URS

STABILIZATION DEMONSTRATION
LIGHT METALS COLORING COMPANY, INC. FACILITY
270 SPRING STREET
SOUTHINGTON, CONNECTICUT

Prepared for:

LIGHT METALS COLORING COMPANY, INC.
SOUTHINGTON, CONNECTICUT

URS CORPORATION AES
URS PROJECT NO: 36925632.00005

SEPTEMBER 13, 2004

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URS

September 10, 2004

Mr. Aaron Gilbert
U. S. Environmental Protection Agency
79 Elm Street
Boston, Massachusetts 06106-5127

Re: Stabilization Demonstration
Environmental Indicators CA 725 and CA 750
Light Metals Coloring Company Facility
Southington, Connecticut
URS Project No.: 26925652.00005

Dear Mr. Gilbert:

On behalf of Light Metals Coloring Company, Inc., URS Corp. is submitting the enclosed document entitled, "Stabilization Demonstration" for the Site (CT001162460), located at 270 Spring Street in Southington, Connecticut. Based on the information presented in this document, URS has concluded that the two Environmental Indicators, Current Human Exposures Under Control (CA 725) and Migration of Contaminated Groundwater Under Control (CA 750), have been met and thus the Light Metals Coloring company facility should be listed as "Stabilized".

The Stabilization Demonstration consists of:

- CA 725 Worksheet (February 5, 1999)
- CA 750 Worksheet (February 5, 1999)
- Stabilization Demonstration Report

We have provided the necessary documentation using the February 5, 1999 worksheets as the basis for the document. As discussed in our meetings regarding stabilization requirements, where the worksheets refer to "appropriately protective risk-based levels" (to determine the significance of constituents in the environment), we have relied upon the CTDEP's 1996 Remediation Standard Regulations (RSRs) and the Proposed Revisions – Volatilization Criteria (March 2003) that are relevant to the site setting. Specifically, although groundwater at the site is not used for potable water, the site is located within a "GA/GAA" groundwater use area (that may not meet standards) and the Site has been, and continues to be used for industrial operations.

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991

URS

We trust that this format will facilitate your review of this Stabilization Demonstration. If you have any questions, please contact me at (860) 529-8882.

Sincerely,

URS CORPORATION AES

Philip E. Warner, PG, LEP
Senior Project Manager

Attachment

cc: G. Shtenyberg – CT DEP
C. Stella – LMC, Inc.

File: P:/LMC/Correspondence/Corrective Action/Stabilization Cover Letter.doc

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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: Light Metals Coloring Company, Inc.
Facility Address: 270 Spring Street, Southington, CT
Facility EPA ID #: CT001162460

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).

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)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	✓			VOCs exceed GWPC & SWPC in upgradient wells - Off-site source is suspected.
Air (indoors)[2]		✓		Air testing results indicate no exceedance of a OSHA PELs or ACGIH TLV
Surface Soil (e.g., <2 ft)		✓		See rationale in question #3. AS.
Surface Water		✓		Concentration of nickel exceeds GWPC & SWPC in upgradient wells, but does not exceed SWPC in down
Sediment		✓		gradient well (CEE-14). (Note: Ni exceeded GWPC downgradient at CEE-14) AS.
Subsurf. Soil (e.g., >2 ft)		✓		
Air (outdoors)		✓		A PID did not detect elevated background concentrations during outside investigations

_____ 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.

✓ 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 at the site is contaminated with VOCs at concentrations which exceed the GWPC; however, based on an exhaustive review of facility operation records and results of recent subsurface investigations no on-Site source of VOCs was discovered but two or more likely sources — to be determined are present in an upgradient direction. The VOCs in groundwater are not impacting indoor air quality. Soil samples collected from depths less than two feet do not contain VOCs at concentrations above method detection limits. Metals and inorganics concentrations exceed GWPC, SWPC, and Secondary Drinking Water Regulations. Presently, there is no downgradient use of groundwater from the surficial aquifer and discharge is likely into the Quinnipiac River. Concentrations of metals and inorganics in groundwater from the downgradient monitoring well (CEE-14) do not exceed SWPC.
The former impoundments were clean-closed. VOCs have not been detected in soil gas and soil samples collected from the suspected potential source area. Significant dilution by the Quinnipiac River minimizes impact from groundwater contribution. As a result, sediments are not likely to be impacted.
Outdoor air quality was monitored during recent field investigations. A PID did not detect elevated background concentrations. AS.
*List of abbreviations attached.

[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.

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	No	No	No	No*			No
Air (indoors)	---		---				
Soil (surface, e.g., <2 ft)	---	No	---	No[x]	No	---	---
Surface Water	---	---			---	---	---
Sediment	---	---			---	---	---
Soil (subsurface e.g., >2 ft)	---	No		No[x]			---
Air (outdoors)	---		---	---	---		

[x]No construction planned – would use a Health & Safety Plan.

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

AJ. Answer to question #2

This assumes GW discharges to Quinnipiac. In any event, downgradient drinking well data is not "contaminated."

AJ

Rationale and Reference(s): Groundwater is not used on the site for either industrial or drinking water purposes. It is unlikely that future downgradient development will occur given the location of the site. Public water supply is available. Based ~~on a hydrogeological~~ investigation, there are no downgradient uses of groundwater in the proximity of the facility. Shallow (0-2') soil is not impacted above risk-based standards. Surface water and sediments at the site are associated with a wetland area and the Quinnipiac River, which is located along the western property boundary. Although no construction is currently considered at the facility, future construction would be conducted under a Health & Safety Plan that would minimize and/or eliminate exposure to contaminants. There are no day care facilities downgradient of the site. There are no properties downgradient of the site that use the surficial aquifer for drinking water supply.

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

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)?

___ 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):_____
_____
_____
_____
_____
_____

[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.

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): _____

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):

✓ YES - 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 **Light Metals Coloring Company, Inc.** facility, EPA ID # **CTD001162460**, located at **270 Spring Street, Southington, 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.

Completed by (signature) Aaron Gilbert Date 9/24/04
(print) Aaron Gilbert
(title) Env. Eng. / RCRA Facilities Manager

Supervisor (signature) [signature] Date 9/28/04
(print) Matthew K. Haggland
(title) Section Chief
(EPA Region or State) Reg. I

Locations where References may be found:

See attached list of references. All documents on file with the CT DEP.

Contact telephone and e-mail numbers

(name) **Cathy Stella**
(phone #) **(860) 621-0145**
(e-mail) **cstella@lightmetalscoloring.com**

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

US EPA New England
RCRA Document Management System
Image Target Sheet

RDMS Document ID # 212109

Facility Name: LIGHT METALS COLORING

Facility ID#: CTD001162460

Phase Classification: R-13

Purpose of Target Sheet:

[ ] Oversized (in Site File) **[ ] Oversized** (in Map Drawer)

[ ] Page(s) Missing (Please Specify Below)

[ ] Privileged **[X] Other** (Provide Purpose Below)

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION -CA750, MIGRATION OF CONTAMINATED GROUNDWATER UNDER CONTROL IS UNAVAILABLE

Description of Oversized Material, if applicable:

[insert title here]

[ ] Map **[ ] Photograph** **[ ] Other** (Specify Below)

STABILIZATION DEMONSTRATION

URS

STABILIZATION DEMONSTRATION
LIGHT METALS COLORING COMPANY, INC. FACILITY
270 SPRING STREET
SOUTHINGTON, CONNECTICUT

Prepared for:

LIGHT METALS COLORING COMPANY, INC.
SOUTHINGTON, CONNECTICUT

URS CORPORATION AES
URS PROJECT NO: 36925632.00005

SEPTEMBER 13, 2004

URS CORPORATION - CONNECTICUT
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1.0 INTRODUCTION

Light Metals Coloring Company, Inc. Facility
270 Spring Street
Southington, Connecticut

The following Stabilization Demonstration has been prepared for the Light Metals Coloring Company, Inc. (LMC) facility, located at 270 Spring Street in Southington, Connecticut. Two environmental indicators "current human exposures under control" (CA 725) and "migration of contaminated groundwater under control" (CA 750) have been evaluated. Based on comparison of analytical results for site soil, groundwater, and air samples to criteria in the Remediation Standard Regulations (RSRs) and the environmental indicators, URS has concluded that the LMC facility is stabilized.

To substantiate that the site meets the stabilization criteria, copies of the February 5, 1999 CA 725 and CA 750 work sheets have been completed and provided along with a copy of the May, 1990 Groundwater Assessment Monitoring Report. The hydrogeology conditions presented in the 1990 report are not likely to have changed and can be considered "current".

A summary of the results of environmental investigations for the three media evaluated is provided in the following sections. The three media include soil, groundwater, and air (indoor and outdoor). RSR standards have been established for soil and groundwater. Indoor air quality was compared to U.S. Occupational Safety and Health Administration (OSHA) standards.

2.0 BACKGROUND

Several discussions through early 1999 were held with the Environmental Protection Agency (EPA). During these discussions, proposed investigation of listed AOCs, stabilization, and final remedy were discussed. LMC's interest in implementing interim measures for stabilization was also addressed.

In a letter from Elizabeth Cotsworth, the Acting Director of the Office of Solid Waste of the Environmental Protection Agency (EPA), LMC was notified of the EPA's intention to increase the pace of cleanups at high priority facilities, which included LMC's facility at 270 Spring Street in Southington, Connecticut. The national cleanup goals apply to the 1,700+ RCRA sites identified by EPA and the States as high priority for cleanup over the next several years. These goals, set by EPA under the Government Performance Results Act (GPRA), require that by the year 2005, the States and EPA verify and document that 95 percent of the high priority RCRA facilities have "current human exposures under control" and 70 percent of these facilities have "migration of contaminated groundwater under control".

In response to telephone conversations and e-mails from EPA, LMC verbally agreed to the goals and expectations for the Voluntary Corrective Action program (VCAP). In an effort to streamline and expedite remediation of the site, it was LMC's understanding that work conducted to satisfy the VCAP could also satisfy the requirements of the Property Transfer Act (PTA).

To document the Environmental Indicator (EI) determination, copies of the February 5, 1999 CA 725 and CA 750 worksheets were prepared and submitted to EPA. EI RCRIS code CA 725 is for "current human exposures under control" and the EI RCRIS code CA 750 is for "migration of contaminated groundwater under control". These forms were transmitted to EPA on October 5, 1999. The CA 750 form indicated that migration of contaminated groundwater was controlled. For the other media, however, data gaps prevented confident conclusions with regards to whether contamination was above appropriately protective risk-based levels, i.e., if current human exposures were under control.

Since submission of the CA 725 and CA 750 worksheets on October 5, 1999, additional investigation has been completed. With the data from these investigations, data gaps in the EI worksheets have been filled and the CA 725 and CA 750 worksheets have been resubmitted.

3.0 REGULATORY FRAMEWORK

The discussion of the analytical results includes a comparison of those results to the tabulated criteria set forth in the State of Connecticut Remediation Standard Regulation (RSRs) Section 22a-133k through 22a-133k-3. With the impending authorization of the federal Corrective Action Program to the Connecticut Department of Environmental Protection (CT DEP), the RSRs will be the applicable standards. Therefore, discussion of the RSRs for soil and groundwater are presented below in Sections 3.1 and 3.2, respectively.

The RSRs apply to any action taken to remediate polluted soil or groundwater that is required pursuant to an administrative order, the Connecticut Property Transfer Act or voluntary site remediation. If a site is not under an administrative order, the Property Transfer Act or a voluntary program, the RSRs may also be used to assess if remediation of contamination is appropriate.

The RSRs provide guidance and standards that are used to determine whether remediation of contamination is necessary to protect human health and the environment; the RSRs do not dictate how an assessment and remediation must be performed or timeframes to perform such work. The RSRs contain numeric criteria for soil and groundwater. These numeric criteria are published in tables included as appendices to the RSRs. The appendices do not include criteria for every compound. If a criterion has not been established in the RSRs, one must be established to assess whether the site is in compliance with the RSRs. To properly evaluate whether the site is in compliance with the RSRs, the nature and extent of the contamination must be understood. Factors that may affect the degree of remediation required include the groundwater quality classification of the site, the land use, and the proximity of sensitive receptors.

3.1 Soil Criteria

The RSRs set forth two criteria for soil that must be met to demonstrate compliance with the RSRs: the direct exposure criteria (DEC) and the pollutant mobility criteria (PMC). A summary of these criteria is presented below:

The DEC were established to protect human health from exposure to contaminants in soil through adsorption, inhalation, dermal contact, etc. These criteria generally apply to soil within the upper 15 feet of the surface whether the soil is unsaturated or saturated. There are two sets of DEC: one for residential (R) sites and one for industrial/commercial (I/C) sites. Soil must be remediated to the R DEC unless the site is used exclusively for industrial or commercial purposes, then the site may be remediated to the I/C DEC (with the exception of PCBs as noted in the discussion below). An environmental land use restriction (ELUR) must be filed to assure that the site will remain industrial or commercial in the future if the R DEC are not met. Identification of the areas where the R DEC are exceeded must be performed to identify whether, and where, an ELUR will be required.

With the exception of PCBs, as noted in the discussion below, the I/C DEC do not need to be met if the contaminated soil is "inaccessible". Inaccessible soil is defined in the RSRs as soil that is: beneath a permanent structure (e.g. building), provided an ELUR is placed on the affected portion of the property ensuring that the building will not be removed; or below the upper two feet beneath pavement or below the upper four feet beneath unpaved areas, provided an ELUR is placed on the affected portions of the property to ensure that the soil will remain at the requisite depth. Concentrations of PCBs up to 10 milligrams per kilograms (mg/kg) may be left in inaccessible soils.

