-516

Notes:

- AOC = Area of Concern
- GTI = Groundwater Technology, Inc.
- H&A = Haley & Aldrich
- B = Boring
- HA = Hand Auger
- COC = Constituent of Concern

**Attachment 1**

**Data Summary Tables from the  
Updated Off-Property Investigation Summary Report and  
Screening Level Ecological Risk Assessment, August 2014**

**TABLE 2**  
**SUMMARY OF DETECTED VOCs - OFF PROPERTY GROUNDWATER MONITORING**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

Monitoring Well ID	Well Screen Interval (ft bgs)	Geologic Unit	Sample Date	VOCs Detected (ug/l)								
				1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Other VOCs	Total VOCs
SWPC	--	--	--	NE	96	NE	88	62,000	2,340	15,750	--	--
CT WQS - Aquatic <sup>1</sup> +	--	--	--	NE	NE	NE	NE	NE	NE	NE	--	--
Vol-IC - 2003 *	--	--	--	41,000	920	11,000	810	16,000	67	52	--	--
Vol-Res - 2003 *	--	--	--	3,000	190	830	340	6,500	27	1.6	--	--
<b>11 Augusta Drive (Northbound Lane)</b>												
MW-701A *	5 - 15	Overburden	16-Jun-11	5.3	12	18	4.5	72	120	<1	--	452
			22-Mar-12	3.2	5.7	18	2.2	23	90	<2.0	--	142
			17-Sep-12	3.5	5.5	13	2.6	21	94	<1	1.7 (chloroform)	141
			24-Sep-13	2.77	3.61	10.5	1	16.8	46.6	<1	--	81
MW-701B	25 - 35	Overburden	16-Jun-11	<75	170	110	430	320	5,200	<100	--	6,230
			22-Mar-12	<75	140	85	480	250	4,500	<100	--	5,455
			17-Sep-12	<38	130	84	490	250	4,400	<50	--	5,354
			24-Sep-13	<37.5	130	67.6	496	218	4,150	<50	--	5,062
MW-701C	50 - 60	Bedrock	16-Jun-11	<38	120	57	460	290	3,200	<50	--	4,127
			22-Mar-12	<38	110	51	540	200	2,700	<50	--	3,601
			17-Sep-12	<75	110	97	720	250	4,000	<100	--	5,177
			24-Sep-13	<37.5	109	53.1	613	179	2,600	<50	380 (1,4-dioxane)	3,934
<b>4 Old Newtown Road (Amphenol RF; formerly Medsource &amp; Tenax Corp.)</b>												
MW-702A * +	2 - 8	Overburden	16-Jun-11	<0.75	<0.5	<0.5	<0.5	<0.5	2.8	<1	82 (Freon)	85
			22-Mar-12	<0.75	<0.5	0.75	<0.5	<0.5	3.4	<1	130 E (Freon)	134
			17-Sep-12	<1.5	<1	<1	<1	<1	5.4	<2	320 E (Freon)	325
MW-702B	11 - 21	Overburden	16-Jun-11	<0.75	1.4	4.4	6.6	1.4	140	<1	14 (Freon)	168
			22-Mar-12	<1.9	1.2	3.9	7.7	<1.2	100	<2.5	9 (Freon)	122
			17-Sep-12	<0.75	1.2	3.5	7.6	0.99	98	<1	6.9 (Freon) 0.9 (chloroform)	119
MS-MW-1A *	6 - 11	Overburden	16-Jun-11	0.86	3.8	5.4	3.1	3.5	91	<1	--	108
			22-Mar-12	<0.75	0.53	0.98	1.3	1.5	35	<1	--	39
MS-MW-2 * +	7 - 12	Overburden	16-Jun-11	<0.75	<0.5	0.68	<0.5	<0.5	3.0	<1	--	3.7
			17-Sep-12	<0.75	<0.5	2	<0.5	<0.5	11	<1	--	13

**TABLE 2**  
**SUMMARY OF DETECTED VOCs - OFF PROPERTY GROUNDWATER MONITORING**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

