

**ATTACHMENT H**

**Monthly Progress and IQAT Reports for the ISTR Construction Period**

[provided on CD with hardcopies]



*de maximis, inc.*

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June 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 67 – May 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 67.

This report covers the period from May 1-31, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 67**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**May 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. May 2014 Project Activities:

- On May 2, 2014, Yankee Gas returned to the site, after the blocked gas line was cleared, and re-activated the gas line.
- During May 2014, TerraTherm completed the shakedown of the system, reviewing interlocks, checking P&ID drawings and testing motors and pumps. Day 1 of ISTR officially commenced on May 15, 2014.
- During May 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor as outlined in the approved sampling schedule.
- On May 23, 2014, USEPA issued approval of the proposed work for the 2014 comprehensive groundwater monitoring event scheduled for June 2014.
- On May 26, 2014, Catalytic Combustion Air Correction (CCC), the manufacturer of the oxidizer, completed final adjustments of the oxidizer and submitted final commissioning paperwork for the oxidizer.
- Monthly Progress Report (MPR) 66 was submitted on May 12, 2014.
- The monthly IQAT report is attached.

b. June 2014 Planned Project Activities:

- During June 2014, *de maximis* will submit MPR 67.
- Starting the week of June 9, 2014, the comprehensive groundwater sampling event will commence.
- During June 2014 *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.



- c. Problems Encountered or Anticipated – None
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
May 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
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**Date:**  
June 4, 2014



## **IQAT Monthly Report May 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report May 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal wellfield installation portion of the Remedial Action (RA) at the Site during May 2014.

To further clarify activities being performed by the various firms in support of the thermal wellfield installation work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities to be performed by the various firms in support of the thermal wellfield installation process.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.

#### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.



## 2.4 TerraTherm

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### 2.4.1 Catalytic Combustion Corporation – TerraTherm subcontractor

Catalytic Combustion Corporation (CCC) is the manufacturer of the oxidizer in use at the Site. CCC was on site to assist TerraTherm with optimization of the oxidizer.

## 2.5 ARCADIS

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

## 2.6 Weston Solutions, Inc.

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

## 3. Summary of Activities and Observations this Reporting Period

### 3.1 General Overview of Site Activities

- Week of 5/1/14 – Work activities conducted during this period include: TerraTherm testing interlocks on the blowers, moisture separator and the oil/water separator. TerraTherm briefly energized all of the circuits of the heaters on the wellfield at ~10% capacity to check that everything is correctly operational. On 5/2, Yankee Gas activated the gas line and TerraTherm restarted the oxidizer. A faulty fitting on an O2 sensor caused alarm and shutdown of the oxidizer the following day.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 5/5/14 – Work activities conducted during this period include: TerraTherm completed testing interlocks on all skids, replaced the flame arrestor on the oxidizer, and replaced the O2 sensor fitting which was faulty and caused the shutdown of the oxidizer as noted above. On

5/9, the oxidizer was restarted and brought up to temperature. A faulty scrubber pump caused shutdown of the oxidizer and replacement parts were unavailable until 5/12.

ARCADIS and O&M, Inc. installed 4 six-inch diameter bollards adjacent to the gas meter to protect it from potential damage and continued to implement the perimeter air monitoring program.

- Week of 5/12/14 – Work activities conducted during this period include: TerraTherm repaired the oxidizer scrubber pumps, repaired a leaking pipe in the water softener, and upgraded the circuit breakers for the oxidizer to 20A. On 5/12 the oxidizer was restarted and CCC on Site to assist TerraTherm with optimizing the oxidizer.

On May 15, TerraTherm started Phase 1 operation of the ISTR system (operations Day 1). VEW wellheads were adjusted to maximize and equalize flow across the wellfield.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 5/19/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of liquid and vapor samples are being completed according to the approved sampling schedule.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 5/26/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of liquid and vapor samples are being completed according to the approved sampling schedule. CCC returned to the Site to verify optimal operation of the oxidizer.

ARCADIS continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report



### 3.3 Significant Issue Reporting

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### 3.4 IQAT Photo Documentation of Work

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### 3.5 Project Construction Meetings

The IQAT participated at Construction Progress Meetings conducted via teleconference on May 14, 21, and 28. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### 3.6 Air Quality Monitoring

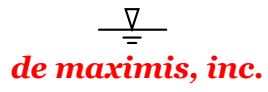
The perimeter air monitoring program is being implemented by ARCADIS and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### 3.7 Health & Safety Incidents / Near Miss Reporting

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## 4. IQAT Conclusions

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/1/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm tested interlocks on the blowers, moisture separator and the oil/water separator.
2. TerraTherm energized all of the circuits of the heaters on the wellfield at ~10% capacity to check that everything is correctly operational.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/2/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. Yankee Gas activated the gas line.
2. TerraTherm restarted the oxidizer and let it run overnight in order to see whether any alarms occur.
3. 3,000 gallons of caustic were delivered into the plastic tank adjacent to the oxidizer.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/5/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm tested interlocks and alarms on the air stripper and the moisture separator.
2. ARCADIS and O&M, Inc. installed 4 six inch diameter bollards adjacent to the gas meter to protect it from potential damage.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/6/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm tested interlocks and alarms on the air stripper and the moisture separator.
2. TerraTherm started the oxidizer and allowed it to ramp up to operating temperature.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/7/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm replaced a broken pump on the oxidizer and replaced the fitting for an O2 sensor which was faulty and caused a shutdown in the oxidizer. A replacement O2 sensor will be delivered and installed on 5/12/14.
2. TerraTherm installed the caustic pump for the moisture separator tank.
3. ARCADIS began marking out locations on the concrete cover for confirmatory samples to be collected at the conclusion of active remediation.
4. The oxidizer was left to run overnight (5/6/14) and during the evening, the scrubber pump failed. TerraTherm was unable to repair the pump having insufficient parts and were unable to switch to the contingency pump as it was also not functioning. Repairs for the pumps were expected to be completed on Monday 5/12/14, which delays the expected startup date to approximately 5/14/14.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/8/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm completed testing interlocks and alarms on all skids except the oxidizer.
2. TerraTherm replaced faulty sensors and replaced the flame arrestor, which was leaking air.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/9/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm fixed a faulty pump and started the oxidizer to bring it up to temperature and determine whether it will continue to run over the weekend.
2. TerraTherm also checked valves and gauges to ensure that everything was in operating position.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/12/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		

**Additional Comments**

1. TerraTherm worked with CCC to optimize and calibrate the oxidizer.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/13/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			