The PMC were established to prevent the pollution of groundwater caused by contamination in soil that could potentially migrate into the groundwater principally through the infiltration of precipitation. In general, these criteria apply to soil located above the seasonal high water table (in groundwater areas classified as GB) or above the seasonal low water table (in groundwater areas classified as GA). The subject property is located in an area classified as GA groundwater, therefore, the stricter PMC for GA groundwater (GA PMC) apply. If the soil is located beneath a building (e.g. is environmentally isolated) and is not contaminated with VOCs, the soil does not require remediation, provided an ELUR is placed on the appropriate portion of the property to ensure that the permanent structure will not be demolished. Identification of the areas where the GA PMC are exceeded must be performed to identify whether, and where, an ELUR will be required.

3.2 Groundwater Criteria

The RSRs set forth three criteria for groundwater that must be met to demonstrate compliance with the RSRs: the Groundwater Protection Criteria (GWPC), the Surface Water Protection Criteria (SWPC) and the Volatilization Criteria (VC). A summary of these criteria is presented below:

The GWPC were established to protect current and future uses of groundwater as current or potential drinking water supplies. In areas where the quality has degraded due to historical land use practices (e.g., areas classified as GB groundwater,) the GWPC do not apply, except that contamination cannot interfere with current use of groundwater. The groundwater at the former Light Metals Coloring Company, Inc. site is classified as GA groundwater, therefore, the GWPC apply. In GA groundwater areas, the groundwater must be remediated to a concentration equal to or less than the applicable groundwater protection criterion. The groundwater may be remediated to the GWPC if a public water supply distribution system is

available within 200 feet of the subject parcel and any parcels affected by the plume, the plume is not located within an aquifer protection area, and the plume is not located within the influence of a public water supply well.

The SWPC were established to protect surface water quality at the discharge point of contaminated groundwater to surface water.

The VC were established to prevent the accumulation of volatile organic compounds inside a building located over contaminated groundwater at concentrations that may pose a risk to human health. The VC are dependent upon the use of the building; i.e., whether the building use is residential or industrial/commercial. As the Light Metals Coloring Company, Inc. site is used for industrial/commercial purposes, the industrial/commercial VC are potentially applicable. A land use restriction must be recorded to ensure that the building will be used for industrial/commercial purposes, if the residential VC are exceeded in groundwater beneath the site building.

4.0 STATUS OF AOCs FOR HUMAN EXPOSURES INDICATOR

Section 4.0 provides a summary of each AOC and discusses each AOC's status relative to demonstrating stabilization with the human exposure criteria. We acknowledge that many of the units have or had the potential to release hazardous constituents to groundwater and that human exposures to groundwater must be considered separate and distinct from the CA750 indicator. This realization is demonstrated in the manner in which the exposure pathway portion of the CA725 worksheet has been completed and is discussed in Section 4.0 of this document. Our evaluation of the human exposure indicator considers the factors discussed below concerning groundwater.

Groundwater contour maps constructed from water-level measurements collected from the monitoring well network since 1987 indicate a flow direction on the Site generally toward the southwest in the direction of the Quinnipiac River. In addition, water-level measurements collected from a monitoring well couplet (CEE-13 and CEE-14) downgradient of the former surface impoundments and approximately 40 feet from the Quinnipiac River indicate a positive vertical gradient (artesian condition). The Quinnipiac River is likely a "gaining stream" along this reach, which means that groundwater contributes a component of base flow into the stream. The steep slope on the opposite bank of the Quinnipiac River also indicates a strong groundwater flow direction toward the Quinnipiac River from this other slope. The sum effect is that groundwater upwells to the river and does not flow beneath it.

Groundwater at the site is known to be impacted; however, the facility abandoned its water supply well and other local users do not obtain potable water from downgradient locations (based on local hydrogeology). The dilution effect of the Quinnipiac River on concentrations in the groundwater plume from the former surface impoundment is significant. Using calculated values for hydraulic conductivity, according to provisions in the Connecticut Remediation Standard Regulations (RSRs) 22a-133k-3(b)(3)(A), the dilution ratio ranges between 280 and 459. Presently, there are no proximal downgradient users of groundwater. It is unlikely that the contribution from the groundwater plume would affect potential water supplies. In addition,

Assumes GW discharges to Quinnipiac River. Instead, EPA relied upon downgradient drinking water data.
DJ.

constituents of concern in groundwater samples from the deeper aquifer are present at concentrations representative of background. It appears that the former surface impoundments have only affected the shallow aquifer. Potential exposures to groundwater by construction workers are limited by on-site health and safety measures that are strictly followed. Based on available water quality data and the fact that most exposures associated with construction activities are of short duration, the primary element of safety measures followed is to ensure against drinking groundwater from the shallow aquifer and direct exposure to groundwater at the site.

4.1 INTERIOR PROCESS AND MAINTENANCE AREAS (AOC NO. 1)

This AOC is comprised of the Interior Process and Maintenance Areas that are located within the southeastern and eastern sections of the facility building. AOC-1a through AOC-1e are directly related to process wastewater collection, containment, and treatment.

4.1.1 Metals Finishing Room Subfloor Drainage Area (AOC-1a)

This area is located within the process area of the LMC facility as shown in Figure 2. The area is located east of the Dye Sub floor Drainage Area (AOC-l b) and the Phosphoric Process Sub floor Drainage Area (AOC-lc).

The concrete sub floor area in the Metal Finishing Room formerly collected rinsewater and floor spillage from anodizing and nickel sealing operations. The area discharges by gravity to the wastewater treatment system located at the southeast corner of the building. Currently, all rinses are hard piped and therefore the floor is only used to collect dragout.

The Metal Finishing Room has been in operation since 1971. From 1971 to 1987 the wastewater discharge from this area was directed to the Wastewater Collection Vault and Sump (AOC- Id). From 1987 to July 1999, the wastewater discharged to the Transfer Tank (SWMU #7), which is located in AOC-ld. Since July 1999, the wastewater has been directed to Neutralization Tank 1 (SWMU#2) located in AOC-l e.

Deterioration of the concrete floor noted in 1978-1979 may have resulted in releases during this time period. The concrete floor was repaired in the late 1979 and has been regularly maintained/repaired since.

The Metals Finishing Room Sub floor Drainage Area is a component of a State permitted wastewater collection and treatment system.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.1.2 Dye Process Subfloor Drainage Area and Sump (AOC-1b)

The Dye Sub floor Drainage Area and Sump are located northwest of the Metal Finishing Room Sub floor Drainage Area (AOC-1a) as shown in Figure 2.

The Dye Process Sub floor Drainage Area was formerly used to collect rinsewater discharge and floor spillage from the dye processing operations and convey to the wastewater to a 3' x 4' x 6' poured-in-place concrete sump with an approximate capacity of 300 gallons. This flow'-through sump receives the wastewater for pH adjustment prior to discharge by gravity to the building sewer. The concrete floor and sump were upgraded in May 1998. At that time, a new floor surface was applied with fiberglass re-surfacing. Currently, most rinses are hard piped and therefore the floor is only used to collect dragout. Hard piping is being completed for the remaining rinses.

The building sewer system conveys the pH adjusted dye wastewater to the municipal sanitary sewer in Spring Street. The sewer system also conveys the building's sanitary wastewaters.

The Dye Sub floor Drainage Area and Sump has been in operation since 1971.

EPA has classified the Dye Area Sump and the Sanitary Sewer System as having a low potential for release (EPA, 1995). There are no known releases from either the Sub floor Drainage Sump or the Sanitary Sewer System.

The Dye Sub floor Drainage Area and Sump are components of a State permitted wastewater collection and treatment system. The building sewer pipe is the conduit for the State permitted wastewater discharge.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.1.3 Phosphoric Process Subfloor Drainage Area (AOC-1c)

The Phosphoric Process Sub floor Drainage Area is southwest of the Metal Finishing Room Sub floor Drainage Area (AOC-1a) as shown in Figure 2.

The Phosphoric Process Sub floor Drainage Area collected wastewaters from the phosphoric process operation and conveyed the wastewater to a 4,000-gallon capacity holding tank located in AOC-2. This sub floor collection area was segregated from other process wastewater by a concrete berm.

AOC-1c was in operation from 1979 until 2001. This process was moved to another area in the facility.

AOC-lc was not a permitted activity. Best Management Practices (BMP) applied.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.1.4 Wastewater Collection Vault and Sump (AOC-1d)

This area was formerly located in the southeastern section of the building within the wastewater treatment area and formed the low point for the LMC wastewater collection facilities. Area AOC-1d is shown in Figure 2.

The former wastewater Collection Vault and Sump was a poured-in-place concrete structure, which was connected by common exterior walls and an internal wall to the Settling Tank - SWMU #4 (AOC-1e). Overall dimensions are 9' x 12.6' x 8'H. The vault had an open top and was located beneath a grated platform. A historical wastewater collection sump was cast in the base. This structure was upgraded in 1999, including the pouring of a new floor and refinishing of the concrete surfaces.

From 1971 to 1987 the sump received wastewater discharges from metal finishing operations including rinsewater and floor spillage. These wastewaters were pumped from the sump within the vault structure to the Wastewater Neutralization Tank- SWMU #8. Since 1987 this structure has provided secondary containment for the following tanks associated with the permitted wastewater treatment system.

- Chrome Reduction Tank (SWMU #1)

  This was a 4' diameter x 6' high fiberglass tank with an approximate volume of 750 gallons. The SWMU was operated from 1971 to 1987, and was used as a flow-through tank for treatment of anodizing wastewater containing hexavalent chromium. Overflow from this tank was to the Wastewater Neutralization Tank (SWMU #8). From 1987 to 1995, treated wastewater from this tank was pumped to Neutralization Tank 1 (SWMU #2). In 1995 this tank was converted to a batch treatment tank for evaporator residue from the chrome wastewater evaporation system. The treated wastewater was pumped to the chrome dewatering press (see below). There are no known releases from the tank. Any release from this unit would discharge to AOC-1d. No previous investigations have been performed. No response, remediation or closure actions have been performed. The tank is component of a state permitted wastewater treatment system. This entire process has been eliminated from current operations.

- Transfer Tank (SWMU #7)

  This was a 3' x 3' x 4.5' high fiberglass tank with an approximate capacity of 300 gallons. The tank received dilute metal finishing wastewaters and floor spillage from anodizing and nickel sealing operations (AOC-1a). The tank also received stormwater from the Tank Farm (AOC -2). Wastewater was pumped from this tank to Neutralization Tank 1 (SWMU #2). The Transfer Tank was operated from 1987 to July 1999 when the tank was taken out of service due to leakage and as part of an upgrade of AOC-1d. Leakage from the Transfer Tank is contained in AOC-1d. This tank was a component of a state permitted wastewater treatment system until taken out of service in July 1999.

- Wastewater Neutralization Tank (SWMU #8)

  This was a 6' diameter x 8' high fiberglass tank with an approximate volume of 1500 gallons. The tank was operated from 1971 to 1987 and used for wastewater neutralization of metal finishing wastewater from AOC-ld, the chrome reduction tank (SWMU #1), and directly from individual process operations. From 1987 to about 1990 this tank was used as a batch treatment tank for concentrated wastewaters prior to discharge to Neutralization Tank 2 (SWMU #3). From 1990 to 1999 the tank was used as a reservoir for treated wastewater from the Clarifier (SWMU #6). This treated wastewater served as feed water to the facility's phosphoric acid scrubber system. The tank was removed in 1999. There are no known releases from this tank. According to EPA (1995) there is a low potential for historical releases to soil or ground water. A release from this tank would have been discharged to AOC-ld. The SWMU was a component of an NPDES permitted wastewater treatment system until taken out of service as a wastewater treatment tank in 1990.

- Chrome Dewatering Press

  This was an 11.3 cubic foot filter press for dewatering treated residue from the chrome wastewater evaporative system. The press was located on a grated platform above AOC - 1d. Dewatered sludge (EPA Waste Code F019) from the press was placed in 55-gallon drums and stored in the Sludge Processing Room (AOC -3a). Filtrate was reused as rinsewater within the chrome process. The Chrome Dewatering Press was in operation since 1995 and is a component of the State permitted wastewater treatment system. AOC-l d provides secondary containment for the dewatering press. There are no known releases from the press.

According to the EPA (1995) documentation, a release has occurred from the former wastewater collection sump. The EPA (1995) documentation references CEE (1991), the Closure Plan for the Light Metals Coloring Company, Inc. According to Section III of the Closure Plan, it is suspected that untreated wastewater began leaking from the collection sump in late 1986 or early 1987.

Ground water monitoring downgradient from AOC-ld has been ongoing since the late 1980s.

The Wastewater Collection Vault and Sump was removed from service as a wastewater transfer sump in 1987. The concrete surfaces in the vault and sump were repaired in the late 1970's, and again in 1999. Since 1987, the vault and sump have been used as secondary containment for wastewater collection and treatment tanks. The wastewater leak has not had an impact on unsaturated soils because the leak occurred at the bottom of the collection sump, at an elevation nearly the same as the local average ground water table elevation.

Until 1987, the sump was a wastewater collection and transfer component of a previous NPDES permitted wastewater treatment system; the sump currently functions as secondary containment for state permitted wastewater pretreatment system.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.1.5 Historical Settling Tank – SWMU #4 (AOC –1e)

The Historical Settling Tank (SWMU #4) was located within the existing wastewater treatment area (Figure 2), and was structurally connected to AOC-ld.

SWMU #4 was a poured-in-place concrete tank with internal dimensions of 17' x 2'-6"x 8' high and an approximate working volume of 7,500 gallons. This unit was located below Neutralization Tank I (SWMU #2), Neutralization Tank 2 (SWMU #3) and the spent nickel solution tank. A common wall separated the Settling Tank and AOC-l d within the wastewater treatment area. This entire process has been eliminated from current operations.