Monitoring Well ID	Well Screen Interval (ft bgs)	Geologic Unit	Sample Date	VOCs Detected (ug/l)								
				1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Other VOCs	Total VOCs
SWPC	--	--	--	NE	96	NE	88	62,000	2,340	15,750	--	--
CT WQS - Aquatic <sup>1</sup> +	--	--	--	NE	NE	NE	NE	NE	NE	NE	--	--
Vol-I/C - 2003 *	--	--	--	41,000	920	11,000	810	16,000	67	52	--	--
Vol-Res - 2003 *	--	--	--	3,000	190	830	340	6,500	27	1.6	--	--
<b>MS-MW-4 * +</b>	3 - 8	Overburden	16-Jun-11	<15	<10	<10	<10	<10	<10	<20	<b>890 (Freon)</b>	890
<b>MS-MW-7 *</b>	6.4 - 11.4	Overburden	30-Jun-11	<0.75	<b>1.0</b>	<b>2.8</b>	<b>1.6</b>	<0.5	<b>45</b>	<1	--	50
<b>2 Old Newtown Road</b>												
<b>2ONR-MW-1A</b>	3 - 13	Overburden	23-Mar-12	<0.75	<0.5	<b>0.57</b>	<0.5	<0.5	<b>0.96</b>	<1	<1	1.5
			17-Sep-12	<0.75	<0.5	<0.5	<0.5	<0.5	<1	--	ND	
			20-Mar-13	<0.75	<0.5	<b>0.93</b>	<0.5	<0.5	<1	--	0.9	
			24-Sep-13	<0.75	<0.5	<b>0.64</b>	<0.5	<0.5	0.534	<1	--	1.2
			11-Mar-14	<0.75	<0.5	<b>1.76</b>	<0.5	<0.5	<0.5	<1	--	1.8
<b>28 Finance Drive</b>												
<b>MW-703</b>	12 - 22	Overburden	27-Nov-12	<19	<b>75</b>	<b>66</b>	<b>180</b>	<b>81</b>	<b>1,800</b>	<25	--	2,202
			1-May-13	<15	<b>43</b>	<b>64</b>	<b>110</b>	<b>44</b>	<b>1,300</b>	<20	--	1,561
			23-Sep-13	<b>3.27</b>	<b>21.6</b>	<b>21.9</b>	<b>59</b>	<b>21.1</b>	<b>636</b>	<1	--	762.9
			14-Mar-14	<15	<b>67.7</b>	<b>121</b>	<b>165</b>	<b>68.7</b>	<b>1,550</b>	<20	--	1,972
<b>DPMW-1 *</b>	? - 13	Overburden	27-Nov-12	<b>2.2</b>	<b>4.7</b>	<b>100</b>	<0.5	<b>2</b>	<b>3</b>	<b>5.9</b>	--	112
			1-May-13	<0.75	<0.5	<b>10</b>	<0.5	<0.5	<b>0.58</b>	<b>3.1</b>	--	14
			23-Sep-13	<b>3.96</b>	<b>7.89</b>	<b>229</b>	<b>2.69</b>	<1	<b>32.2</b>	<b>9.61</b>	--	285.4
<b>DPMW-4 *</b>	? - 14.3	Overburden	23-Sep-13	<0.75	<0.5	<b>0.663</b>	<0.5	<0.5	<0.5	<1	--	0.663

**TABLE 2**  
**SUMMARY OF DETECTED VOCs - OFF PROPERTY GROUNDWATER MONITORING**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

Monitoring Well ID	Well Screen Interval (ft bgs)	Geologic Unit	Sample Date	VOCs Detected (ug/l)								
				1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Other VOCs	Total VOCs
SWPC	--	--	--	NE	96	NE	88	62,000	2,340	15,750	--	--
CT WQS - Aquatic <sup>1</sup> *	--	--	--	NE	NE	NE	NE	NE	NE	NE	--	--
Vol-IC - 2003 *	--	--	--	41,000	920	11,000	810	16,000	67	52	--	--
Vol-Res - 2003 *	--	--	--	3,000	190	830	340	6,500	27	1.6	--	--
<b>Still River</b>												
PZ-SR875	0.5 - 3.5	Piezometer	15-May-13	<15	45	38	100	86	1300	<20	--	1569
			23-Sep-13	6.94	24	51.6	42.6	33.9	525	5.32	0.811 (toluene)	690.2
			12-Jun-14	<7.5	34.6	34.5	95.9	65.8	100	<10	44.3 (total zylene) 20.9 (p/m-xylene) 23.4 (o-xylene)	375.1
PZ-SR1075	0.8 - 2.8	Piezometer	2-May-13	<3.8	10	44	7.9	2.7	250	5.4	170 (tetrahydrofuran) 7.3 (toluene)	497.3
PZ-SR1250	0.5 - 2.5	Piezometer	2-May-13	<0.75	0.61	0.97	1.6	<0.5	23	<1	0.9 (toluene)	27.1
			23-Sep-13	<0.75	<0.5	0.59	2.09	0.658	17.4	<1	--	20.7
			12-Jun-14	<0.75	<0.5	0.725	1.64	<0.5	14.1	<1	13.9 (total zylene) 6.94 (p/m-xylene) 6.95 (o-xylene) 1.57 Ethyl Benzene 6.48 (1,2,3 trichloropropane)	50.7
PZ-SR1450	0.5 - 2.5	Piezometer	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	1.2	<1	--	1.2
			23-Sep-13	<0.75	<0.5	<0.5	<0.5	<0.5	0.554	<1	--	0.55
			12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	1.07	<1	3.37 (total zylene) 1.69 (p/m-xylene) 1.68 (o-xylene)	4.44

**TABLE 2**  
**SUMMARY OF DETECTED VOCs - OFF PROPERTY GROUNDWATER MONITORING**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