**Additional Comments**

1. TerraTherm repaired the oxidizer water pumps and repaired a leaking pipe in the water softener.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/14/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		

**Additional Comments**

1. TerraTherm replaced the O2 sensor in the oxidizer, upgraded the circuit breakers for the oxidizer to 20A and switched the scrubber pump to pump A in order to repair pump B.
2. TerraTherm continued to optimize the oxidizer and system settings.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/15/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm energized to operational capacity, the selected heaters for Phase I operation of the thermal wellfield.
2. TerraTherm started Phase 1 operation of the ISTR system.
3. TerraTherm checked and repaired minor air leaks in the vapor transfer piping.
4. TerraTherm checked the vapor pressure at each VEW location and adjusted the flow so that there was uniform flow throughout the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/16/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.
2. TerraTherm adjusted the valves of the VEW wells to balance the vacuum across the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/19/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/20/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.
2. Collected vapor samples from the stack effluent and the oxidizer influent.
3. Collected liquid samples from the carbon vessel influent and midpoint and effluent.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/21/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/22/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.
2. TerraTherm recorded vacuum readings from the VEW wells.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/23/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/27/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.
2. TerraTherm collected samples of the oxidizer influent vapor and the carbon vessel influent and midpoint were collected.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/28/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 5/29/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.
Catalytic Combustion Corporation (CCC)	On site to verify that the oxidizer it is working efficiently.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.
2. CCC on site to optimize the oxidizer and verify that it is working properly and efficiently.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 5/30/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

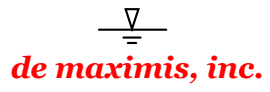
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of the ISTR work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued operation and monitoring of the ISTR system.



**Attachment 2**

**Representative Photos**

SRSNE Site May 2014 Monthly Report  
Representative Photographs



Date: 5/2/2014

Yankee Gas Company inspecting gas metering station in preparation of turning on gas.



Date: 5/5/14

Installation of bollards around gas metering station.



SRSNE Site May 2014 Monthly Report  
Representative Photographs



Date: 5/7/2014  
Repairing scrubber pump unit.



Date: 5/15/2014      Orientation: East looking West  
Starting Phase 1 operation of the ISTR system, vapor extraction wellheads are being adjusted to maximize and equalize flow across the wellfield and the wellfield piping is being inspected for air leaks.



SRSNE Site May 2014 Monthly Report  
Representative Photographs



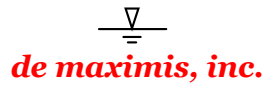
Date: 5/27/2014

View of water sample being collected at the liquid carbon unit (midpoint sample).



Date: 5/27/2014

View of vapor sample being collected at oxidizer unit (influent sample).



**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Jeff Holden, Bruce Thompson, Eva Davis, Shannon Pociu

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** May 6, 2014

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On April 30, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker,
- TerraTherm, Inc (TerraTherm) –Derek LaRosee, Tim Mahoney, Robin Swift
- ARCADIS - Kevin Crowder, Michael Skowronek
- USEPA –Karen Lumino
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone

**I. Meeting Minutes**

- A. Minutes from the April 9, 2014 meeting were distributed on April 16 & 23, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Utilities
    - Pole connection to transformer (3-18-14)
    - Energize of CL&P electrical upgrade and receive account # (4/8/14)
    - Installation of gas manifold (4-16-14)
    - Installation of gas meter (4-21-14)
    - Adjustment of gas regulators (4-24-14)
    - Clean out of blocked gas line (starting 4/30/14)
    - Re-start of gas and adjustment of meters (5/2/14)
  - b) Construction
    - Shakedown/troubleshooting using the generator ~3weeks (starting 3-31-14)
    - Water supply (softener) skid delivery (4-11-14)
    - Caustic tank installation (4-11-14)
    - Oxidizer shakedown (4/21/14)
    - Phase I SCR programming complete (4/29/14)
    - Interlock review of process equipment (starting 4/29/14)
  - c) Potential Start-up (5-8-14)

**III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there were no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during shakedown and startup of the system.

**IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The PID's that had been sent out for service prior to start-up, have been returned and air monitoring has been carried out since 4/22/14.

**V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) No QC issues were noted during this period.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plan and specifications

**VI. Engineering and Design Items**

- A. Continue to review and submit suggestions to the website (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Current requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. EPA and CTDEEP personnel visited the site Thursday, April 24, 2014, comments received from DEEP and EPA staff have been very positive.
- B. EPA has the RAWP and O&M plan, the documents are currently being finalized. EPA and CT DEEP have requested hardcopies and electronic copies of the documents once they are finalized.
- C. The 5 year comprehensive groundwater sampling event has been scheduled to start June 9, 2014. As a result of additional well installation and sampling since the last 5 year review, a spreadsheet with a comprehensive list of wells to be sampled, sampling methods and parameters to be sampled for has been submitted to the EPA for approval.
- D. Weston Solutions has completed installation of the new valve vault that will enable one of the two spare force mains to be used during O&M. They are currently working on scheduling the installation of RW-15. A completion report will be submitted once the well is installed.

**IX. New Action Items**

- A. Continue to review the website and provide TerraTherm comments.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, April 16, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Jeff Holden

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** May 21, 2014

---

On May 14, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) –Derek LaRosee, Tim Mahoney, Robin Swift
- ARCADIS - Kevin Crowder, Michael Skowronek
- USEPA –Karen Lumino, Eva Davis
- CTDEEP- Shannon Pociu
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone

**I. Meeting Minutes**

- A. Minutes from the May 7, 2014 meeting were distributed on May 14, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Utilities
    - Pole connection to transformer (3-18-14)
    - Energize of CL&P electrical upgrade and receive account # (4/8/14)
    - Installation of gas manifold (4-16-14)
    - Installation of gas meter (4-21-14)
    - Adjustment of gas regulators (4-24-14)
    - Clean out of blocked gas line (starting 4/30/14)
    - Re-start of gas and adjustment of meters (5/2/14)
  - b) Construction
    - Shakedown/troubleshooting using the generator ~3weeks (starting 3-31-14)
    - Water supply (softener) skid delivery (4-11-14)
    - Caustic tank installation (4-11-14)
    - Oxidizer shakedown (4/21/14)
    - Phase I SCR programming complete (4/29/14)
    - Interlock review of process equipment (starting 4/29/14)
    - Replacement of scrubber pump seal (5/14/14)

- Installation of replacement O2 sensor (5/14/14)
- Final commissioning of oxidizer (tentative 5-21-14)
- c) Potential Start-up (5-15-14)
- d) TerraTherm continues to go through interlocks and the P&ID. Liquid is running through the system and they have been bringing in dilution air in preparation of startup.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there were no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during shakedown and startup of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The PID's that had been sent out for service prior to start-up, have been returned and air monitoring has been carried out since 4/22/14.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) No QC issues were noted during this period.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans, specifications and has been following the interlock table and P&ID diagrams.