From 1971 to 1987 the Settling Tank was used for sludge settling prior to discharge via gravity flow to the polishing lagoons. The Settling Tank was operational from 1985 to 1987 as a flow-through unit for neutralized anodizing wastewaters from the Wastewater Neutralization Tank (SWMU #8). Effluent from SWMU #4 discharged via gravity from an overflow pipe to the historical wastewater polishing lagoons (SWMUs #10 and #11). From 1971 to 1985 sludge flowed by gravity to the sludge drying beds (SWMUs #12 and #13). From 1985 to 1987 sludge was pumped from the bottom of this tank to the Sludge Thickening Tank (SWMU #5). From 1987 to the present the Settling Tank has been used as an emergency holding tank for off-specification wastewater from Neutralization Tank 2 (SWMU #3), and as secondary containment for the units described below. In October 1994, the Settling Tank was lined.

- Neutralization Tank 1 (SWMU #2)

  Neutralization Tank I is a fiberglass tank with dimensions 5'-6"dia. x 8' H, and an approximate capacity of 1,400 gallons. The tank is located on a concrete floor above the AOC-le. This is a continuous flow through tank that received wastewater pumped from the Transfer Tank (SWMU #7) and discharges by gravity to Neutralization Tank 2 (SWMU #3). Neutralization Tank I has been operational since 1987. The tank currently receives wastewater pumped from the process area (AOC-la), and storm water from the Tank Farm (AOC-2). There are no known releases from this tank. There is a low potential for historical releases to soil or ground water. Any release from this unit would be contained by AOC-le. Neutralization Tank I is a component of a State permitted wastewater treatment system. No response, remediation and closure activities or previous investigations have been performed relative to this tank.

- Neutralization Tank 2 -SWMU #3

  Neutralization Tank 2 is a 6' dia. by 6' H fiberglass tank with an approximate capacity of 1,200 gallons. The tank is located on a concrete floor above AOC-l e. The tank functions as a second stage neutralization tank with continuous gravity flow. The tank receives wastewater from Neutralization Tank I (SWMU #2), and discharges to the Flocculation Chamber and Clarifier (AOC-3b). Neutralization Tank 2 has been in operation since 1987. There are no known releases from this tank. There is a low potential for historical releases to soil or groundwater. Any release would ultimately be contained by AOC-le. No previous response, remediation and closure activities or previous investigations have been performed. The tank is a component of a State permitted wastewater treatment system.

- Spent Nickel Solution Tank

  The Spent Nickel Solution Tank was a 3' dia. by 4' H continuous flow through fiberglass tank with an approximate capacity of 200 gallons. The tank was located on main platform in the wastewater treatment area above AOC-le. The tank operated since 1971. Since 1987 treated solution is pumped to Neutralization Tank 2 (SWMU #3). Prior to 1987 it was pumped to the Wastewater Neutralization Tank (SWMU #8). There are no known releases from this tank. According to the EPA, there is a low potential for historical releases to soil or ground water (EP A, 1995). AOC-l e would contain any release from this unit. Previous investigations have not been performed. The subject tank is a component of a State permitted wastewater treatment system. The Spent Nickel Solution Tank has been replaced and relocated.

- Historical Wastewater Point Source Leak-SWMU#16

  Figure 2 shows the location of AOC-l. As noted above, potential historical untreated wastewater leaks may have resulted in releases from AOC-la, AOC-ld, and AOC-le. The duration and volume of historical leaks is unknown. Repairs within the AOC-la were made in the late 1970s and in 1999. Repairs within AOC-le were made in July 1988 and October 1994.

The Settling Tank has been used as an emergency holding tank since 1987. Prior to 1994, there may have been releases through the sidewall penetration for the sludge transfer piping. The tank was partitioned and lined in October 1994.

A RCRA Certified Closure (CEE 1994) includes removal of effluent piping from the settling tank and the sampling and analysis of adjacent soils.

AOC-le, SWMUs #2 and #3, and the spent nickel solution tank are components of State permitted wastewater treatment system.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.1.6 Maintenance Department Tool Area (AOC1-f)

The Maintenance Department Tool Area is located in the northeastern section of the LMC facility as shown in Figure 2.

The area is used as a workspace for the repair of LMC facility equipment and the storage of maintenance supplies. Small quantities of maintenance products are occasionally generated.

The area was used from 1971 to present as a maintenance area, including the accumulation and discard of small quantities of maintenance type materials, such as waste aerosols, paint thinners and waste oils.

EPA has described the Maintenance Department Tool Area as having a "low potential for release " (EPA 1995). The concrete floor structure provides secondary containment for potential spills or releases in this area.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.2 TANK FARM (AOC NO. 2)

The Tank Farm is a raw materials storage area enclosed by a concrete berm.

The Tank Farm is located in the rear yard area adjacent to the Metal Finishing area on the south side of the facility (Figure 2).

Nitric, phosphoric and sulfuric acids, aluminum sulfate, and fuel oil are contained in the exterior storage tanks. Secondary containment installed in 1987.

There have been historical spills of nitric and phosphoric acids from the tank farm prior to the installation of secondary containment. These spills would have infiltrated into soils immediately south of the facility. This information is documented in the Closure Plan (CEE 1991). It is believed that a phosphoric acid by-product, contaminated with nickel and aluminum, was included in the historical spills. In 1987, the entire tank farm was provided with secondary containment. No releases have been reported since the secondary containment was constructed.

No releases have occurred in the Tank Farm since the construction of secondary containment in 1987. Uncontaminated stormwater accumulation within the secondary containment is returned to Wastewater Neutralization Tank-SWMUs #2.

Monitoring wells CEE-9 and CEE-10 are located immediately downgradient from the tank farm. Soil samples were collected above the seasonal high ground water elevation within this AOC during the removal of the sludge transfer lines for the RCRA Closure. Post excavation analyses include total and TCLP Ni and limited Appendix IX COC.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.3 INTERIOR AND EXTERIOR WASTEWATER & SOLIDS MANAGEMENT COMPONENTS (AOC NO. 3)

4.3.1 Sludge Processing Room (AOC - 3a)

The Sludge Processing Room was constructed in 1985 as an addition to the LMC facility. The room is located at the southwestern corner of the facility. The steel frame and concrete block structure is approximately 25 x 40 feet in area with a poured concrete floor. The Sludge

Processing Room provides secondary containment for the following solids management components:

- Sludge Thickening Tank (SWMU #5)

The Sludge Thickening Tank is a 10' dia. x 8' H. fiberglass tank with an approximate capacity of 4000 gallons; located in Sludge Process Room. The tank receives dilute metal hydroxide sludge from the Clarifier (SWMU #6) and discharges thickened sludge to the Filter Press (SWMU #9) for dewatering. The tank has been operational from 1985 to the present. From 1985 to 1995 the sludge processed was classified as F019; however, since 1995 sludge is classified as non-hazardous aluminum hydroxide sludge (CR 05). On May 2, 1994, approximately 250 gallons of aluminum hydroxide slurry discharged from the sludge holding tank. Sealand Environmental Services cleaned up this release.

- Filter Press and Portable Dumpster (SWMU #9)

A one-cubic yard sludge filter press with portable dumpster is located in AOC-3a. The press receives dilute sludge from the Sludge Thickening Tank (SWMU #5). The filter press discharges filtrate to the clarifier. Dewatered sludge is collected in a portable dumpster located beneath the filter press. The collected sludge is transported to an exterior 30 cubic yard sludge roll-off dumpster located adjacent to west end of building. The sludge filter press and portable dumpster has been in operation since 1985. The following releases from this unit have been reported by LMC:

- June 11, 1993 -aluminum hydroxide slurry discharge from filter press, < 3 gallons. The LMC Haz-Mat Team cleaned up the discharge;

- February 6, 1994 -aluminum hydroxide slurry discharge from filter press, approx. 70 gallons. Sealand Environmental Services cleaned up the discharge; and,

- May 18, 1994 -aluminum hydroxide slurry discharge from filter press, approx. 75 gallons. The LMC Haz-Mat Team cleaned up the discharge.

- Chrome Wastewater Evaporative System

Chrome wastewater was pumped from process area sumps to 160-gallon capacity reservoir tank with high level alarm, which fed the evaporator. This evaporative system was above a 320-gallon capacity secondary containment tank. The evaporator concentrate was either reused in process or discharged to the Chrome Reduction Tank (SWMU#1) in AOC-1d. The Chrome Wastewater Evaporative System was in operation from 1995 until recently. Currently, chrome wastewater is drummed and disposed by a contract hauler.

- Hazardous Waste Container Accumulation Area

The Hazardous Waste Container Accumulation Area has a storage capacity of two to six 55-gallon drums of D001, D002, and D007 wastes generated by the spent dye evaporative system or the chrome dewatering press. The storage area is located in the Sludge Processing Room on the concrete floor. Drums are periodically hauled off-site for disposal.

The storage area has been in operation since 1995. There are no known releases from the containers stored in this area. The hazardous waste container accumulation area is a less than 180-day storage area for a Small Quantity Generator (SQG).

- Scrubber Treatment System

The Scrubber Treatment System was installed in August 1995 and used until 2001. The former system included an 800-gallon storage tank containing sodium tetrasulfide that was introduced via meter pump to a recirculating loop.

- Raw Material Container Storage Area

The Raw Material Container Storage Area is an area of approximately 15 55-gallon capacity drums containing metal finishing concentrates on a wooden platform above the concrete floor.

Because this AOC is covered with concrete and is located in the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725; a human exposure pathway is not complete.

4.3.2 Exterior Wastewater & Solids Management Components (AOC – 3b)

The Exterior Wastewater & Solids Management Components are located west and Southwest of the LMC Facility as shown of the site plan (Figure 2).

As noted below, the wastewater and solids management components include a clarifier and flocculation chamber, a 30-cubic yard sludge roll-off dumpster, and historical spent dye holding tanks.

The historical spent dye holding tanks were in operation from 1971 to 1995. The clarifier, flocculation chamber and 30-cubic yard sludge roll-off dumpster have been in operation since 1987.

The following units are included:

- Clarifier and Flocculation Chamber (SWMU #6)

This is a 17'-6" radius x 12'-6" high exterior poured in place concrete clarifier for separation of wastewater and metal hydroxide sludge received from the flocculation chamber. The approximate capacity is 22,500 gallons. A flocculation chamber that is structurally a part of the clarifier receives neutralized wastewater from SWMU #3. A polymer is added for flocculation. The wastewater discharges to the clarifier center well. Sludge is pumped from the bottom of the clarifier to the Sludge Thickening Tank (SWMU #5). The Clarifier structure has operated since 1987. From 1987 to December 1992, the clarifier discharged treated wastewater to the Quinnipiac River. Since 1992, effluent was discharged back to the plant for use as scrubber feed water. Currently, the effluent is monitored and discharged to the Southington sewer system. The Clarifier is a component of a State permitted wastewater treatment system.

- Sludge Roll Off Dumpster

This is a 30-cubic yard roll-off dumpster located on pavement at west end of building adjacent to Sludge Process Room, and receives dewatered sludge from the Filter Press and Portable Dumpster (SWMU #9). The roll-off is typically covered with a tarp, except during the addition of CR 05 material (non-hazardous). The roll-off is secure at all times, except during the addition of material, to ensure that potential exposure to employees and others is minimized.

The dumpster has been in operation from 1985 to the present. A release occurred on June 2, 1993 when approximately 0.5 cubic feet of aluminum hydroxide sludge discharged from the dumpster during transportation. The LMC Haz-Mat Team cleaned up the discharge.

- Spent Dye Holding Tanks

Two former 500-gallon capacity above ground holding tanks for spent metal-based dyes were located exterior to the Sludge Processing Room as noted in Figure 2. These tanks were located within a concrete secondary containment structure. The spent solutions were periodically hauled off-site for disposal as a D007 waste. The tanks were operational from 1971 to February 1999. On February 1, 1994 the release of about 15 gallons of spent dye solution from holding tanks to the ground surface was reported. The LMC Haz-Mat Team cleaned up the discharge through the removal of contaminated soils and snow. The tanks and concrete containment structure were removed in 1999. Confirmatory soil sampling was performed and no soil contamination was noted. The units were a less than 90-day RCRA storage area.

Because access to this AOC is restricted to trained personnel and components are located both within and exterior to the building near active industrial operations, URS concludes this AOC meets the stabilization criteria for CA725, a human exposure pathway is not complete.

4.4 FORMER SURFACE IMPOUNDMENTS (AOC NO. 4)

Five former surface impoundments and an effluent drainage swale were located exterior to the facility on the south side. The former impoundments and effluent swale were operated from 1971 to 1987.

- SWMU #10 - Polishing Lagoon No.1
- SWMU #11 - Polishing Lagoon No.2
- SWMU #12 - Sludge Drying Bed No.1
- SWMU #13 - Sludge Drying Bed No.2
- SWMU #14 - Historical Sludge Storage Lagoon
- SWMU #15 - Historical NPDES Outfall Swale

Historical releases involving these SWMU s were remediated in 1985 and 1994.

A 1989 assessment ground water monitoring program, and Appendix IX analyses for representative soil samples contain information that was referenced in the preparation of the September 1991 approved Closure Plan.

The SWMUs were closed via the consolidation of potentially impacted soil within the area of SWMUs #10 through #13, and the construction of an engineered cap composed of foundation layers, a clay low permeability liner, a flexible membrane liner, and a drainage layer. The area of SWMUs #14 was capped via a foundation layer and a low permeability engineered layer. Potential environmental pathways have been addressed through the consolidation of contaminated soils and the construction of an engineered cap as specified in the approved Closure Plan. The closure activities conformed to the September 1991 approved RCRA Closure Plan and the subject SWMUs were Certified Closed in October 1994. A land use restriction has been filed as part of the closure. A semi-annual ground water monitoring program has been implemented to verify the effectiveness of the closure. This constitutes a final remedy for the units.

The Closure Plan was approved by CT DEP on September 30, 1991. The October 1994 Post Closure Certification was filed with CT DEP.