Monitoring Well ID	Well Screen Interval (ft bgs)	Geologic Unit	Sample Date	VOCs Detected (ug/l)								
				1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Other VOCs	Total VOCs
SWPC	--	--	--	NE	96	NE	88	62,000	2,340	15,750	--	--
CT WQS - Aquatic <sup>1</sup> +	--	--	--	NE	NE	NE	NE	NE	NE	NE	--	--
Vol-I/C - 2003 *	--	--	--	41,000	920	11,000	810	16,000	67	52	--	--
Vol-Res - 2003 *	--	--	--	3,000	190	830	340	6,500	27	1.6	--	--
PZ-SR1640	0.5 - 2.5	Piezometer	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.75</b>	<1	1.4 (o-xylene) 2.4 (total xylene)	4.6
			23-Sep-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.61</b>	<1	--	0.61
			12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.54</b>	<1	9.07 (total xylene) 4.16 (p/m-xylene) 4.91 (o-xylene) 0.654 Ethyl Benzene	10.26
PZ-SR1860	0.5 - 2.5	Piezometer	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.75</b>	<1	--	0.75
			23-Sep-13	<0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<1	--	non-detect

**NOTES:**

ug/l = micrograms per liter (parts per billion equivalent)

Detected results are shown in **bold**; ND = non detect

SWPC = CTDEEP Remediation Standard Regulations (RSRs) Surface Water Protection Criteria

Vol-I/C = CTDEEP RSRs Volatilization Criteria Industrial/Commercial (I/C) - Proposed Revisions, March 2003

Vol-Res = CTDEEP RSRs Volatilization Criteria Residential (Res) - Proposed Revisions, March 2003

NE = No standard has been established for this particular compound in the CTDEEP RSRs

1 - State of Connecticut Water Quality Standards - Freshwater chronic aquatic standards. October 2013. Table 3: Numerical Water Quality Criteria for Chemical Constituents.

2 - Refer to Table 14 for a comparison of applicable groundwater data to ecological benchmarks.

\* indicates the well is screened across the water table surface and are compared to the Vol-I/C and/or Vol-Res, as applicable.

+ indicates the well is located in proximity to the wetlands and are compared to the CT WQS- Aquatic Freshwater Chronic values.

E = Analyzed compound exceeded the instrument linear calibration range

JK = Estimated, bias unknown

Samples analyzed via USEPA Method 8260B. Only compounds detected above the laboratory reporting limits (LRLs) are reported.

< = less than the LRL

VOC = Volatile Organic Compounds

**TABLE 3**  
**SUMMARY OF DETECTED INORGANICS - OFF-PROPERTY GROUNDWATER MONITORING**  
Off-Property Investigation Summary Report  
Danbury, Connecticut

Monitoring Well ID	Well Screen Interval (ft bgs)	Geologic Unit	Sample Date	Inorganics Detected (ug/l)													
				Total Cyanide	Total Antimony	Total Arsenic	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Mercury	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Zinc
SWPC	--	--	--	52	86,000	4.0	4.0	6.0	NE	48	13	0.4	880	50	12	63	123
CT WQS - Aquatic <sup>1</sup>	--	--	--	5.2	--	150	--	0.125	11 (hex)	4.8	1.2	0.77	28.9	5.0	--	--	65
<b>11 Augusta Drive (Northbound Lane)</b>																	
MW-701A	5 - 15	Overburden	16-Jun-11	<5	<2	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<1	<50
			22-Mar-12	<b>10</b>	<b>1.0</b>	<1	<1	<b>1.2</b>	<10	<b>4.7</b>	<b>1.5</b>	<0.2	<25	<2	<7	<1	<50
MW-701B	25 - 35	Overburden	16-Jun-11	<5	<2	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<1	<50
			22-Mar-12	<10	<1	<1	<1	<b>0.6</b>	<10	<b>14.5</b>	<b>2.9</b>	<0.2	<25	<2	<7	<1	<50
MW-701C	50 - 60	Bedrock	16-Jun-11	<5	<2	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<1	<50
			22-Mar-12	<5	<1	<1	<1	<b>0.7</b>	<10	<b>5.2</b>	<1	<0.2	<25	<2	<7	<1	<50
<b>4 Old Newtown Road (Amphenol RF; formerly Medsource &amp; Tenax Corp.)</b>																	
MW-702A +	2 - 8	Overburden	16-Jun-11	<5	<4	<2	<2	<5	<10	<10	<10	<0.2	<25	<10	<7	<2	<50
			22-Mar-12	<5	<1	<1	<1	<0.4	<10	<b>1.9</b>	<1	<0.2	<25	<2	<7	<1	<50
			17-Sep-12	<5	<50	<0.5	<0.5	<0.5	<10	<b>1.6</b>	<0.5	<0.2	<25	<10	<7	<20	<50
MW-702B	11 - 21	Overburden	16-Jun-11	<5	<2	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<1	<50
			22-Mar-12	<b>13</b>	<1	<b>1.2</b>	<1	<0.4	<10	<b>3.1</b>	<1	<0.2	<25	<2	<7	<1	<50
MS-MW-1A	6 - 11	Overburden	16-Jun-11	<5	<2	<b>1.1</b>	<1	<5	<10	<b>14</b>	<10	<b>8.2</b>	<25	<10	<7	<10	<b>76</b>
			22-Mar-12	<5	<1	<1	<1	<0.4	<10	<b>4.2</b>	<1	<b>1.5</b>	<25	<2	<7	<1	<50
MS-MW-2 +	7 - 12	Overburden	16-Jun-11	<5	<2	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<1	<50
			22-Mar-12	<5	<1	<1	<1	<0.4	<10	<b>1.3</b>	<1	<0.2	<25	<2	<7	<1	<50
			17-Sep-12	<5	<50	<0.5	<0.5	<0.5	<10	<b>0.9</b>	<0.5	<0.2	<25	<10	<7	<20	<50
MS-MW-4 +	3 - 8	Overburden	16-Jun-11	<5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			22-Mar-12	<5	<1	<b>1.3</b>	<1	<0.4	<10	<b>1.8</b>	<1	<0.2	<25	<2	<7	<1	<50
MS-MW-7	6.4 - 11.4	Overburden	30-Jun-11	<5	<1	<0.5	<0.5	<5	<10	<10	<10	<0.2	<25	<10	<7	<0.5	<50
			22-Mar-12	<5	<1	<1	<1	<0.4	<10	<b>3.4</b>	<b>2.4</b>	<0.2	<25	<2	<7	<1	<50
<b>28 Finance Drive</b>																	
MW-703	12 - 22	Overburden	27-Nov-12	<5	<50	<1	<1	<5	<10	<10	<10	<0.2	<25	<10	<7	<20	<50
DPMW-1	? - 13	Overburden	27-Nov-12	<5	<50	<b>1.5</b>	<0.5	<5	<10	<10	<10	<0.2	<25	<10	<7	<20	<50