### **VI. Engineering and Design Items**

- A. Continue to review and submit suggestions to the website (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Current requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.

### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

### **VIII. Other Business**

- A. EPA has the RAWP and O&M plan, the documents are currently being finalized. EPA and CT DEEP have requested hardcopies and electronic copies of the documents once they are finalized.
- B. The 5 year comprehensive groundwater sampling event has been scheduled to start June 9, 2014. As a result of additional well installation and sampling since the last 5 year review, a spreadsheet with a comprehensive list of wells to be sampled, sampling methods and parameters to be sampled for has been submitted to the EPA for approval.
- C. Weston Solutions has completed installation of the new valve vault that will enable one of the two spare force mains to be used during O&M. They are currently working on scheduling the installation of RW-15. A completion report will be submitted once the well is installed.

**IX. New Action Items**

- A. Continue to review the website and provide TerraTherm comments.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, May 21, 2014.



**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Eva Davis, Shannon Pociu

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** May 21, 2014

---

On May 21, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) –Derek LaRosee, Tim Mahoney, Robin Swift
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- USEPA –Karen Lumino
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone

**I. Meeting Minutes**

- A. Minutes from the May 14, 2014 meeting were distributed on May 21, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Utilities
    - Pole connection to transformer (3-18-14)
    - Energize of CL&P electrical upgrade and receive account # (4/8/14)
    - Installation of gas manifold (4-16-14)
    - Installation of gas meter (4-21-14)
    - Adjustment of gas regulators (4-24-14)
    - Clean out of blocked gas line (starting 4/30/14)
    - Re-start of gas and adjustment of meters (5/2/14)
  - b) Construction & Start-up
    - Shakedown/troubleshooting using the generator ~3weeks (starting 3-31-14)
    - Water supply (softener) skid delivery (4-11-14)
    - Caustic tank installation (4-11-14)
    - Oxidizer shakedown (4/21/14)
    - Phase I SCR programming complete (4/29/14)
    - Interlock review of process equipment (starting 4/29/14)
    - Replacement of scrubber pump seal (5/14/14)
    - Installation of replacement O2 sensor (5/14/14)



- Start-up (5-15-14)
- Final commissioning of oxidizer (tentative 5-29-14)
- SCRs at design kW output (5-22-14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there have been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during shakedown and startup of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is working on final QC for the “think-thermal” website.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans, specifications and has been following the interlock table and P&ID diagrams. IQAT also noted that TerraTherm has been following the updated sampling plan since start-up.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website (<http://www.think-thermal.com/>; username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Current requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.

### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

### **VIII. Other Business**

- A. EPA has the RAWP and O&M plan, the documents are currently being finalized. EPA and CT DEEP have requested hardcopies and electronic copies of the documents once they are finalized.
- B. The 5 year comprehensive groundwater sampling event has been scheduled to start June 9, 2014. As a result of additional well installation and sampling since the last 5 year review, a memo that includes a spreadsheet with a comprehensive list of wells to be sampled, sampling methods and parameters to be sampled for has been submitted to the EPA for approval. EPA has requested minor changes to this memo.
- C. Weston Solutions has completed installation of the new valve vault that will enable one of the two spare force mains to be used during O&M. They are currently working on scheduling the installation of RW-15. A completion report will be submitted once the well is installed.

**IX. New Action Items**

- A. Submit changes to groundwater sampling memo
- B. Review website when current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, May 28, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

July 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 68 – June 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 68.

This report covers the period from June 1-30, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bruce Thompson'.

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 68**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**June 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. June 2014 Project Activities:

- During June 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor as outlined in the approved sampling schedule.
- During the week of June 9, 2014, the comprehensive groundwater sampling event commenced as scheduled. Groundwater samples were collected from 129 monitoring wells.
- During the week of June 16, 2014 groundwater samples were collected from ISTR monitoring wells 1-7, as outlined in the approved Work Plan.
- During June, Biotrap samplers were deployed in 6 monitoring wells (ISTR-1, ISTR05, TW-8B, TW-8D, MW-502 and MW-705DR); results from these samples will help assess biodegradation and the monitored natural attenuation progression on site.
- Monthly Progress Report (MPR) 67 was submitted on June 10, 2014.
- The monthly IQAT report is attached.

b. July 2014 Planned Project Activities:

- During July 2014, **de maximis** will submit MPR 68.
- During July 2014 TerraTherm will continue operation and sampling of ISTR system. Progress soil sampling is tentatively rescheduled from the week of July 8<sup>th</sup> to the last week in July.
- During July 2014 **de maximis** will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.

- c. Problems Encountered or Anticipated – None
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
June 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
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**Date:**  
July 1, 2014



## **IQAT Monthly Report June 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes





## **IQAT Monthly Report June 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the In-Situ Thermal Remediation (ISTR) portion of the Remedial Action (RA) at the Site during June 2014.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## 2.3 Independent Quality Assurance Team (IQAT)

Mr. David Lehnus and Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

## 2.4 TerraTherm

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

## 2.5 ARCADIS

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

## 2.6 Weston Solutions, Inc.

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

# 3. Summary of Activities and Observations this Reporting Period

## 3.1 General Overview of Site Activities

- Week of 6/2/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

TerraTherm installed turbulators into the oxidizer to increase efficiency of the oxidizer. TerraTherm noted a leak in the secondary heat exchanger and attempted to repair it. The source of the leak was not immediately obvious and TerraTherm will further investigate the situation and contact the equipment vendor. This heat exchanger is a secondary back-up unit; no downtime related to this heat exchanger issue has occurred.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 6/9/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

TerraTherm upgraded the Silicon Controlled Rectifiers (SCRs) and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs, to help maintain consistent power to the controller.

ARCADIS and O&M collected groundwater samples from 129 monitoring wells as part of the comprehensive groundwater monitoring program. A total of 54 wells were sampled using Hydrasleeve passive samplers and 72 wells were sampled using low flow techniques with a submersible bladder pump. Two wells were not sampled because one contained NAPL (CPZ-8R) and one was dry (MW-901D). Three other wells were sampled using alternative sampling methods: MW-209B was sampled with a bailer because of the limited water column and CPZ-1R and MW-704M was sampled using peristaltic pump because obstructions in the wells.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 6/16/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

An electrical phase loss caused system power loss during the overnight of June 17 leading to shutdown of the treatment system for approximately 12 hours. Discussions with CL&P indicated that an off-site electrical pole was damaged by a car causing the on-site loss of power.