Since this area has an engineered cap and received approval of final closure, URS concludes this unit meets the stabilization criteria for CA 725. In other words, a human exposure pathway is not complete.

4.5 POTENTIAL VOLATILE ORGANIC COMPOUND RELEASE AREA (AOC NO. 5)

This AOC is located in the exterior southeastern portion of the LMC facility.

Contamination was first observed in July 1987 in groundwater collected from monitoring well CEE-3.

The likely origin of this contamination is from migration of dissolved contamination in ground water from upgradient off-site sources. There is no record of use of these compounds through the history of this facility.

Monitoring wells CEE-7 and CEE-8 were constructed in March 1988 and monitoring well MW-16 was installed in August 1998 to monitor VOC contamination in ground water.

Since there is no use of groundwater for drinking water or industrial purposes at the Site or proximal downgradient locations, URS concludes this unit meets the stabilization criteria for CA 725. In other words, a human exposure pathway is not complete.

N.D. ↓

Assumes GW discharges to Quinnipiac River. Instead, EPA relied upon downgradient drinking well sampling results.

5.0 STATUS OF GROUNDWATER INDICATOR

LMC applied for interim status authorization for a Transport, Storage, and Disposal Facility (TSDF) on January 3, 1981. Commensurate with this application, LMC installed six

monitoring wells at the site. Eleven additional wells were installed between November 1988 and March 1999. Since 1995, groundwater at the site has been monitored for post-closure requirements via semi-annual groundwater sampling of eleven wells. Monitoring wells CEE-1, CEE-9, CEE-10, and CEE-13 are not included in the semi-annual groundwater sampling. Monitoring well CEE-15 is the replacement well for CEE-8.

Hazardous constituents detected since the inception of the monitoring program have exceeded maximum contaminant levels. Specific constituents of concern (COCs) include VOCs and metals. Most of the exceedances for VOCs have been detected in four upgradient wells (CEE-3, CEE-7, CEE-8, and CEE-16). Exceedances for inorganics and metals have been detected in upgradient and downgradient monitoring wells. Through the sampling history of the monitoring well network, occasional peaks have been noted at monitoring well locations. This variability is likely the result of pulses of the groundwater plume or seasonal effects.

Semi-annual sampling of the monitoring well network is presently in its tenth year. Regulations require continued observation for another twenty years. Evaluation of groundwater impact will continue to be performed at the site and any anomalies or changes in the morphology of the volatile plumes will be described in the annual reports.

The area of VOCs, inorganics, and metals exceeding numeric criteria in the shallow groundwater zone is generally along the south side of the facility. These compounds were detected in groundwater samples at concentrations exceeding GA groundwater protection criteria (GWPC) and/or surface water protection criteria (SWPC). In general, the plumes are located in the north and central section of the south portion of the site. Previous and recent groundwater sampling rounds indicate a steady state of the size of the shallow zone plumes. Based on analytical results of groundwater samples from the deeper aquifer, concentrations of VOCs, inorganics and metals appear to be representative of background.

Given the groundwater flow direction toward the southwest, the monitoring network provides data to generally characterize the nature and extent of groundwater impact from the identified potential source areas. As part of this demonstration, and as described in Annual Summary reports, VOCs, inorganics, and metals have been detected at concentrations that exceed either maximum contaminant levels for drinking water and/or RSR criteria; however, the observed plumes appear to be at steady state or declining.

A report entitled *Verification of Municipal Water Supply Connection* for the Light Metals Coloring Company, Inc. was prepared by Consulting Environmental Engineers, Inc. in May 2002. The objective of this investigation was to ascertain which developed parcels within the project area do not appear to be connected to the Town's municipal water supply. Three parcels were identified and are located on Smoron Road (Old Spring Street), 293 Spring Street, and 466 Spring Street. In January 3, 2002, Mr. Marco Palmeri, of the Southington Health Department collected potable water samples from Flynn Moving (100 Smoron Court), K. Bros. LLC (293 Spring Street), and W. Sadowsky (466 Spring Street). A forth residence at 53 Smoron Drive did not respond to the request from the Town. The results of laboratory analyses of the three drinking water supply samples did not contain concentrations of constituents of concern exceeding State potable water quality standards; however, the sample from K. Bros. LLC (293 Spring Street) contained a concentration of TCE at 4 micrograms per liter (ug/l).

Although several locations were found not to have a connection to the municipal water supply, the fact that a location does have a connection does not preclude the possibility that the location may have a private water supply. A comprehensive field check was not performed. Given the fact that there are few developed properties downgradient of the facility, it is unlikely that a private water supply well that draws from the surficial aquifer has been installed.

The Southington Board of Health was contacted during the summer of 2004 to ascertain whether any additional water samples had been collected for analysis from the private water supplies and whether any new water supply wells had been installed. No additional samples had been collected for analyses and no new water supplies had been installed.

The street to the northwest of the LMC facility has been called Smoron Road, Smoron Court, and Smoron Drive. The water supply well sampled in 2002 was from Map 172, Lot No. 17 (Flynn Moving, 100 Smoron Court). No VOCs were detected in the water sample analyzed from this location. This lot is across the Quinnipiac River and is located in a different watershed sub-basin. As a result it is not considered downgradient of the LMC facility to the east.

The dilution effect of the Quinnipiac River on concentrations in the groundwater plume from the former surface impoundment is significant. Presently, there are no proximal downgradient users of groundwater (based on local hydrogeology). It is unlikely that the contribution from the groundwater plume would affect potential water supplies. In addition, constituents of concern in groundwater samples from the deeper aquifer are present at concentrations representative of background. As a result, the migration of groundwater is under control and is considered stabilized for Environmental Indicator CA 750. A positive "Migration of Contaminated Groundwater Under Control" EI determination indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater". The analytical results for groundwater samples collected since 1998 are shown in Table 1.

6.0 SURFICIAL AND SUBSURFACE SOIL INVESTIGATIONS

To evaluate surficial and subsurface soil quality in AOC-3 and AOC-5, soil samples were collected and submitted for laboratory analyses. To aid in the selection of soil sampling locations in AOC-5, a passive soil gas survey was conducted. Soil samples from AOC-5 were submitted for analysis of VOCs and petroleum hydrocarbons and soil samples from AOC-3 were submitted for analysis of RCRA 8 metals plus copper nickel and zinc.

6.1 EVALUATION OF AOC-3

The potential source of metals impact to soil in AOC-3 was from releases of aluminum hydroxide sludge or spent dye. Each release was cleaned up by a spill contractor or trained

personnel at the facility. The soil evaluation was performed to evaluate if residual concentrations in the soil exceed applicable standards.

The west side of the facility is paved with bituminous concrete. At the time of the releases this paving likely prevented the infiltration of released fluids; however, the pavement was sloped and infiltration may have occurred along the edge. The conceptual site model used to evaluate the soil identified the area along the downgradient edge of the pavement as the most likely area to be impacted by the releases.

Five surficial soil samples were collected along the downgradient side of the pavement along the west side of the building. Soil samples were collected from approximately 3 inches to 1 foot. Along a deep crack in a low spot of the pavement, a hand auger was used to collect a soil sample from 4 inches to 1 foot in depth (immediately below the sub base). The soil sampling locations are shown in Figure 3.

Soil samples were submitted to the laboratory for analysis of RCRA 8 metals plus copper, nickel, and zinc. Table 2 presents the results of the analyses. Generally, metals were detected at concentrations likely representative of background. Concentrations detected did not exceed applicable criteria.

6.2 EVALUATION OF AOC-5

VOCs are present in groundwater samples from monitoring wells located in the southeastern portion of the property. This area is upgradient of the former surface impoundments. The source of the VOCs is unknown and likely from an upgradient, off-site source; however, an investigation program was designed to evaluate the potential for an on-site source.

The subsurface investigation consisted of a passive soil gas survey using GORE-SORBER® modules inserted in a grid pattern followed by laboratory analysis of soil samples collected from hand-augered borings. The soil gas survey was initially conducted to optimize the placement of soil borings.

Results of the GORE-SORBER® survey indicate that no VOCs were detected above method detection limits for each of the modules submitted for analysis. Tetrachloroethylene (PCE) was detected at trace concentrations at two locations near the northeast corner of the building.

Based upon the results of the GORE-SORBER® survey, five boring locations were selected for hand-auger borings. Results of laboratory analyses of soil samples collected from these borings were compared to numeric criteria established in the Connecticut Remediation Standard Regulations (RSRs). A soil sample from each boring was submitted to the laboratory for analysis. Soil sample selection was based on observations made in the field and measurements of a field-screening instrument. A photoionization detector (PID) was used to field screen headspace of soil samples collected.

Results of the soil sample analyses indicate no detection of VOCs in each of the soil samples analyzed. Soil samples were collected at two-foot intervals and those from the surface to two feet and two feet to four feet were selected for analysis. The results of laboratory analyses are listed in Table 3. The boring locations are shown on Figure 4.

The results of the soil gas survey and soil sample analyses indicate that no on-site source of VOCs was detected in the AOC-5 area. It appears that VOCs are reaching the property through groundwater migration. In an attempt to locate potential upgradient sources of VOCs, a file search was conducted in May 2004 at the CT DEP for facilities in the local area that use/used degreasers or solvents for cleaning activities. Two facilities that use 1,1,1-TCA were identified in the upgradient area. The property addresses of these locations are 170 Spring Street and 235 Spring Street. A facility at 213 Spring Street used solvents for cleaning; however, the solvent used was not listed. A facility at 175 Spring Street used a methylene chloride degreaser. The location of each facility is shown on Figure 5.

7.0 AIR

In July 2002, an indoor air monitoring program was conducted at the LMC facility by CEE, Inc. The monitoring program was conducted to evaluate airborne concentrations of target volatile organic compounds within the building.

Four SUMA canisters with eight-hour regulators were placed in the locations of the proposed sampling plan. The four samplers were located in Sump 01, Sump 02 and Crane 01. One canister was placed in a Background location. The samples were submitted for analysis according to method TD-14.

Based on the results of the sampling program no organic vapors included in the EPA TD-14 analyses ere detected at specified locations and in background.

In April 2004, an indoor air monitoring program was conducted at the LMC facility by OSHA. The monitoring program was conducted to evaluate airborne levels of a variety of organic vapors within the building. The sources of the VOCs include facility operations and potential volatilization from groundwater below the building slab.

Breathing Zone (B2) air samples were collected on four employees while performing their normal operation activities in the southeastern section of the facility. There was also one area sample taken at a fixed station within the southeastern section of the building. The personal monitors were placed on personnel who worked in Maintenance, an Environmental Technician, and in Anodizer Bulk Operations. The fixed station was located in the southeastern section of the facility approximately four feet above the floor.

Personal monitors with a "Gilian Model Gil-Air" pump connected to a small charcoal tube at approximate air flow rates of 0.1 liters per minute (lpm) and were operated over an eight-hour period to collect air samples. Samples were collected over an eight-hour time period so that results could be compared to OSHA permissible exposure limits (PELs). All samples were sent to the Wisconsin Occupational Health Laboratory in Madison, Wisconsin for analysis.

Based on the results of the sampling program, no organic vapors included in the EPA TO-1 analysis were detected at or above OSHA PELs. The low concentrations of VOCs detected in

indoor air supports the conclusion that Human Exposure Are Controlled relative to the Stabilization Demonstration for CA725.