**NOTES:**

All results provided in ug/l (micrograms per liter (parts per billion equivalent))

SWPC = CTDEEP Remediation Standard Regulations (RSRs) Surface Water Protection Criteria

1+ = State of Connecticut Water Quality Standards - Freshwater chronic aquatic standards. October 2013. Table 3: Numerical Water Quality Criteria for Chemical Constituents. Wells with this (+) foot note have also been compared to these criteria.

NS - constituent not sampled

\*+ indicates the well is located in proximity to the wetlands and are compared to the CT WQS- Aquatic Freshwater Chronic values.

**TABLE 6**  
**SUMMARY OF DETECTED VOCs - OFF PROPERTY SURFACE WATER MONITORING**

Off-Property Investigation Summary Report

Danbury, Connecticut

Monitoring Well ID	Sample Date	VOCs Detected (ug/l)							Total VOCs
		1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride (Other VOCs)	
2013 CT WQS HH <sup>1</sup>		NA	3.2	NA	3.3	NA	30	2.4	--
<b>OUTFALL AREA</b>									
SR-SW-01	29-Jul-11	<0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<1	non-detect
SR-SW-02	29-Jul-11	<0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<1	non-detect
SR-SW-REF-01	29-Jul-11	<0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<1	non-detect
<b>DOWNSTREAM DISCHARGE AREA</b>									
SW-SR875	15-May-13	<0.75	<0.5	<0.5	<b>0.51</b>	<0.5	<b>3.3</b>	<1	3.8
	12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<1	non-detect
SW-SR1075	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.62</b>	<1	0.6
SW-SR1250	2-May-13	<0.75	<0.5	<b>0.5</b>	<0.5	<0.5	<b>1.1</b>	<1	1.6
	12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.574</b>	<1	0.6
SW-SR1450	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>1.0</b>	<1	1.0
	12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.531</b>	<1	0.5
SW-SR1640	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>1.1</b>	<1	1.1
	12-Jun-14	<0.75	<0.5	<0.5	<0.5	<0.5	<b>0.531</b>	<1	0.5
SW-SR1860	2-May-13	<0.75	<0.5	<0.5	<0.5	<0.5	<b>1.2</b>	<1	1.2

**NOTES:**

Detected results shown in **bold**

1 - State of Connecticut Water Quality Standards - Freshwater chronic aquatic standards. October 2013. Table 3: Numerical Water Quality Criteria for Chemical Constituents.

2 - Refer to Tables 12A and 12B for a comparison of surface water data to ecological benchmarks.

Samples analyzed via USEPA Method 8260B. Only compounds detected above the laboratory reporting limits (LRLs) are reported.