On June 17, some of the Phase II heater wells were energized to target the area around TMP-20 located in the Phase 1 area (all of the Phase I heaters were energized on May 15, 2014).

O&M and ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-7 located in the treatment system wellfield.



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Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

Wells ISTR-2, ISTR-3, and ISTR-4 were sampled using hot groundwater sampling methods because of the elevated temperature of the groundwater at these well located within the Phase I heating area.

ARCADIS installed Biotrap quantarray sample collection devices into four Site wells (ISTR-1, ISTR-5, TW-8B and TW-8D) for analysis for microorganism growth to assess biodegradation potential for progress of monitored natural attenuation effectiveness.

ARCADIS continued to implement the perimeter air monitoring program.

- 6/23/14 to 6/30/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On June 23, TerraTherm conducted maintenance to the blower units (replacement of gaskets in the blowers) which required a brief shut down of the system.

ARCADIS collected groundwater samples from Hydrasleeve samplers in monitoring wells MW-906DR, CPZ-6A, CPZ-7R, and CPZ-8R in order to get baseline MNA parameters with the intent of assessing the use of Biotrap sampling devices into wells on the Site. ARCADIS also installed Biotrap sampling devices into these wells and wells MW-502 and MW-705DR (Biotrap sampling devices to be removed in approximately 30 days).

ARCADIS continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work



## **IQAT Monthly Report June 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

inconsistency. No Significant issue notifications were necessary during this reporting period.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on June 18 and 25. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

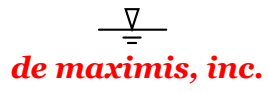
The perimeter air monitoring program is being implemented by ARCADIS and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 6/2/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 6/3/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system.
2. TerraTherm collected carbon influent and midfluent liquid samples and oxidizer influent and effluent vapor samples.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/4/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm noted a leak in the secondary heat exchanger and began to repair it. The source of the leak was not immediately obvious and further investigation will be completed. As this heat exchanger was a secondary unit, no downtime related to this issue is expected.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/5/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. O&M and ARCADIS recorded water levels in select monitoring wells prior to groundwater sampling event in order to use the data for groundwater modeling.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/6/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Installation of turbulators
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm installed turbulators into the oxidizer to increase the surface area of heating and to create a vortex in the vapor flow thus increasing efficiency of the oxidizer.
3. ARCADIS calibrated instrumentation for the pending groundwater sampling event and organized paperwork and glassware.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/9/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TeraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm tested SCR units in order to assess the units due to frequent failure.
3. ARCADIS and O&M personnel on site to begin the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/10/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Groundwater sampling setups, decontamination of pumps
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. A representative of Sprang visited the Site in order to upgrade the SCR units addressing the frequent failures.
3. TerraTherm collected weekly vapor and liquid samples as required in the O&M plan.
4. ARCADIS and O&M personnel on site to continue the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/11/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Decontaminating pumps, inspection of heat exchanger.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. Sprang upgraded the SCR units and all are working effectively.
3. ARCADIS and O&M personnel on site to continue the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/12/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm checked temp and vapor pressures on wellfield and adjusted vapor intake accordingly.
3. ARCADIS and O&M personnel on site to continue the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/13/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program and performed comprehensive groundwater monitoring.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

- Continued to monitor the treatment system and performing effluent and oxidizer screening.
- ARCADIS and O&M personnel on site to conclude the comprehensive groundwater monitoring program.
- O&M and ARCADIS completed the comprehensive groundwater monitoring program.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/16/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	x			Photos of groundwater sampling.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

- Continued to monitor the treatment system and performing effluent and oxidizer screening.
- O&M and ARCADIS collecting groundwater samples from monitoring wells ISTR-4 through ISTR-7 as part of the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/17/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Collection of hot groundwater samples.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm collected the weekly liquid influent and midfluent and vapor influent and effluent samples as specified in the sampling program.
3. O&M and ARCADIS completed collection of groundwater samples from monitoring wells ISTR-1 through ISTR-3 as part of the comprehensive groundwater monitoring program.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/18/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Installation of Biotrap sampling devices.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. An electrical phase loss caused system power loss over night leading to shutdown of the treatment system for approximately 12 hours. Discussions with CL&P indicated that an off-site electrical pole was damaged by a car causing the on-site loss of power.
3. ARCADIS installed Biotrap quantarray sample collection devices into four Site wells (ISTR-1, ISTR-5, TW-8B, TW-8D) for analysis for microorganism growth to assess biodegradation potential for progress of monitored natural attenuation effectiveness.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/19/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm collected weekly readings from the pressure monitoring points / vapor extraction wells and adjusted the vacuum, as necessary.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/20/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. TerraTherm shut off the dilution air valve.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/23/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. The system was briefly shutdown to conduct maintenance to the blower units (replaced gaskets in the blowers). The technicians conducting the maintenance work donned respirators because of the relatively high concentration of VOCs in the blower units.
3. ARCADIS installed hydrasleeve samplers in monitoring wells MW-906DR, CPZ-6A, CPZ-7R, and CPZ-8R in order to get baseline MNA parameters with the intent of assessing the use of biotrap sampling devices into wells on the Site.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 6/24/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm collected weekly carbon influent and effluent samples as well as oxidizer vapor influent and effluent samples as scheduled in the sampling matrix.
2. ARCADIS collected hydrasleeve samples from monitoring wells MW-906DR, CPZ-6A, CPZ-7R, and CPZ-8R in order to get baseline MNA parameters and installed biotrap sampling devices into these wells and wells MW-502 and MW-705DR on the Site to be removed in approximately 30 days.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/25/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 6/26/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. ARCADIS removed the biotrap sampler from ISTR-1 and submitted it via overnight FedEx to a laboratory in North Carolina. The trap was removed after only one week due to concerns that the elevated temperature in the groundwater would impair the bacteria growth and compromise the sample.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 6/27/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

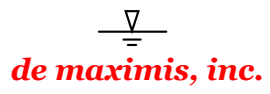
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing effluent and oxidizer screening.
2. Weston removed and cleaned the sanitary sewer discharge flow meter because it had become clogged and was not measuring the flow.



**Attachment 2**

**Representative Photos**

SRSNE Site June 2014 Monthly Report  
Representative Photographs



Date: 6/6/2014  
View of turbulators prior to installation.



Date: 5/5/14  
TerraTherm installing turbulators to increase efficiency of the oxidizer.