TABLES

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-2		1999 CEE-2		2000 CEE-2		2001 CEE-2		2002 CEE-2		2003 CEE-2		2004 CEE-2	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals *(Units below are in mg/L)*																		
Nitrate	10	-	-	-	0.8	2.6	1.3	2	2.2	1.6	0.54	-	1.9	2	1	1.7	0.95	
Sulfate	250	-	-	-	17	17	12	17	11	19	0.97	-	9	21.3	4	9.8	5.6	
Chloride	250	-	-	-	14	72	26	66	16	51	1.7	-	66	54	11	60	108.5	
Aluminum	0.05	-	-	-	< 0.005	*0.71*	< 0.1	< 0.1	*1.2*	*0.25*	< 0.10	-	*0.07*	*0.07*	<0.02	0.04	0.02	
Iron	0.3	-	-	-	< 0.005	*0.46*	0.06	< 0.05	*0.58*	0.12	< 0.10	-	0.04	0.04	0.03	<0.02	< 0.02	
Manganese	0.5	-	-	-	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.02	< 0.02	<0.02	<0.02	< 0.02	
Nickel	0.1	0.1	0.88	-	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.02	< 0.02	<0.02	<0.02	< 0.02	
Sodium	28	-	-	-	7.5	1.6	9.2	26	18	24	10	-	20.94	21.83	6.71	25.97	19.1	
Phosphorus	-	-	-	-	< 0.1	1.2	< 0.1	32	2.7	1.6	2.2	-	3.34	1.7	1.42	2.18	1.28	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.01	<0.01	<0.01	<0.01	< 0.01	
Volatile Organic Compounds *(Units below are in ug/L)*																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5.1	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**300**	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in milligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-3		1999 CEE-3		2000 CEE-3		2001 CEE-3		2002 CEE-3		2003 CEE-3		2004 CEE-3	
	AWQS	GWPC	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals *(Units below are in mg/L)*																		
Nitrate	10	-	-	-	2.9	3.6	8.6	*110*	*77*	*203*	3.6	*88*	*72*	*58*	*19*	*16*	*12.6*	
Sulfate	250	-	-	-	*380*	*510*	*330*	*810*	*820*	*1600*	84	*710*	*750*	*725*	175	*810*	*395*	
Chloride	250	-	-	-	83	93	68	130	130	190	6.1	*310*	142	112	64.5	104	98	
Aluminum	0.05	-	-	-	< 0.005	< 0.05	*0.34*	*25*	*13*	*110*	*11*	*24.44*	*61.4*	*35.05*	*23.45*	*80.3*	*22.05*	
Iron	0.3	-	-	-	0.11	< 0.05	< 0.05	*2.2*	*0.42*	*8.5*	*0.5*	*6.96*	*3.68*	*1.06*	*1.8*	*0.38*	0.15	
Manganese	0.5	-	-	-	*3*	*2.3*	*1.9*	*2.9*	*7.9*	*6.1*	*1.3*	*3.85*	*2.73*	*2.56*	*1.16*	*2.92*	*1.15*	
Nickel	0.1	0.1	0.88	-	0.09	***0.16***	***0.21***	***3.2***	***1.2***	***1.9***	***0.24***	*0.85*	***0.55***	***0.72***	***0.55***	***0.81***	***0.27***	
Sodium	28	-	-	-	*84*	*190*	*76*	*280*	*180*	*270*	*36*	*494.5*	*228.1*	*245.4*	*172.3*	*206.8*	*93.4*	
Phosphorus	-	-	-	-	< 0.1	0.69	< 0.1	16	7.7	160	16	9.04	10.19	33.99	19.84	14.51	47.93	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<0.1	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds *(Units below are in ug/L)*																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	**90**	**140**	**89**	< 1.0	**150**	**88**	33	7.5	8.1	12.9	5.3	44.5	5.6	
12 DCA		1	21	68	< 1.0	< 1.0	1.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	3	4.9	2.9	< 1.0	5.3	3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000		5.8	3.1	< 1.0	4.4	3.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	**160**	**300**	**170**	3.5	**240**	**130**	**68**	**31.9**	**30**	**93.2**	**18.3**	**162**	**20.6**	
111 TCA		200	62000	16,000	17	30	7.5	3.1	10	8.2	< 5.0	4.6	4.4	9.4	< 1.0	8.8	< 1	
112 TCA		5	1260	2900	4.1	**6.5**	< 1.0	< 1.0	4.7	**5.2**	4.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	13	32	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-4		1999 CEE-4		2000 CEE-4		2001 CEE-4		2002 CEE-4		2003 CEE-4		2004 CEE-4	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	0.48	< 0.1	1.2	ND	< 0.1	1	0.5	<0.05	-	0.4	0.39	0.1	0.65	
Sulfate	250	-	-	-	*360*	170	76	132	220	*260*	67	190	-	*325*	46	93	96	
Chloride	250	-	-	-	5.8	35	2.6	32	10	27	1.2	61.5	-	56	13	13.5	8	
Aluminum	0.05	-	-	-	< 0.05	*1.9*	*0.81*	< 0.1	*3.3*	*0.26*	< 1.0	<0.02	-	*0.06*	< 0.02	*0.08*	< 0.02	
Iron	0.3	-	-	-	0.24	*0.36*	0.14	0.054	0.22	*0.34*	< 1.0	<0.02	-	0.05	0.03	0.13	< 0.02	
Manganese	0.5	-	-	-	< 0.05	0.15	< 0.05	0.22	0.11	0.13	< 0.05	<0.02	-	*3.47*	< 0.02	0.39	< 0.02	
Nickel	0.1	0.1	0.88	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.02	-	0.05	< 0.02	< 0.02	< 0.02	
Sodium	28	-	-	-	22	*32*	10	21	19	*33*	3.1	*40.84*	-	*164.8*	8.02	*38.81*	9.16	
Phosphorus	-	-	-	-	< 0.1	0.52	< 0.1	0.97	1.8	0.27	0.21	0.85	-	24.1	5.24	43.95	7.35	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 1.0	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	1.2	10	< 1.0	4.6	< 1.0	8.7	< 1.0	8.5	-	12.5	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2	-	1.1	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	-	< 10	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-5		1999 CEE-5		2000 CEE-5		2001 CEE-5		2002 CEE-5		2003 CEE-5		2004 CEE-5	
	AWQS	GWPC	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	0.29	< 0.1	0.55	4.4	3.9	1.7	0.31	<0.05	0.26	< 0.05	0.2	< 0.1	1.07	
Sulfate	250	-	-	-	21	18	33	35	38	36	18	90	84	27.5	3.6	14.8	4.6	
Chloride	250	-	-	-	3.2	3.2	6.2	6	6.6	8.5	2.7	15	176	36	10	24	10	
Aluminum	0.05	-	-	-	< 0.05	*0.21*	< 0.1	*3.6*	*1.5*	*0.13*	< 0.1	0.02	< 0.02	< 0.02	*0.06*	< 0.02	< 0.02	
Iron	0.3	-	-	-	*3.5*	0.08	< 0.05	0.23	*8.6*	*6.9*	< 0.1	0.1	*0.92*	0.24	0.09	0.17	< 0.02	
Manganese	0.5	-	-	-	*4.3*	*1.9*	*5.5*	*2.6*	*4.1*	*3.6*	*3.5*	*1.96*	*2.81*	*5.15*	*2.11*	*2.26*	0.04	
Nickel	0.1	0.1	0.88	-	***0.42***	***0.29***	***0.43***	***0.26***	***0.29***	***0.27***	***0.17***	***0.13***	***0.17***	***0.18***	0.05	0.09	< 0.02	
Sodium	28	-	-	-	*46*	26	23	*31*	24	28	17	*31.93*	21.98	*30.03*	12.46	17.63	4.7	
Phosphorus	-	-	-	-	0.11	5.6	0.12	21	22	18	46	26.3	49.36	13.13	75	7.68	10.53	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-6		1999 CEE-6		2000 CEE-6		2001 CEE-6		2002 CEE-6		2003 CEE-6		2004 CEE-6	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	3.5	3.9	9.7	*14*	6.2	*24*	*35*	*13*	9.5	*20.7*	*15.2*	*10.8*	2.9	
Sulfate	250	-	-	-	240	200	*310*	*300*	240	*440*	*490*	*326*	*280*	*400*	128	*355*	*270*	
Chloride	250	-	-	-	22	19	45	35	25	37	67	43	180	82	59.5	44.5	33	
Aluminum	0.05	-	-	-	*0.08*	< 0.5	< 0.1	*0.31*	*0.13*	*0.48*	*0.12*	0.1	*0.84*	*0.96*	*0.59*	*3.75*	*0.67*	
Iron	0.3	-	-	-	0.23	0.11	< 0.05	0.28	0.11	*0.36*	< 0.1	< 0.02	0.19	0.09	0.05	0.03	0.1	
Manganese	0.5	-	-	-	*6.3*	*5.2*	*6.1*	*8.9*	*7*	*8.2*	*11*	9	*9.43*	*11.64*	*8.59*	*12.36*	*6.83*	
Nickel	0.1	0.1	0.88	-	***0.71***	***0.62***	***0.66***	***0.94***	***0.65***	***0.86***	***1.1***	***0.76***	***1.01***	***1.3***	***0.8***	***1.31***	***0.73***	
Sodium	28	-	-	-	*76*	*56*	*59*	*68.16*	*77*	*91*	*98*	*116*	*98.5*	*141.1*	*115.6*	*150.9*	*87.6*	
Phosphorus	-	-	-	-	< 0.1	7.3	< 0.1	< 0.1	7.1	3.7	2.2	2.15	1.4	0.91	1.43	0.83	0.66	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	1.7	1.1	1.9	< 1.0	1.9	< 1.0	< 1.0	< 1.0	1.4	< 1.0	1.1	1.4	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**14**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-7		1999 CEE-7		2000 CEE-7		2001 CEE-7		2002 CEE-7		2003 CEE-7		2004 CEE-7	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals *(Units below are in mg/L)*																		
Nitrate	10	-	-	-	*52*	0.25	*34*	*120*	*230*	*180*	7.4	*11.4*	*290*	*17*	*29.8*	*20*	*20.6*	
Sulfate	250	-	-	-	180	41	*1900*	*860*	*1900*	*1800*	99	220	*1350*	200	*725*	*990*	*610*	
Chloride	250	-	-	-	25	24	230	110	200	180	7.8	49.5	*294*	74	66	73.5	105	
Aluminum	0.05	-	-	-	< 0.50	< 0.05	< 0.1	*24*	*300*	*170*	*140*	*12.74*	*278.3*	*12.59*	*160.3*	*196.3*	*96*	
Iron	0.3	-	-	-	< 0.50	< 0.05	< 0.05	0.15	*4.9*	*12*	*6.4*	0.11	*16.14*	*0.75*	*8.24*	*6.09*	*5.75*	
Manganese	0.5	-	-	-	*1.2*	0.28	*4.8*	*5.7*	*6.4*	*4.7*	*2.5*	*1.29*	*1.53*	*1.04*	*1.38*	*3.07*	*1.11*	
Nickel	0.1	0.1	0.88	-	< 0.50	< 0.05	***2.2***	***1.9***	***2.9***	***3.7***	***0.93***	***0.4***	***1.15***	***0.21***	***0.81***	***1.11***	***0.41***	
Sodium	28	-	-	-	8	27	*490*	*250*	*300*	*320*	*250*	*72.6*	*667*	*54.6*	*257.1*	*178.5*	*102.5*	
Phosphorus	-	-	-	-	< 0.1	4	< 0.1	30	100	75	49	6.28	50.32	13.85	41.27	61.65	29.4	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds *(Units below are in ug/L)*																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	5	1.7	3.8	49	< 1.0	< 1.0	< 1.0	3.3	1	7.7	< 1.0	4.4	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	17	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	2.9	**7.9**	**95**	< 1.0	3.4	**9.5**	**19.3**	3.5	**51.3**	1.2	**22.1**	**9.5**	
111 TCA		200	62000	16,000	20	< 1.0	3.7	14	< 1.0	< 1.0	3.2	53.8	4.8	124	< 1.0	7.5	1.5	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-8		1999 CEE-8		2000 CEE-8		2001 CEE-8		2002 CEE-8		2003 CEE-8		2004 CEE-8	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	*20*	0.26	*41*	*170*	*150*	*340*	*14*	*93*	*170*	*63*	4	*20.2*	*35.5*	
Sulfate	250	-	-	-	*460*	*3500*	*770*	*1000*	*1300*	*1900*	*460*	*820*	*1570*	*1025*	150	*290*	*1110*	
Chloride	250	-	-	-	39	*340*	120	110	140	250	20	*370*	*288*	138	38	179	190	
Aluminum	0.05	-	-	-	*4*	*29*	*33*	*43*	*160*	*220*	*37*	*8.64*	*248.4*	*55.2*	*143.4*	*442.1*	*169.4*	
Iron	0.3	-	-	-	*21*	*110*	*2.8*	*2.5*	*1.7*	*8.5*	*0.35*	0.06	*3.42*	*1.06*	*0.9*	*9.65*	*3.14*	
Manganese	0.5	-	-	-	*3.6*	*3.8*	*0.64*	*5.2*	*10*	*4.6*	0.38	*1.72*	*2.91*	*1.86*	*1.31*	*5.03*	*1.13*	
Nickel	0.1	0.1	0.88	-	***0.4***	***2.1***	***0.95***	***2.2***	***2***	***2.5***	***0.15***	***1.02***	***0.94***	***5.14***	***0.69***	***1.87***	***1.34***	
Sodium	28	-	-	-	*130*	*770*	*220*	*340*	*210*	*400*	*38*	*838*	*495*	*447.2*	*119.7*	*415*	*432*	
Phosphorus	-	-	-	-	< 0.1	0.57	< 0.1	201	21	44	9.1	11.4	22.29	17.45	36.11	177.6	32.78	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	<0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	4	1.3	1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.9	< 1.0	< 1.0	< 1.0	5.5	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	**22**	**12**	5.2	**18**	< 1.0	**12**	3.9	**105**	**54.6**	**212**	3.9	**214**	**113**	
111 TCA		200	62000	16,000	22	6	2.4	< 1.0	< 1.0	4.1	1.5	148	40.6	158	< 1.0	10.7	5.3	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-9		1999 CEE-9		2000 CEE-9		2001 CEE-9		2002 CEE-9		2003 CEE-9		2004 CEE-9	
	AWQS	GWPC	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	< 0.1	-	-	-	-	-	-	0.4	-	-	-	-	-	
Sulfate	250	-	-	-	1.1	-	-	-	-	-	-	3	-	-	-	-	-	
Chloride	250	-	-	-	1.9	-	-	-	-	-	-	8	-	-	-	-	-	
Aluminum	0.05	-	-	-	*1*	-	-	-	-	-	-	*0.09*	-	-	-	-	-	
Iron	0.3	-	-	-	0.11	-	-	-	-	-	-	0.11	-	-	-	-	-	
Manganese	0.5	-	-	-	0.07	-	-	-	-	-	-	< 0.02	-	-	-	-	-	
Nickel	0.1	0.1	0.88	-	< 0.005	-	-	-	-	-	-	< 0.02	-	-	-	-	-	
Sodium	28	-	-	-	7.1	-	-	-	-	-	-	9.86	-	-	-	-	-	
Phosphorus	-	-	-	-	< 0.1	-	-	-	-	-	-	0.51	-	-	-	-	-	
Cyanide	0.2	0.2	0.052	-	< 0.1	-	-	-	-	-	-	< 0.01	-	-	-	-	-	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
11 DCA		70	NE	41,000	< 10	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
12 DCA		1	21	68	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
cis 12-DCE		70	NE	11000	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
trans 12-DCE		100	NE	13000	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
11 DCE		7	96	920	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
111 TCA		200	62000	16,000	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
112 TCA		5	1260	2900	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
TCE		5	2340	67	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
PCE		5	88	810	< 1.0	-	-	-	-	-	-	< 1.0	-	-	-	-	-	
Dichlorodifluromethane		-	-	1200	< 10	-	-	-	-	-	-	< 1.0	-	-	-	-	-	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-10		1999 CEE-10		2000 CEE-10		2001 CEE-10		2002 CEE-10		2003 CEE-10		2004 CEE-10	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	*70*	*260*	*170*	*260*	*270*	*120*	*120*	*161*	*264*	*33*	*46*	*80*	*56*	
Sulfate	250	-	-	-	*700*	*1700*	*1500*	*3700*	*1400*	*2500*	*3500*	*350*	*1240*	*1100*	*2450*	*1620*	*6000*	
Chloride	250	-	-	-	35	96	160	120	180	250	102	*360*	*300*	56	178	*316*	224	
Aluminum	0.05	-	-	-	*58*	*190*	*120*	*360*	*160*	*190*	*180*	*79.2*	*182.4*	*103*	*269.4*	*188.3*	*534*	
Iron	0.3	-	-	-	*7.4*	*21*	*21*	*29*	*9.7*	*11*	*18*	*15.49*	*7.39*	*68.5*	*41.73*	*15.07*	*81*	
Manganese	0.5	-	-	-	*1.4*	*1.6*	*1.4*	*2.5*	*1.6*	*1*	*2.2*	*0.98*	*0.75*	*0.82*	*1.16*	*1.03*	*1.37*	
Nickel	0.1	0.1	0.88	-	**0.42**	***4.2***	***2.6***	***2.5***	***1.2***	***2.8***	***1***	***0.75***	***0.98***	***1.57***	***2.1***	***1.32***	***1.31***	
Sodium	28	-	-	-	*42*	*160*	*160*	*430*	*450*	*490*	*250*	*710*	*716*	*171.3*	*392.4*	*422*	*672*	
Phosphorus	-	-	-	-	0.16	1300	0.22	1900	100	140	78	196	149.7	1205	345.2	71.8	397	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	0.14	<0.1	< 1.0	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-12		1999 CEE-12		2000 CEE-12		2001 CEE-12		2002 CEE-12		2003 CEE-12		2004 CEE-12	
	AWQS	GWPC	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	< 0.1	4	< 10	9.2	*30*	5.5	1.6	4.05	3.4	*17.5*	3.8	1.85	0.2	
Sulfate	250	-	-	-	10	76	12	98	*530*	150	13	80	32	220	48	8.4	43	
Chloride	250	-	-	-	< 0.5	8.7	2.3	19	97	40	2.7	58.6	178	58	12	18.5	16.5	
Aluminum	0.05	-	-	-	< 5.0	*1*	*0.13*	< 0.1	*0.2*	< 0.1	*0.45*	*0.15*	0.04	*0.57*	*0.08*	0.02	*0.27*	
Iron	0.3	-	-	-	*12*	0.22	< 0.05	*0.51*	*0.56*	*43*	*12*	0.15	*1.47*	*1.23*	0.09	0.06	*11.26*	
Manganese	0.5	-	-	-	*1.6*	*2.5*	*1.9*	*4.1*	*1.7*	*5.6*	*9.4*	*2.36*	0.48	*3.38*	*0.7*	*1.34*	*1.7*	
Nickel	0.1	0.1	0.88	-	0.005	0.06	0.007	0.096	< 0.05	0.092	***0.44***	0.05	***0.14***	***0.38***	< 0.02	< 0.02	0.03	
Sodium	28	-	-	-	4.4	*29*	4.3	*38*	*420*	*92*	*87*	*57.9*	17.5	*113.8*	8.43	*29.06*	27.25	
Phosphorus	-	-	-	-	< 0.1	0.66	< 0.1	11	4	1.1	0.52	3	0.96	1.51	1.13	1.13	1.54	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-14		1999 CEE-14		2000 CEE-14		2001 CEE-14		2002 CEE-14		2003 CEE-14		2004 CEE-14	
	AWQS	**GWPC**	SWPC	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals (*Units below are in mg/L*)																		
Nitrate	10	-	-	-	1.2	0.9	7.1	*16*	< 0.1	0.7	0.35	0.59	0.6	0.22	0.44	0.19	0.6	
Sulfate	250	-	-	-	180	*570*	190	*590*	*360*	*650*	20	*506*	120	*356*	70	*364*	*450*	
Chloride	250	-	-	-	14	33	43	62	30	45	1.8	61.5	24	52	33	54	39.5	
Aluminum	0.05	-	-	-	< 0.05	< 0.05	< 0.1	*0.11*	*0.43*	*0.46*	< 0.1	*0.35*	0.02	< 0.02	0.03	< 0.02	*0.11*	
Iron	0.3	-	-	-	< 0.05	< 0.05	< 0.05	0.12	*0.33*	*0.62*	< 0.1	0.11	0.11	0.05	0.05	< 0.02	0.05	
Manganese	0.5	-	-	-	*0.9*	*6.5*	*2.7*	*5.7*	*4*	*5.8*	*2.2*	*3.35*	*1.39*	*4.44*	0.39	*4*	*9.27*	
Nickel	0.1	0.1	0.88	-	0.06	***0.22***	***0.12***	***0.21***	***0.17***	***0.21***	***0.12***	***0.22***	0.05	***0.23***	< 0.02	***0.23***	***0.45***	
Sodium	28	-	-	-	*40*	*85*	*51*	*85*	*85*	*92*	*69*	*143.9*	*53*	*79.1*	*29.43*	*123.3*	*111.4*	
Phosphorus	-	-	-	-	< 0.1	1.2	< 0.1	51	11	1.8	3.9	1.71	1.75	0.57	1.09	0.43	0.35	
Cyanide	0.2	0.2	0.052	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds (*Units below are in ug/L*)																		
Chloromethane		2.7	NE	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	< 1.0	1.9	1.4	1.3	1.8	< 1.0	< 1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12 DCA		1	21	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	< 1.0	2.3	1.2	< 1.0	1.4	< 1.0	< 1.0	2.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
111 TCA		200	62000	16,000	1.1	2.1	< 1.0	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
112 TCA		5	1260	2900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	< 1.0	1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 1