< = less than the laboratory reporting limit

ug/L - micrograms per liter

NA - Not applicable

**TABLE 7**  
**SUMMARY OF DETECTED INORGANICS - STILL RIVER SEDIMENT**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

	SR-SED-01-1	SR-SED-01	SR-SED-02	SR-SED-REF-01
	2-May-13	29-Jul-11	29-Jul-11	29-Jul-11
<b>13 Priority Pollutant Metals (mg/kg)</b>	<b>OUTFALL AREA</b>			
Antimony, Total	<b>0.34</b>	<b>0.091 JL</b>	<b>0.044 JL</b>	<b>0.605 JL</b>
Arsenic, Total	<b>2.0</b>	<b>1.87 JK</b>	<b>0.84 JK</b>	<b>1.97 JK</b>
Beryllium, Total	<b>0.16 J</b>	<b>0.207</b>	<b>0.125</b>	<b>0.179</b>
Cadmium, Total	<b>0.08 J</b>	<b>0.124</b>	<b>0.063</b>	<b>0.064</b>
Chromium, Total	<b>8.8</b>	<b>7.22</b>	<b>7.69</b>	<b>6.2</b>
Copper, Total	<b>19</b>	<b>11.5 JK</b>	<b>9.76 JK</b>	<b>15.5 JK</b>
Cyanide, Total	<1.2	<1.2	<1.1	<1.2
Lead, Total	<b>11</b>	<b>7.73 JK</b>	<b>10.2 JK</b>	<b>26.4 JK</b>
Mercury, Total	<b>0.17</b>	<b>0.205 JK (primary)</b> <b>0.943 JK (duplicate)</b>	<b>0.117 JK</b>	<b>0.069 JK</b>
Nickel, Total	<b>8.7</b>	<b>7.35 JK</b>	<b>5.35 JK</b>	<b>7.08 JK</b>
Selenium, Total	<b>0.17 J</b>	<b>0.437 JK</b>	<b>0.141 JK</b>	<b>0.136 JK</b>
Silver, Total	<b>0.19 J</b>	<b>0.052</b>	<b>0.058</b>	<b>0.058</b>
Thallium, Total	<0.50	<0.092	<b>0.059</b>	<0.043
Zinc, Total	<b>64</b>	<b>55.9</b>	<b>44.4</b>	<b>51.6</b>

**NOTES:**

JK = Result qualified as estimated, unknown bias

JL = Result qualified as estimated, low bias

J = Result qualified as estimated - reported result was detected at a concentration below the reporting limit, but above the method detection limit.

Detected results shown in **bold**

mg/kg = milligrams per kilogram

Analytical results for sediment are in dry weight

**TABLE 8**  
**SUMMARY OF DETECTED VOCs - STILL RIVER SEDIMENT**  
Off-Property Investigation Summary Report  
Danbury, Connecticut

Sample Location	Sample Date								
		1,1-Dichloroethane	1,1-Dichloroethene	cis -1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Other VOCs
<b>OUTFALL AREA</b>									
SR-SED-REF-01	7/29/2011	<0.0014	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.0018	--
SR-SED-01	7/29/2011	<0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	--
SR-SED-02	7/29/2011	<0.0013	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.0018	--
SR-SED-01-1	5/15/2013	<0.0017	<0.0011	<0.0011	<b>0.00081 J</b>	<0.0011	<0.0011	<0.0022	--
<b>DOWNSTREAM DISCHARGE AREA</b>									
SR-SED-875	6/11/2014	<0.0013	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.0018	--
SR-SED-1075	6/11/2014	<b>0.0059</b>	<b>0.035</b>	<b>0.65</b>	<b>0.18</b>	<b>0.065</b>	<b>0.33</b>	<b>0.0025</b>	<b>0.0036 (Freon 113)</b> <b>0.0019 (trans-1,2-DCE)</b>
SR-SED-1250	6/11/2014	<0.00087	<0.00058	<b>0.0007</b>	<b>0.014</b>	<0.00058	<b>0.035</b>	<0.0012	--
SR-SED-1450	6/11/2014	<0.00077	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.001	--

**NOTES:**

only compounds detected above the laboratory reporting limits (LRLs) are reported.

< = less than the LRL

mg/kg - milligrams per kilogram

VOCs = Volatile Organic Compounds

Detected results shown in **bold**

Analytical results for sediment are in dry weight

**TABLE 9**  
**SUMMARY OF DETECTED INORGANICS - STILL RIVER SURFACE WATER**

Off-Property Investigation Summary Report  
 Danbury, Connecticut

	LOCATION		SR-SW-01		SR-SW-02		SR-SW-REF-01	
	SAMPLING DATE		29-JUL-11		29-JUL-11		29-JUL-11	
	CT WQS <sup>1</sup>		Result	Qual	Result	Qual	Result	Qual
Aquatic Life, Chronic Freshwater	Human Health, consumption of fish							
<b>13 Priority Pollutant Metals (µg/L)</b>			<b>OUTFALL AREA</b>					
Antimony, Total	NE	640	0.5	U	0.5	U	0.5	U
Arsenic, Total	150	0.021	<b>1.3</b>		<b>1.1</b>		<b>1.1</b>	
Beryllium, Total	NE	0.13	0.5	U	0.5	U	0.5	U
Cadmium, Total	0.125	10,769	0.5	U	0.5	U	0.5	U
Chromium, Total	11 (hex) 42 (tri)	2,019 (hex) 1,009,615 (tri)	1	U	1	U	1	U
Copper, Total	4.8	NE	<b>3</b>		<b>3</b>		<b>3</b>	
Cyanide, Total	5.2	140	5	U	5	U	5	U
Lead, Total	1.2	NE	1	U	1	U	1	U
Mercury, Total	0.77	0.051	0.05	U	0.05	U	0.05	U
Nickel, Total	28.9	4,600	<b>1.3</b>		<b>1.3</b>		<b>1.2</b>	
Selenium, Total	5	4,200	5	U	5	U	5	U
Silver, Total	NE	107,692	0.2	U	0.2	U	0.2	U
Thallium, Total	NE	0.47	0.2	U	0.2	U	0.2	U
Zinc, Total	65	26,000	<b>14</b>		<b>13</b>		<b>15</b>	

Notes:

1 - State of Connecticut Water Quality Standards - Freshwater chronic aquatic standards. October 2013. Table 3: Numerical Water Quality Criteria for Chemical Constituents.