SRSNE Site June 2014 Monthly Report  
Representative Photographs



Date: 6/10/2014  
Collection of groundwater sample using hydrasleeve method.



Date: 6/10/2014  
Collection of groundwater sample using low flow sampling method.



SRSNE Site June 2014 Monthly Report  
Representative Photographs



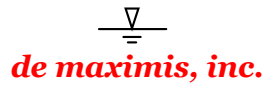
Date: 6/11/2014

Decontamination of sampling equipment used during the comprehensive sampling event.



Date: 6/11/2014

TerraTherm investigating problem encountered in the secondary heat exchanger (back-up unit).



**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Karen Lumino, Shannon Pociu, Derek LaRosee

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** June 4, 2014

---

On May 28, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Tim Mahoney, Robin Swift
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone

**I. Meeting Minutes**

- A. Minutes from the May 21, 2014 meeting were distributed on May 28, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up (5-15-14)
  - b) SCRs at design kW output (5-22-14)
  - c) Final commissioning of oxidizer (5-29-14)
  - d) Data uploaded to “Think-Thermal” website (5-27-14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays

**III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there have been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

**IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

**V. Quality Control / Quality Assurance**



- A. TerraTherm / QC
  - a) TerraTherm is working on requested changes for the “think-thermal” website.
  - b) TerraTherm summarized current operational conditions of the ISTR system
  - c) TerraTherm that the system is running smoothly and that energy input has been accelerated compared to other sites, this is due to 195 day schedule.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that the checklists have been reviewed. IQAT also noted that TerraTherm has been following the updated sampling plan since start-up.

#### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website  
(<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Current requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.
  - d) Add PID data, graph comparing to lab data

#### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

#### **VIII. Other Business**

- A. The Finalized RAWP and O&M plan will be uploaded to the SRS website and requested hardcopies and electronic copies of the documents of the documents are in production.
- B. The 5 year comprehensive groundwater sampling event has been scheduled to start June 9, 2014. A
- C. Weston Solutions has completed installation of the new valve vault that will enable one of the two spare force mains to be used during O&M. They are currently working on scheduling the installation of RW-15. A completion report will be submitted once the well is installed.

#### **IX. New Action Items**

- A. Review website as current data is uploaded.

#### **X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, June 4, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Karen Lumino

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** June 25, 2014

---

On June 18, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Tim Mahoney, Robin Swift, Derek LaRosee
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone, Chris Fuerst
- USEPA-Eva Davis
- CTDEEP- Shannon Pociu

#### **I. Meeting Minutes**

- A. Minutes from the May 28, 2014 meeting were distributed on June 18, 2014 comments received have been incorporated.

#### **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)

#### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.

- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

#### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

#### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
- a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 6/16/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Influent readings on the PID’s have been increasing and this trend is expected to continue
    - Temperature is approximately 60° C, adjustments based on data are expected to be made when the temperature reaches approximately 70 ° C
    - It is unknown how high PID readings are expected to get.
    - An additional circuit was added, it is currently ramping up and is expected to bring in additional vapor
    - There is a difference in the PID data vs Laboratory data on the Mass Removal Graph, this is due to a delay in receiving the laboratory data, and this graph will be updated as the data is received.
  - d) It was noted that the SCRs went down this am (6/18/14) and had to be restarted as a result of low voltage. Note: CL&P confirmed that there had been a pole vs car accident that had caused the voltage issue
- B. ARCADIS / QA
- a) No QA issues were noted during this period
- C. IQAT
- a) IQAT noted that all is going to plans and that the checklists have been reviewed. IQAT also noted that TerraTherm has been following the updated sampling plan since start-up.

#### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website  
(<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
- a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.
  - d) Add PID data, graph comparing to lab data
  - e) Add scatter plot including contract milestones has been updated
  - f) Add circuit layout drawing to website

#### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

#### **VIII. Other Business**

- A. The Finalized RAWP and O&M plan has been uploaded to the SRS website and hardcopies and electronic copies of the documents have been sent as requested.

- B. The 5 year comprehensive groundwater sampling event started on June 9, 2014 and was completed on June 17, 2014.
- C. Weston Solutions will schedule the installation of RW-15 upon approval of Technical Work Plan that has been submitted to the EPA.

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Temperatures from the ISTR wells will be obtained and monitored regularly.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, June 25, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

August 11, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 69 – July 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 69.

This report covers the period from July 1-31, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 69**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**July 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. July 2014 Project Activities:

- During July 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor as outlined in the approved sampling schedule.
- During July, Biotrap samplers were retrieved from 6 monitoring wells (ISTR-1, ISTR05, TW-8B, TW-8D, MW-502 and MW-705DR); results from these samples will help assess biodegradation rates and the progress of natural attenuation.
- Starting on July 9, 2014, Phase II heaters were set to idle, they were subsequently adjusted to 20%, and phase II extraction wells were opened. Phase II heaters have continued to ramp up throughout July and will continue to heat up in August.
- On July 10, 2014, received EPA's approval of the requested reduction in financial assurance.
- On July 16, 2014, the backup heat exchanger was removed from the ISTR system was removed for repair. The heat exchanger was repaired and reinstalled on July 23, 2014.
- On July 16, 2014, the Draft Confirmatory Sampling Work Plan was submitted to the Agencies for Review
- During the week of July 14, 2014 groundwater samples were collected from ISTR monitoring wells 1-7, as outlined in the approved Work Plan.
- On July 23, 2014, the Technical Work Plan for the RW-15 was approved by the EPA.
- During the week of July 28, 2014, progress samples were collected from five borings completed to bedrock within the Phase I area. The borings were located near TMP-5, TMP-10, TMP-24, TMP-47 and TMP-74.
- Monthly Progress Report (MPR) 68 was submitted on July 10, 2014.
- The monthly IQAT report is attached.

b. August 2014 Planned Project Activities:

- During August 2014, *de maximis* will submit MPR 69.
- During August 2014 TerraTherm will continue operation and sampling of ISTR system.
- During August 2014 the pilot hole for RW-15 will be installed and the installation of the well will be scheduled.
- During August 2014 *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.

c. Problems Encountered or Anticipated – None

- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None





**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
July 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
**de maximis, inc**  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
August 4, 2014



## **IQAT Monthly Report July 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report July 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal wellfield installation portion of the Remedial Action (RA) at the Site during July 2014.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report July 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 7/1/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On 7/3/14, TerraTherm adjusted the sensor length in temperature monitoring points TMP-74 and TMP-75 to allow for increased thickness of the concrete cover in those areas.