SUMMARY OF GROUNDWATER SAMPLE RESULTS (1998 - 2004)
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

		RSRs			1998 CEE-16		1999 CEE-16		2000 CEE-16		2001 CEE-16		2002 CEE-16		2003 CEE-16		2004 CEE-16	
	AWQS	**GWPC**	**SWPC**	I/C GW VC	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Inorganics and Metals *(Units below are in mg/L)*																		
Nitrate	10	-	-	-	-	0.46	4.5	*93*	*180*	*18*	*60*	3	*132*	8	7.8	5	1.9	
Sulfate	250	-	-	-	-	35	87	*380*	*1200*	*300*	*980*	116	*390*	246	75	111	47	
Chloride	250	-	-	-	-	100	25	150	150	32	68	160	*266*	124	36	21	15	
Aluminum	0.05	-	-	-	-	*0.11*	< 0.1	*0.31*	*180*	*11*	*65*	*2.38*	*50.6*	*14.31*	*7.48*	*4.54*	*2.77*	
Iron	0.3	-	-	-	-	*0.33*	0.06	0.084	*1.6*	*0.88*	*3.4*	0.16	*0.31*	0.28	*0.47*	0.04	0.03	
Manganese	0.5	-	-	-	-	*1.1*	*0.76*	*4.6*	*5.8*	*3.8*	*0.97*	*1.93*	*1.69*	*1.42*	0.4	0.42	0.21	
Nickel	0.1	0.1	0.88	-	-	< 0.05	< 0.05	0.07	***2.6***	***0.55***	***0.56***	***0.13***	***1.13***	***0.28***	0.09	***0.11***	0.04	
Sodium	28	-	-	-	-	*47*	*29*	*180*	*230*	*54*	*95*	*89.1*	*418*	*138.6*	*37.7*	*30.07*	8.89	
Phosphorus	-	-	-	-	-	0.42	< 0.1	29	8.1	4.9	8.1	0.58	1.18	27.33	1	0.62	0.86	
Cyanide	0.2	0.2	0.052	-	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Volatile Organic Compounds *(Units below are in ug/L)*																		
Chloromethane		2.7	NE	NE	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCA		70	NE	41,000	-	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	2	1	3.9	6.6	2.4	< 1.0	
12 DCA		1	21	68	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis 12-DCE		70	NE	11000	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans 12-DCE		100	NE	13000	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11 DCE		7	96	920	-	1.7	1.2	< 1.0	< 1.0	4.7	1.2	**11.5**	**8.2**	**28.5**	5.5	**16.3**	2	
111 TCA		200	62000	16,000	-	< 1.0	< 1.0	< 1.0	< 1.0	120	1.4	21.2	57	25.7	8.8	24.7	3.9	
112 TCA		5	1260	2900	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TCE		5	2340	67	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
PCE		5	88	810	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluromethane		-	-	1200	-	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Bold indicates an exceedance of the GWPC.
Shading indicates an exceedance of SWPC.
Italics indicates an exceedance of AWQS.
NE = Not established
- indicates Monitoring Well not sampled.
Laboratroy analytical results in miligrams per liter (mg/L).

TABLE 2

SUMMARY OF SOIL SAMPLE RESULTS - AOC 3
Light Metals Coloring Company Inc.
270 Spring Street
Southington, Connecticut

Constituent	RSRs			AOC-3 SS-1	AOC-3 SS-2	AOC-3 SS-3	AOC-3 SS-4	AOC-3 SS-5	AOC-3 SS-6
	R DEC (mg/kg)	I/C DEC (mg/kg)	GA PMC (mg/l)						
Lead	500	1000	0.015	< 2.0	2.9	4.1	3.4	3.6	2.7
Selenium	340	10000	0.05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium	34	1000	0.005	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chromium*	100	100	0.05	4.3	14	8.8	13	7.5	7.9
Arsenic	10	10	0.05	2.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Barium	4700	140000	1	13	18	30	21	16	24
Silver	340	10000	0.036	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Copper	2500	76000	1.3	30	19	18	21	20	14
Nickel	1400	7500	0.1	7.3	14	11	20	8.7	5.3
Zinc	20000	610000	5	20	21	17	22	19	13
Mercury	20	610	0.002	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20

Laboratory analytical results in milligrams per kilograms (mg/kg).
Bold indicates an exceedance of a Residential Direct Exposure Criteria (R DEC) or Industrial/Commercial Direct Exposure Criteria (I/C DEC) from the Connecticut Remediation Standard Regulations (RSRs).
Comparison to GA PMC requires SPLP analysis (mg/l).

* Criteria for hexavalent chromium (Cr^{+6}) used as a conservative measure.

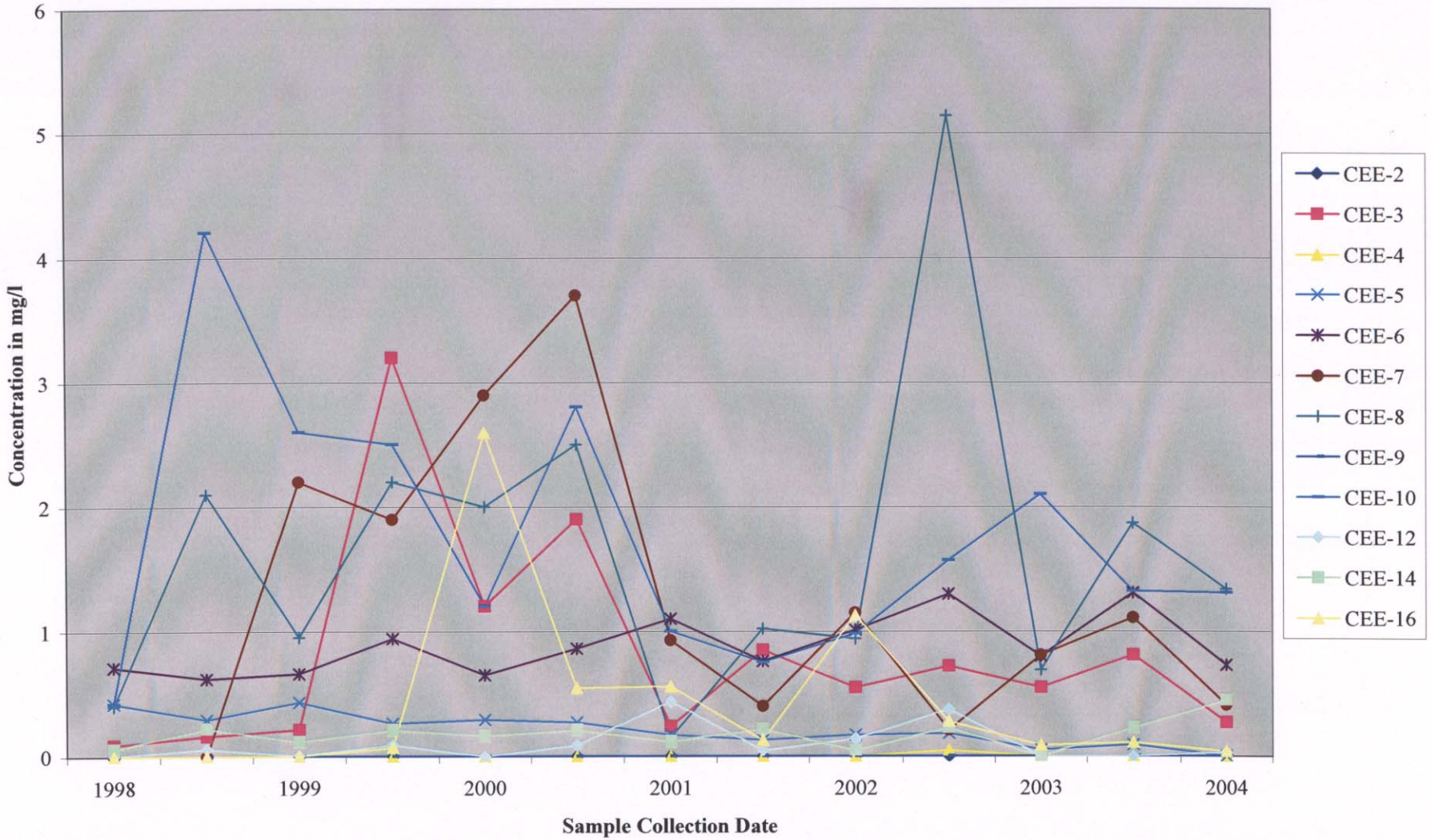
TABLE 3

SUMMARY OF SOIL ANALYTICAL RESULTS - AOC 5
Light Metals Coloring Company, Inc.
270 Spring Street
Southington, Connecticut