Detected results shown in **bold**

Shading indicates an exceedance of the CT WQS

**Attachment 2**

**Proposed Monitoring Program**

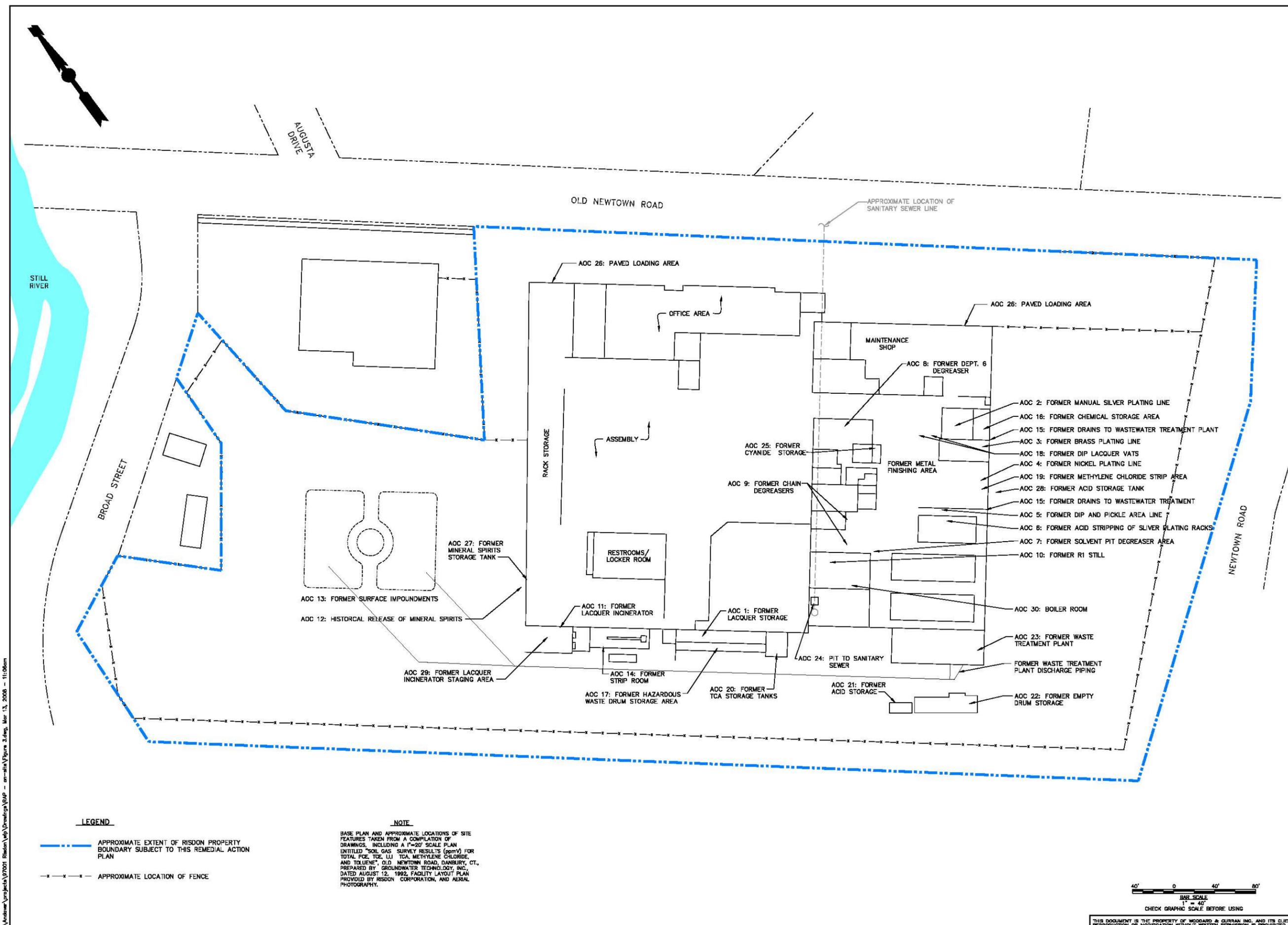


Monitoring Well ID	ANALYSIS				RATIONALE/ OBJECTIVE			FREQUENCY		
	VOCs CT RCP 8260B	1,4- dioxane	Total Cyanide	13 Priority Pollutant Metals	Plume Stability	Off-property Volatilization POC Well	SWPC POC Well	2 to 3 Quarters <sup>1</sup> (year 1)	Semi Annual	Annual
<b>ON-PROPERTY - GROUNDWATER</b>										
MW-1	X		X	X	X					X
MW-2	X		X	X	X					X
MW-3	X		X	X	X					X
MW-8	X		X	X	X					X
MW-9	X				X					X
MW-10	X		X	X	X					X
MW-11	X		X	X	X					X
MW-111	X		X (annual only)	X (annual only)	X				X (VOCs)	X (inorganics)
MW-112	X				X					X
MW-113	X		X	X	X					X
MW-508	X				X					X
MW-508C	X				X				X	
MW-601B	X		X	X	X					X
<b>OFF-PROPERTY - GROUNDWATER</b>										
MW-14	X				X	X	X		X	
MW-15M	X		X		X				X	
2ONR-MW-1A	X		X	X	X	X	X		X	
MW-701A	X		X	X	X	X				X
MW-701B	X		X	X	X					X
MW-701C	X	X	X	X	X					X
DPMW-1	X					X	X			X
DPMW-4	X					X				X
MW-703	X				X		X		X	
PZ-SR875	X						X	X		
PZ-1075	X						X	X		
PZ-SR1250	X						X	X		
PZ-SR1450	X						X	X		
PZ-SR1640	X						X	X		
<b>GROUNDWATER TOTALS</b>	<b>27</b>	<b>1</b>	<b>14</b>	<b>13</b>	<b>20</b>	<b>5</b>	<b>9</b>	<b>5</b>	<b>6</b>	<b>17</b>
<b>OFF-PROPERTY - SURFACE WATER</b>										