## IQAT Monthly Report July 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 7/7/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On 7/9/14, TerraTherm put the Phase II heater wells on idle.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 7/14/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On July 15, TerraTherm adjusted the Phase II heaters to 20% capacity and on July 16 opened the Phase II vapor extraction wells.

O&M and ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-7 located in the well field using hot groundwater sampling methods.

ARCADIS continued to implement the perimeter air monitoring program.

- Week of 7/21/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On July 23, the backup heat exchanger was removed with a crane and shipped to the manufacturer for repair.

ARCADIS retrieved biotrap samplers from monitoring wells TW-08B, TW-08D, and ISTR-5 that were installed in June. The samplers were shipped to Microbial Insights in Knoxville, Tennessee via FedEx overnight in an iced cooler for quantarray analysis.

ARCADIS continued to implement the perimeter air monitoring program.



## IQAT Monthly Report July 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

- Week of 7/28/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

TerraTherm collected progress soil samples from five borings completed to bedrock in the Phase I area. The borings were located near TMP-5, TMP-10, TMP-24, TMP-47 and TMP-74. The maximum PID reading was approximately 140 ppm at the boring location near TMP-47. The soil samples were submitted to Accutest of Marlborough, Massachusetts for analysis for volatile organic compounds. To enable the drill rig access to the boring location near TMP-5, the drill rig had to be lifted onto the wellfield with a crane.

On July 23, the back-up heat exchanger was returned to the Site and reinstalled with a crane.

On July 30, the transfer pump located in the vault that receives scrubber blow down failed and the water had to be temporarily transferred into a frac tank until the pump was replaced on July 31.

ARCADIS retrieved biotrap samplers from monitoring wells CPZ-6A, MW-502, MW-907M, MW-907DR, PZ-906DR, CPA-7R, CPZ-8R, and MW-905DR that were installed in June. The samplers were shipped to Microbial Insights via FedEx overnight in an iced cooler for quantarray analysis.

ARCADIS continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.



## **IQAT Monthly Report July 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on July 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, and 30<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

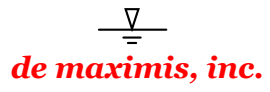
The perimeter air monitoring program is being implemented by ARCADIS and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/7/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight of all thermal wellfield installation work.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Sensor depths in TMP-74 and TMP-75 were adjusted because of inconsistency of the readings. It is suspected that their location near the edge of the concrete cap affected their readings.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/8/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected weekly vapor influent and effluent samples and liquid influent and midfluent samples from the carbon vessels.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/9/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/10/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/11/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
- 2.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/14/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Drillers on site to determine access to the interim sampling locations for TerraTherm.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/15/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Photos of GW sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS collected monthly groundwater samples from ISTR-1 through ISTR-7.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/16/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Photos of LNAPL collection from the oil water separator.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm opened the valves on the VEW wells in anticipation of ramping up the heaters in Phase 2 to ensure that a vacuum was present in the Phase 2 area.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/17/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm recorded vapor flow readings across the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/18/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/21/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS retrieved biotrap samplers from monitoring wells TW-08B, TW-08D, and ISTR-5 that were installed in June. The samplers were shipped to a laboratory in Tennessee via FedEx overnight in an iced cooler.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/22/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Vapor influent and effluent and carbon influent and midfluent samples were collected as scheduled.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/23/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The broken heat exchanger was removed with a crane and shipped for repair. It will be returned in approximately 7 to 10 days.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/24/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm recorded flow, pressure, and temperature data at the VEW wells across the wellfield and at each individual treatment system component.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/25/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 7/28/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected progress soil samples from borings completed to bedrock near TMP-24 and TMP-47. The maximum PID reading was approximately 140 ppm at TMP-47. Three samples were collected from each boring from the intervals with highest PID readings. Samples were submitted for analysis for VOCs.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/29/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected progress soil samples from borings completed to bedrock near TMP-10 and TMP-74.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/30/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected progress soil samples from borings completed to bedrock near TMP-5. The rig had to be lifted in with a crane that was brought through the western gate through the Yorski property. Permission was granted by Mrs. Yorski.
3. The back-up heat exchanger was returned and reinstalled.
4. The transfer pump from the scrubber blowdown failed and water had to be transferred into a frac tank until the pump can be repaired.
5. ARCADIS retrieved biotrap samplers from monitoring wells CPZ-6A, MW-502, MW-907M, MW-907DR, PZ-906DR, CPA-7R, CPZ-8R, and MW-905DR that were installed in June. The samplers were shipped to a laboratory in Tennessee via FedEx overnight in an iced cooler.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 7/30/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
---	----

**Contractors on-Site and Summary of Work Performed**

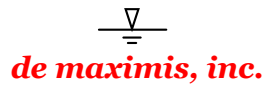
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Managing implementation of the perimeter air monitoring program.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Assisting with implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The failed scrubber blowdown pump was replaced and resumed water discharge into the sanitary sewer.



**Attachment 2**

**Representative Photos**

SRSNE Site July 2014 Monthly Report  
Representative Photographs



Date: 7/16/2014

TerraTherm decanting and containerizing LNAPL from oil/water separator.



Date: 7/23/14

TerraTherm loading back-up heat exchanger onto truck. The back-up heat exchanger is being sent to the manufacturer for repair.