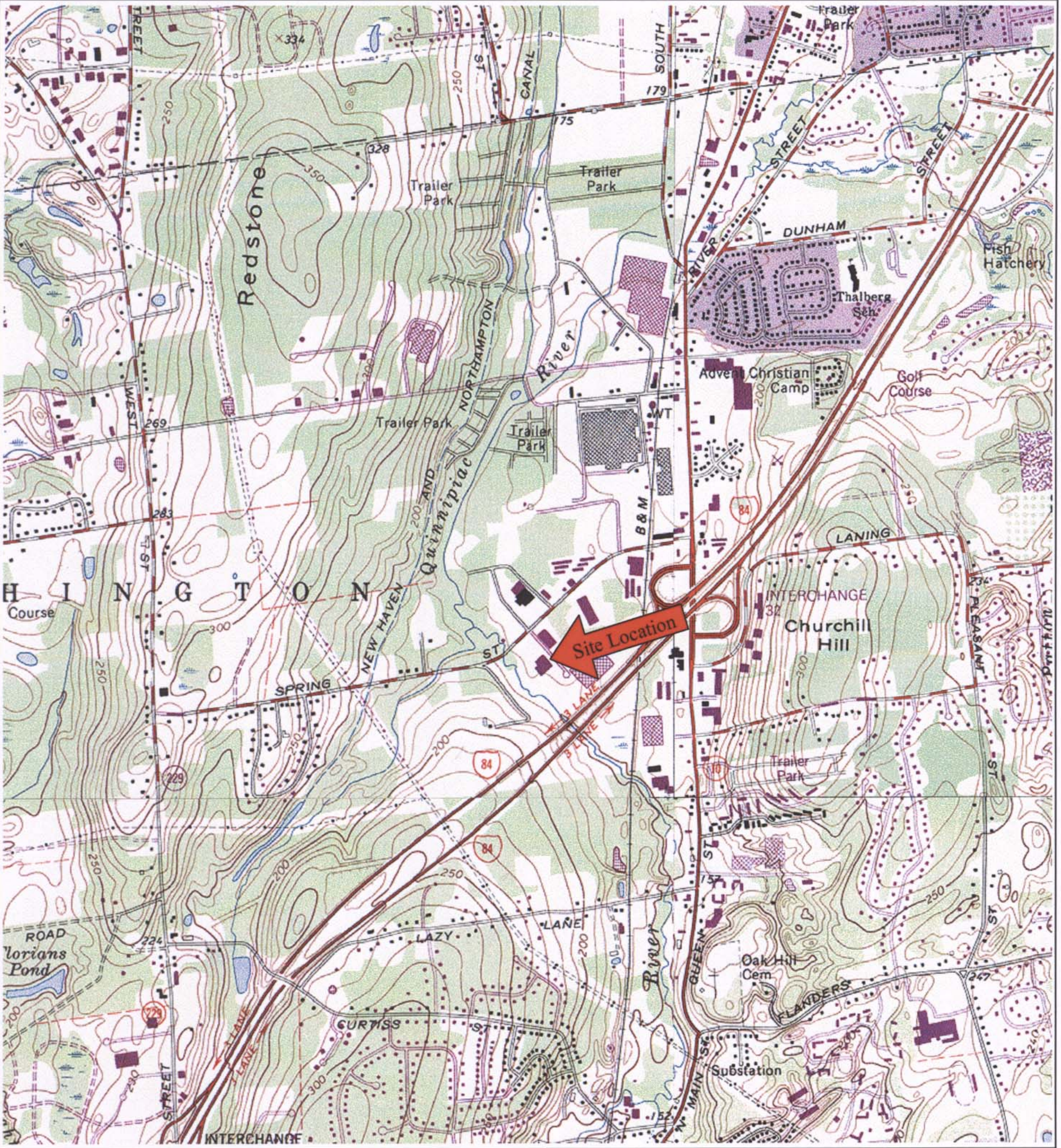
PARAMETERS	Units	RSR Criteria				AOC-5 SB1 0-2	AOC-5 SB2 0-2	AOC-5 SB3 0-2	AOC-5 SB4 0-2	AOC-5 SB5 2-4	AOC-5 SB5 2-4 DUP
		RDEC	I/C DEC	GA/GAA PMC	GB PMC	6/25/2004	6/10/2004	6/10/2004	6/10/2004	6/10/2004	6/10/2004
Volatile Organic Compounds (VOCs)	(ug/kg)										
Dichlorofluoromethane		NE	NE	NE	NE	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25
Chloromethane		47000	440000	54	0.54	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Vinyl Chloride		320	3000	40	0.4	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Bromomethane		95000	1000000	200	2	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0
Chloroethane		NE	NE	NE	NE	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0
Trichlorofluoromethane		500000	1000000	26000	260	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25
1,1-Dichloroethene		1000	9500	140	1.4	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Methylene Chloride		82000	760000	100	1	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25	ND < 25
Methyl-tert-Butyl-Ether (MTBE)		500000	1000000	2000	20	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0	ND < 10.0
trans-1,2-Dichloroethene		500000	1000000	2000	20	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1-Dichloroethane		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
2,2-Dichloropropane		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
cis-1,2-Dichloroethene		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Bromochloromethane		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Chloroform		100000	940000	120	1.2	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1,1-Trichloroethane		500000	1000000	4000	40	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Carbon Tetrachloride		4700	4400	100	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1-Dichloropropene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Benzene		21000	200000	20	0.2	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0
1,2-Dichloroethane		6700	63000	20	0.2	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Trichloroethene		56000	520000	100	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2-Dichloropropane		9900	84000	100	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Dibromomethane		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Bromodichloromethane		9900	92000	11	0.11	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
cis-1,3-Dichloropropene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Toluene		500000	1000000	20000	67	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
trans-1,3-Dichlrorpropene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1,2-Trichloroethane		11000	100000	100	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Tetrachloroethene		12000	110000	100	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,3-Dichloropropane		3400	32000	10	0.1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Dibromochloromethane		7300	68000	10	0.1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2-Dibromomethane		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Chlorobenzene		500000	1000000	2000	20	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1,1,2-Tetrachloroethane		24000	220000	20	0.2	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Ethylbenzene		500000	1000000	10100	10.1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
m+p Xylenes*		500000	1000000	19500	19.5	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
o-Xylene*		500000	1000000	19500	19.5	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Styrene		500000	1000000	2000	20	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Bromoform		78000	720000	80	0.8	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Isopropylbenzene		500000	1000000	600	132	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,1,2,2-Tetrachloroethane		3100	29000	10	0.1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Bromobenzene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2,3-Trichloropropane		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
n-Propylbenzene		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
2-Chlorotoluene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
4-Chlorotoluene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,3,5-Trimethylbenzene		500000	1000000	7000	70	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
tert-Butylbenzene		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2,4-Trimethylbenzene		500000	1000000	7000	70	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
sec-Butylbenzene		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,3-Dichlorobenzene		500000	1000000	1200	120	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
4-Isopropyltoluene		500000	1000000	600	41.8	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,4-Dichlorobenzene		26000	240000	1500	15	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2-Dichlorobenzene		500000	1000000	3100	3.1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
n-Butylbenzene		500000	1000000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2-Dibromo-3-Chloropropane		440	4100	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2,4-Trichlorobenzene		680000	2500000	1400	14	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Hexachlorobutadiene		7900	73000	1000	1	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Naphthalene		1000000	2500000	5600	56	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
1,2,3-Trichlorobenzene		NE	NE	NE	NE	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0
Extractable Petroleum Hydrocarbons	mg/kg					AOC-5 SB5 4-6					
ETPH		500	2500	500	2500	ND < 50					

NA = Not analyzed
NE = Not established
(mg/L) = Miligrams per liter
(ug/L) = Micrograms per liter
GWPC = Groundwater Protection Criteria
I/C VOL = Industrial/Commercial Volatilization Criteria
SWPC = Surface Water Protection Criteria
RSRs = Remediation Standard Regulations
Bold indicates exceedances of one or more soil criteria
NS = Not sampled
* There are no established criteria for m+p or o-xylenes, therefore total xylene criteria is used

Nickel Concentrations in Groundwater (1998 - 2004)



FIGURES



Scale:

0 — 1/2 — 1 MILE
0 — 1000 FEET
0 — 500 m — 1000 m

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Figure 1

Site Location Map

Light Metals Coloring
270 Spring Street
Southington, CT

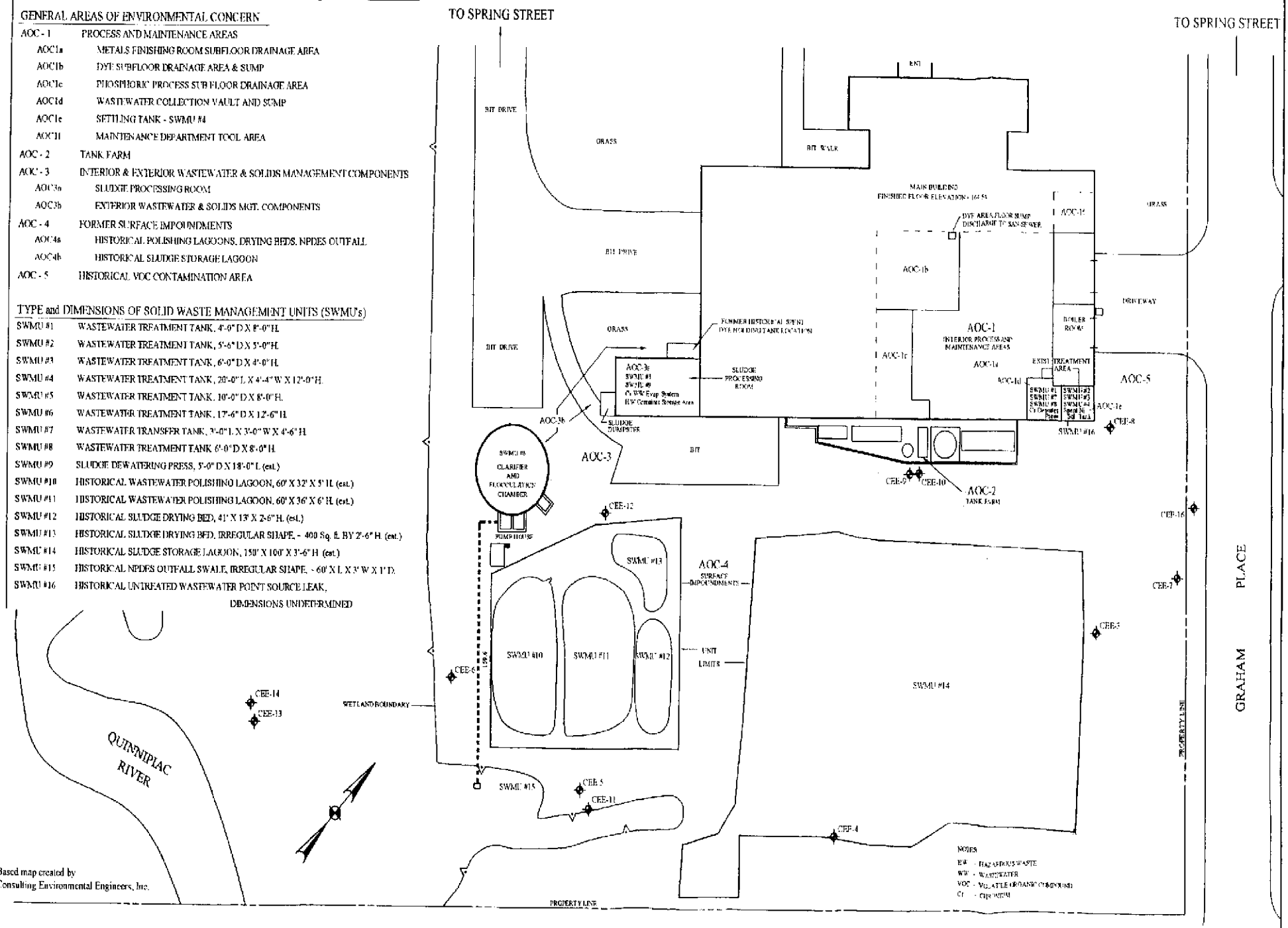
Job No.: 36925652 URS Corporation AES

GENERAL AREAS OF ENVIRONMENTAL CONCERN

AOC - 1	PROCESS AND MAINTENANCE AREAS
AOC1a	METALS FINISHING ROOM SUBFLOOR DRAINAGE AREA
AOC1b	DYE SUBFLOOR DRAINAGE AREA & SUMP
AOC1c	PHOSPHORIC PROCESS SUB FLOOR DRAINAGE AREA
AOC1d	WASTEWATER COLLECTION VAULT AND SUMP
AOC1e	SETTLING TANK - SWMU #4
AOC1f	MAINTENANCE DEPARTMENT TOOL AREA
AOC - 2	TANK FARM
AOC - 3	INTERIOR & EXTERIOR WASTEWATER & SOLIDS MANAGEMENT COMPONENTS
AOC3a	SLUDGE PROCESSING ROOM
AOC3b	EXTERIOR WASTEWATER & SOLIDS MGT. COMPONENTS
AOC - 4	FORMER SURFACE IMPOUNDMENTS
AOC4a	HISTORICAL POLISHING LAGOONS, DRYING BEDS, NPDES OUTFALL
AOC4b	HISTORICAL SLUDGE STORAGE LAGOON
AOC - 5	HISTORICAL VOC CONTAMINATION AREA