SW-SR875	X							X		
SW-SR1075	X							X		
SW-SR1250	X							X		
SW-SR1450	X							X		
SW-SR1640	X							X		
<b>SURFACE WATER TOTALS</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>

<sup>1</sup> - quarterly sampling of accessible temporary piezometers and co-located surface water samples will be performed during year 1 pending river flow conditions.

**Figure 1**

**Risdon Corporation Site Plan  
(Areas of Concern, figure 3, from January 2008 Remedial Action Plan)**



REV	DESCRIPTION	DATE

DESIGNED BY: CHR  
CHECKED BY: EVR  
DRAWN BY: Figure 3.dwg

**AREAS OF CONCERN**

RISON CORPORATION  
DANBURY, CONNECTICUT

REMEDIAL ACTION PLAN

JOB NO.: 97001  
DATE: JANUARY 2008  
SCALE: AS NOTED  
SHEET: OF

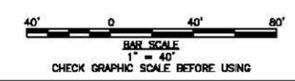
**FIGURE 3**

**LEGEND**

- APPROXIMATE EXTENT OF RISON PROPERTY BOUNDARY SUBJECT TO THIS REMEDIAL ACTION PLAN
- - - APPROXIMATE LOCATION OF FENCE

**NOTE**

BASE PLAN AND APPROXIMATE LOCATIONS OF SITE FEATURES TAKEN FROM A COMPILATION OF DRAWINGS, INCLUDING A 1"-20' SCALE PLAN ENTITLED "SOIL GAS SURVEY RESULTS (ppmV) FOR TOTAL PCE, TCE, 1,1,1 TCA, METHYLENE CHLORIDE, AND TOLUENE", OLD NEWTOWN ROAD, DANBURY, CT., PREPARED BY GROUNDWATER TECHNOLOGY, INC., DATED AUGUST 12, 1992, FACILITY LAYOUT PLAN PROVIDED BY RISON CORPORATION, AND AERIAL PHOTOGRAPHY.