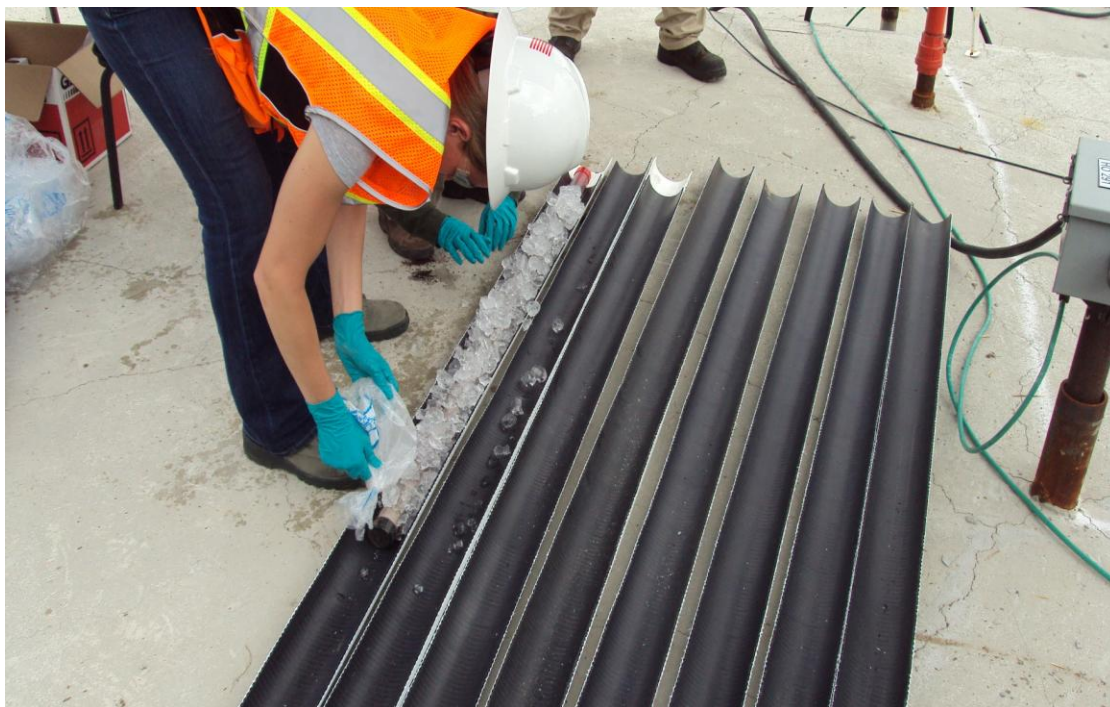


SRSNE Site July 2014 Monthly Report  
Representative Photographs



Date: 7/28/2014

TerraTherm setting up drill rig. During July, progress soil samples are being collected from five borings locations within the Phase I area.



Date: 7/28/2014

Icing hot soil samples.

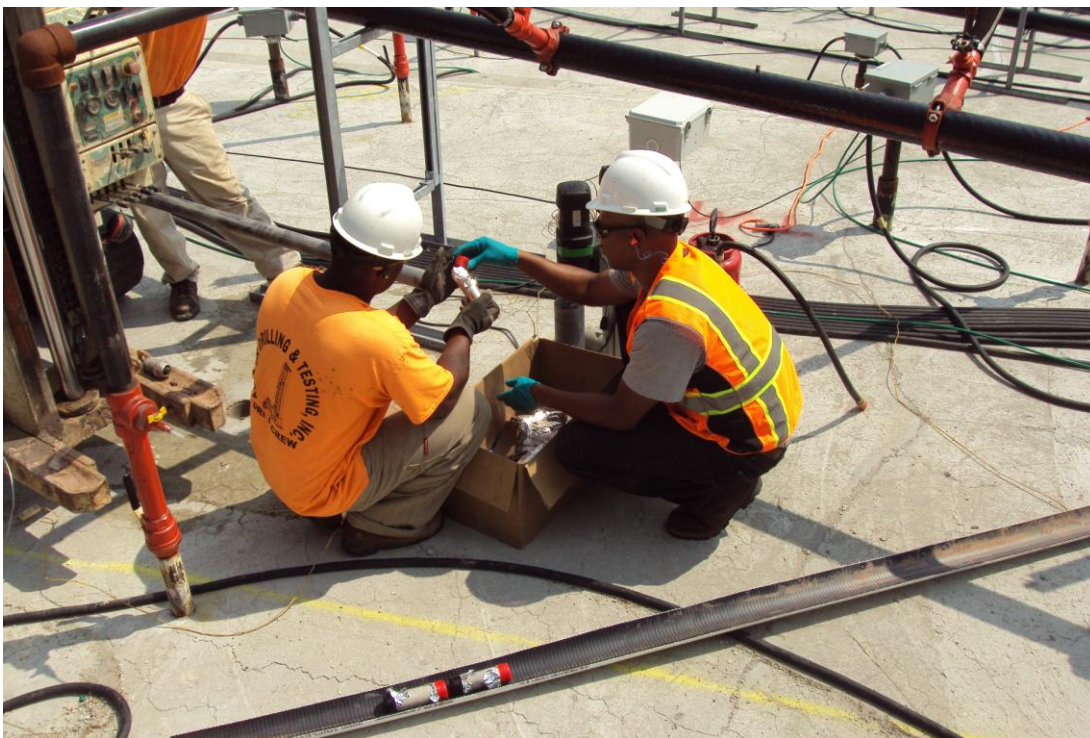


SRSNE Site July 2014 Monthly Report  
Representative Photographs



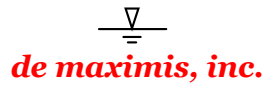
Date: 7/30/2014

To enable the drill rig access to the boring location near TMP-5, the drill rig had to be placed onto the wellfield with a crane.



Date: 7/30/2014

Retrieving soil samples from core barrel.



**Attachment 3**

**Progress Meeting Minutes**



**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Shannon Pociu

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** July 2, 2014

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On June 25, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Tim Mahoney, Robin Swift, Derek LaRosee
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone, Chris Fuerst
- USEPA-Eva Davis, Karen Lumino

#### **I. Meeting Minutes**

- A. Minutes from the June 18, 2014 meeting were distributed on June 25, 2014 comments received have been incorporated.

#### **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Vapor and liquid sampling has been performed as scheduled.

#### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.

- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

#### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

#### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
- a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 6/16/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Influent readings on the PID’s have been increasing and this trend is expected to continue
    - Temperature is approximately 60° C, adjustments based on data are expected to be made when the temperature reaches approximately 70 ° C
    - It is unknown how high PID readings are expected to get.
    - An additional circuit was added, it is currently ramping up and is expected to bring in additional vapor
    - There is a difference in the PID data vs Laboratory data on the Mass Removal Graph, this is due to a delay in receiving the laboratory data, and this graph will be updated as the data is received.
  - d) It was noted that TMP 67,74 & 75 are not heating as expected, TerraTherm is currently troubleshooting and adjustments are expected.
  - e) TerraTherm noted that temperature increases are ahead of schedule and that PID readings continue to trend upward.
  - f) TerraTherm is preparing for the progress soil sampling that is scheduled for mid-July when TMPs in Phase I uniformly reach 70 ° C
- B. ARCADIS / QA
- a) No QA issues were noted during this period
- C. IQAT
- a) IQAT noted that all is going to plans and that the checklists have been reviewed. IQAT also noted that TerraTherm has been following the updated sampling plan since start-up.

#### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
- a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.
  - d) Add PID data, graph comparing to lab data
  - e) Add scatter plot including contract milestones has been updated
  - f) Add circuit layout drawing to website
  - g) Added overall summary to weekly report

#### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. Weston Solutions will schedule the installation of RW-15 upon approval of Technical Work Plan that has been submitted to the EPA.
- B. The Draft Confirmation Sampling Work Plan will be finalized and sent to EPA and DEEP for review.