TYPE and DIMENSIONS OF SOLID WASTE MANAGEMENT UNITS (SWMU's)

SWMU #1	WASTEWATER TREATMENT TANK, 4'-0" D X 8'-0" H.
SWMU #2	WASTEWATER TREATMENT TANK, 5'-6" D X 5'-0" H.
SWMU #3	WASTEWATER TREATMENT TANK, 6'-0" D X 4'-0" H.
SWMU #4	WASTEWATER TREATMENT TANK, 20'-0" L X 4'-4" W X 12'-0" H.
SWMU #5	WASTEWATER TREATMENT TANK, 10'-0" D X 8'-0" H.
SWMU #6	WASTEWATER TREATMENT TANK, 17'-6" D X 12'-6" H.
SWMU #7	WASTEWATER TRANSFER TANK, 3'-0" L X 3'-0" W X 4'-6" H.
SWMU #8	WASTEWATER TREATMENT TANK 6'-0" D X 8'-0" H.
SWMU #9	SLUDGE DEWATERING PRESS, 5'-0" D X 18'-0" L (est.)
SWMU #10	HISTORICAL WASTEWATER POLISHING LAGOON, 60' X 32' X 5' H. (est.)
SWMU #11	HISTORICAL WASTEWATER POLISHING LAGOON, 60' X 36' X 6' H. (est.)
SWMU #12	HISTORICAL SLUDGE DRYING BED, 41' X 13' X 2-6" H. (est.)
SWMU #13	HISTORICAL SLUDGE DRYING BED, IRREGULAR SHAPE, ~ 400 Sq. ft. BY 2'-6" H. (est.)
SWMU #14	HISTORICAL SLUDGE STORAGE LAGOON, 150' X 100' X 3'-6" H. (est.)
SWMU #15	HISTORICAL NPDES OUTFALL SWALE, IRREGULAR SHAPE, ~ 60' X L X 3' W X 1' D.
SWMU #16	HISTORICAL UNTREATED WASTEWATER POINT SOURCE LEAK, DIMENSIONS UNDETERMINED



Based map created by
Consulting Environmental Engineers, Inc.

URS Corporation
500 Enterprise Drive, Ste. 3B
Rocky Hill, Connecticut
Tel. 860 529.8882
Fax. 860 529.3991

0 20 40 80
SCALE: 1" = 40' (1:480)

Site Plan

Light Metals Coloring Co., Inc.
270 Spring Street
Southington, Connecticut

CAD: P:/LMC/Fig 2.ppt	Drawn By: SMR	Figure No.: 2
Job No.: 36925652	Checked By: PEW	Date: 7-26-04

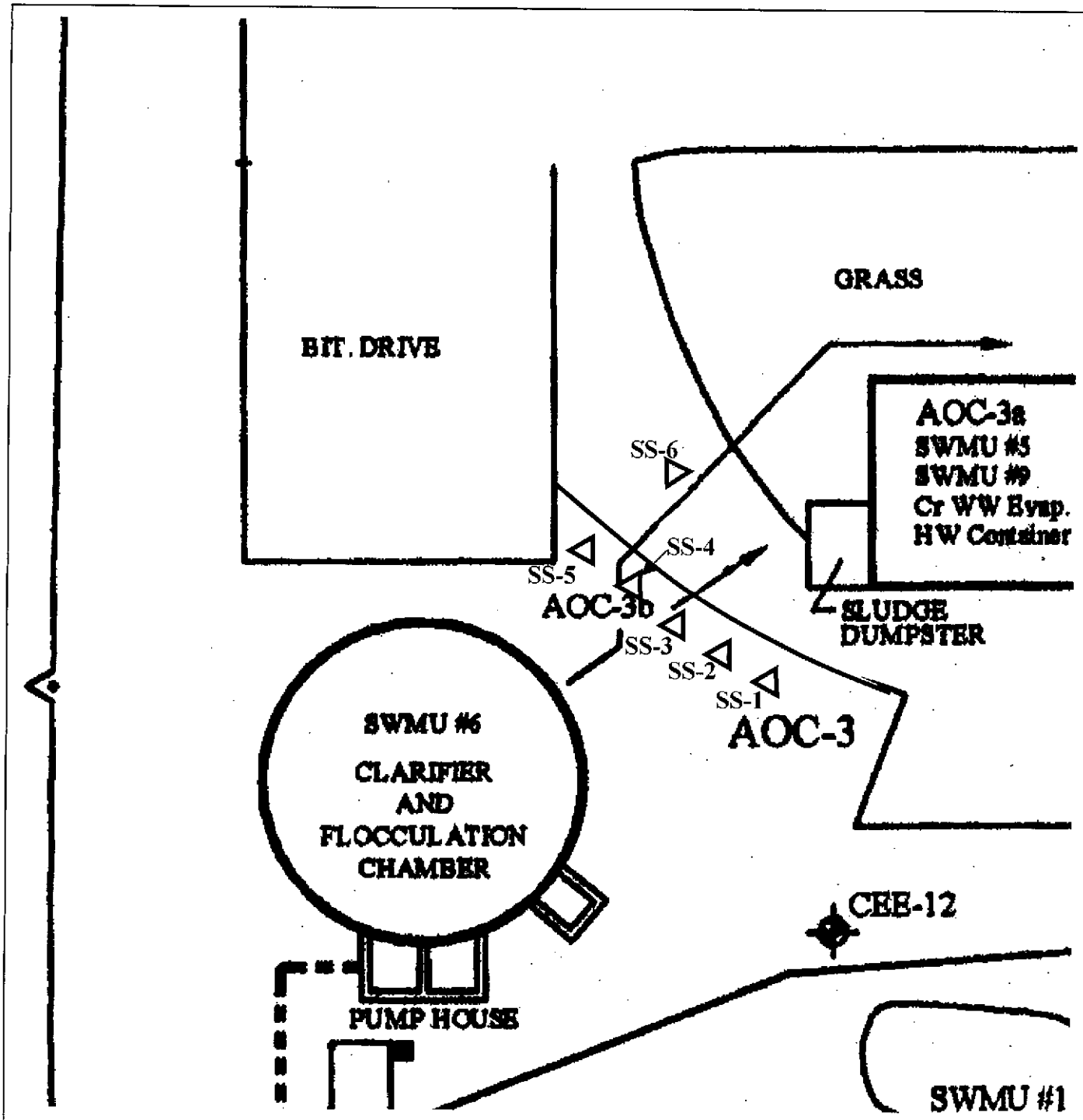


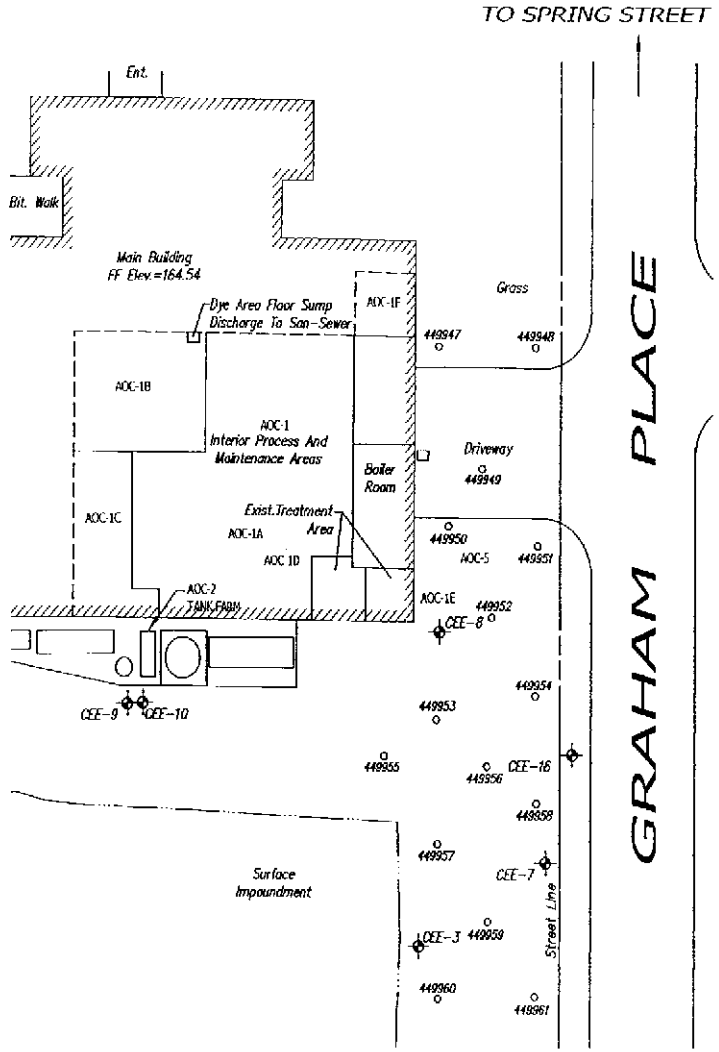
Figure 3

AOC-3 Soil Sampling Locations

Light Metals Coloring Company Inc.
270 Spring Street
Southington, CT

Note: Approximate Scale 1" ~ 17'

Job No.: 36925652 URS Corporation AES



LEGEND

◈ – Groundwater Monitoring Well

o – Core-Sorber® Module Location

AOC-1 – Area Of Concern

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT. 06067-4002
Tel: 860.529.8882
Fax: 860.529.3991
www.urscorp.com

0 60

APPROXIMATE SCALE, FEET

PROJECT NO. 36925652		CLIENT: LIGHT METALS COLORING CO., INC	
DESIGN: KC	SCALE: AS SHOWN	PROJECT: 270 SPRING STREET SOUTHINGTON, CONNECTICUT	TITLE: SITE PLAN
APPROVED: PW	DATE: MAY 2004		FIGURE NO: 4
DRAWN: KC	FILE NO: FIG.1		

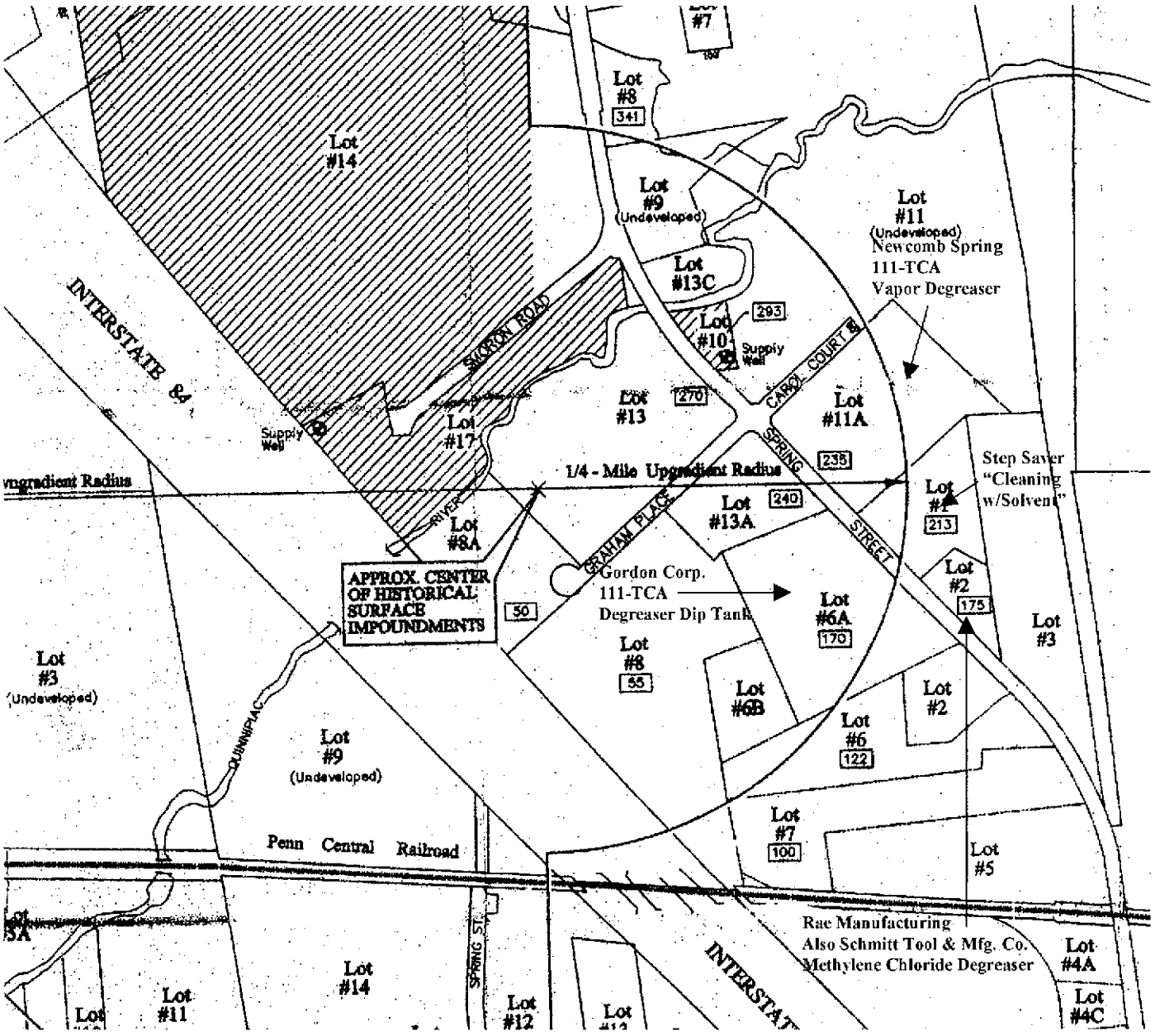


Figure 5

Assessor's Map Showing Upgradient Use of Solvents

Light Metals Coloring Company Inc.
270 Spring Street
Southington, CT

Note: Approximate Scale 1" = 600'

Job No.: 36925652 URS Corporation AES