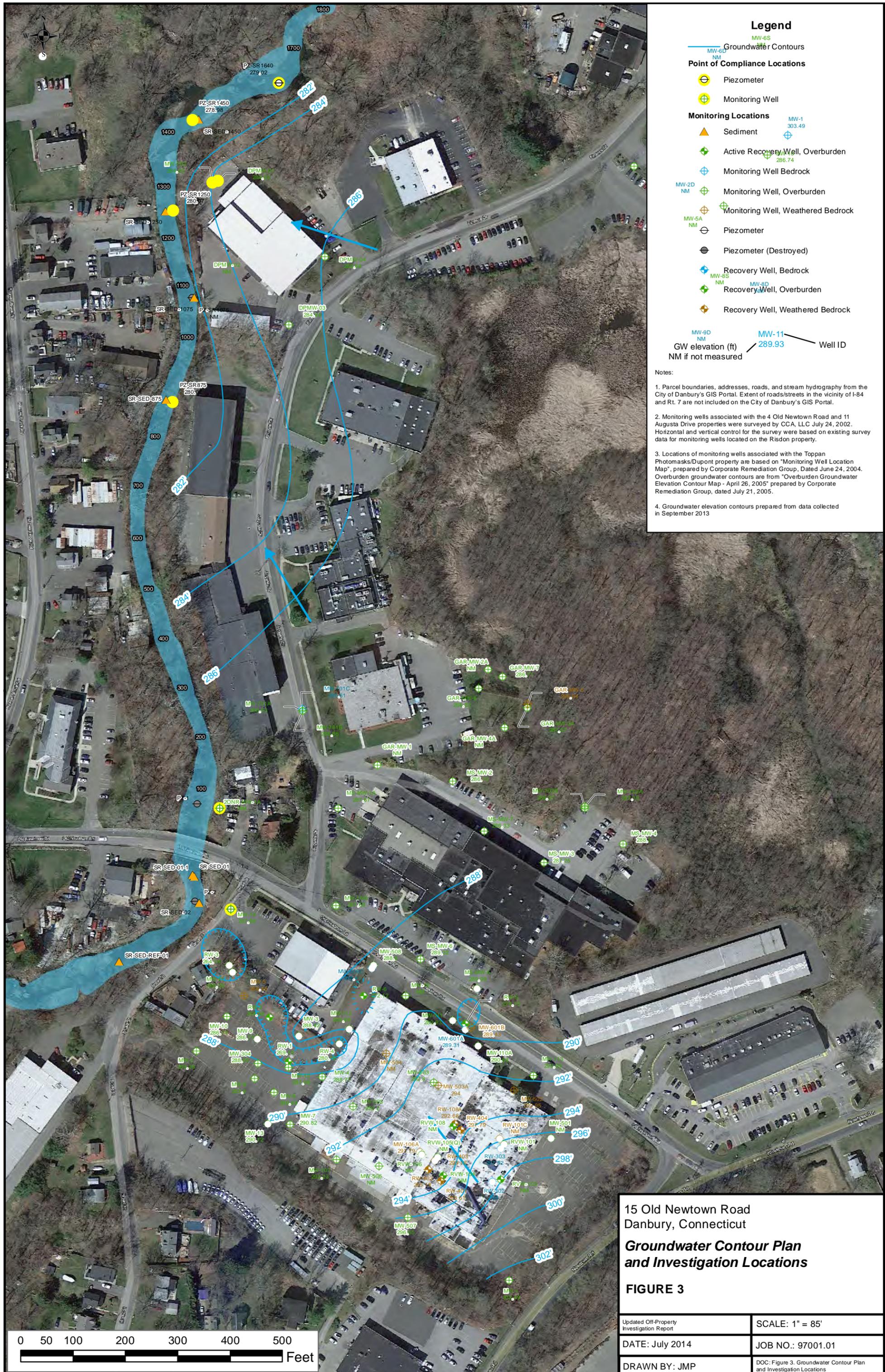


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\\msdnet\projects\17001\_Rison\wp\Drawings\RAP - on-site\Figure 3.dwg, Mar 13, 2008 - 11:08am

**Figure 2**

**Site map showing groundwater contours and investigation locations**



**Legend**

- MW-6S Groundwater Contours
- MW-6D NM
- Point of Compliance Locations**
- ⊖ Piezometer
- ⊕ Monitoring Well
- Monitoring Locations**
- ▲ Sediment
- MW-1 303.49
- ⊕ Active Recovery Well, Overburden
- ⊕ Monitoring Well Bedrock
- MW-2D NM
- ⊕ Monitoring Well, Overburden
- ⊕ Monitoring Well, Weathered Bedrock
- MW-5A NM
- ⊖ Piezometer
- ⊖ Piezometer (Destroyed)
- ⊕ Recovery Well, Bedrock
- MW-8S NM
- MW-8D NM
- ⊕ Recovery Well, Overburden
- ⊕ Recovery Well, Weathered Bedrock

MW-9D NM  
 GW elevation (ft)  
 NM if not measured

MW-11  
 289.93 Well ID

Notes:

- Parcel boundaries, addresses, roads, and stream hydrography from the City of Danbury's GIS Portal. Extent of roads/streets in the vicinity of I-84 and Rt. 7 are not included on the City of Danbury's GIS Portal.
- Monitoring wells associated with the 4 Old Newtown Road and 11 Augusta Drive properties were surveyed by CCA, LLC July 24, 2002. Horizontal and vertical control for the survey were based on existing survey data for monitoring wells located on the Risdon property.
- Locations of monitoring wells associated with the Toppan Photomasks/Dupont property are based on "Monitoring Well Location Map", prepared by Corporate Remediation Group, Dated June 24, 2004. Overburden groundwater contours are from "Overburden Groundwater Elevation Contour Map - April 26, 2005" prepared by Corporate Remediation Group, dated July 21, 2005.
- Groundwater elevation contours prepared from data collected in September 2013

15 Old Newtown Road  
 Danbury, Connecticut  
**Groundwater Contour Plan  
 and Investigation Locations**

**FIGURE 3**

Updated Off-Property Investigation Report	SCALE: 1" = 85'
DATE: July 2014	JOB NO.: 97001.01
DRAWN BY: JMP	DOC: Figure 3. Groundwater Contour Plan and Investigation Locations

0 50 100 200 300 400 500  
 Feet