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Add last data of vapor sampling results received to PID vs data graph

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, July 2, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** July 16, 2014

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On July 9, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Tim Mahoney, Robin Swift, Derek LaRosee
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone, Chris Fuerst
- USEPA-Eva Davis, Karen Lumino
- CTDEEP- Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the June 25, 2014 meetings were distributed on July 8, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (6/9/14)
  - j) Vapor and liquid sampling has been performed as scheduled.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 6/16/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Influent readings on the PID’s have been increasing and this trend is expected to continue
    - Temperature is approximately 81° C
    - Adjustments in TMP 74&75 have resulted in an increase in temperature in these TMPs
    - TerraTherm continues to troubleshoot the TMP 67
    - There is a difference in the PID data vs Laboratory data on the Mass Removal Graph, this is due to a delay in receiving the laboratory data, and this graph will be updated as the data is received.
    - TMP 20 continues to have low temperatures, but temperatures have been increasing since turning on the additional circuit
  - d) TerraTherm noted that temperature increases are ahead of schedule and that PID readings continue to trend upward and they expect to see an increase in influent mass within the next week or so.
  - e) TerraTherm noted that they have set the Phase II heaters at idle to begin preparing to bring Phase II online.
  - f) TerraTherm is preparing for the progress soil sampling that is tentatively scheduled for July 28<sup>th</sup> and they will provide a sampling locations map and plan. Sampling is expected to take approximately 3 days.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up. IQAT requests information regarding the upcoming progress sampling event.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this.
  - d) Add PID data, graph comparing to lab data
  - e) Add scatter plot including contract milestones has been updated
  - f) Add circuit layout drawing to website
  - g) Added overall summary to weekly report

- h) Add IDs on scatterplot chart to TMPs that are not performing as expected

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. Weston Solutions will schedule the installation of RW-15 upon approval of Technical Work Plan that has been submitted to the EPA.
- B. The Draft Confirmation Sampling Work Plan will be finalized and sent to EPA and DEEP for review.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, July 16, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Robin Swift, Derek LaRosee

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** July 22, 2014

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On July 16, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Tim Mahoney, Alyson Fortune
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone, Chris Fuerst
- USEPA-Eva Davis, Karen Lumino
- CTDEEP- Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the July 9, 2014 meetings were distributed on July 16, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Vapor and liquid sampling has been performed as scheduled.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 7/15/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Influent readings on the PID’s have been increasing and this trend is expected to continue
    - Temperature is approximately 85° C
    - There is a difference in the PID data vs Laboratory data on the Mass Removal Graph, this is due to a delay in receiving the laboratory data, and this graph will be updated as the data is received, lag time is approximately 2 weeks.
  - d) TerraTherm noted that temperature increases are ahead of schedule and that PID readings continue to trend upward and there has been an increase in influent mass as expected.
  - e) TerraTherm noted that they have set the Phase II heaters at idle plan to increase temperature in the next few weeks.
  - f) TerraTherm is preparing for the progress soil sampling that is tentatively scheduled for July 28<sup>th</sup> and they have provided a sampling locations map and plan. Sampling is expected to take approximately 3 days.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up. IQAT requests information regarding the upcoming progress sampling event.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this;
  - d) Add PID data, graph comparing to lab data;
  - e) Add scatter plot including contract milestones has been updated;
  - f) Add circuit layout drawing to website;
  - g) Added overall summary to weekly report;
  - h) Add IDs on scatterplot chart to TMPs that are not performing as expected;



- i) Change “projected” Lab results to a dashed line on the on the Mass removal chart

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. Weston Solutions will schedule the installation of RW-15 upon approval of Technical Work Plan that has been submitted to the EPA.
- B. The Draft Confirmation Sampling Work Plan will be finalized and sent to EPA and DEEP for review. We will discuss the work plan during next week’s call.
- C. EPA requests a figure that shows the proposed locations of where the progress soil samples will be taken.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, July 23, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Shannon Pociu

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** July 30, 2014

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On July 23, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Derek LaRosee, Tim Mahoney, Alyson Fortune
- ARCADIS - Kevin Crowder, Michael Skowronek, Jeff Holden
- IQAT – David Lehnus, Clayton Smith
- O&M - Ryan Malone, Chris Fuerst
- USEPA-Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the July 16, 2014 meetings were distributed on July 22, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)
  - l) Backup heat exchanger removed for repair (7/23/14)

- m) Vapor and liquid sampling has been performed as scheduled.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 7/28/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Influent readings on the PID’s have been increasing and this trend is expected to continue
    - Temperature is approximately 89° C.
    - Centroid temperatures are expected to hit 90 ° C by the end of the week.
  - d) TerraTherm noted that temperature increases are ahead of schedule and that PID readings continue to trend upward and there has been an increase in influent mass as expected.
  - e) TerraTherm noted that they have set the Phase II heaters are heating as expected, they are currently at approximately 30 ° C, and will continue to ramp up in the next few weeks.
  - f) TerraTherm is preparing for the progress soil sampling that is tentatively scheduled for July 28<sup>th</sup> and they have provided a sampling locations map and plan. Sampling is expected to take approximately 3 days.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up. IQAT requests information regarding the upcoming progress sampling event.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this;
  - d) Add PID data, graph comparing to lab data;
  - e) Add scatter plot including contract milestones has been updated;
  - f) Add circuit layout drawing to website;
  - g) Added overall summary to weekly report;
  - h) Add IDs on scatterplot chart to TMPs that are not performing as expected;
  - i) Change “projected” Lab results to a dashed line on the on the Mass removal chart

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. Weston Solutions will schedule the installation of RW-15 upon approval of Technical Work Plan that has been submitted to the EPA.
- B. The Draft Confirmation Sampling Work Plan has been sent to EPA and DEEP for review. EPA has sent comments and will wait till progress sampling has been completed to make a final decision.
- C. A copy of the figure that shows the proposed locations of where the progress soil samples will be taken has been sent to EPA.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, July 30, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

September 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 70 – August 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 70.

This report covers the period from August 1-31, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bruce Thompson'.

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 70**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**August 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. August 2014 Project Activities:

- From August 1, 2014 to August 13, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor as outlined in the approved sampling schedule.
- During the week of August 11, 2014, a heat exchanger was installed on the discharge line of the ISTR system.
- On August 12, 2014, groundwater samples were collected from ISTR-4 and ISTR 7.
- On August 13, 2014, the oxidizer shut down and could not be restarted. Upon inspection of the oxidizer it was discovered that an internal part of the oxidizer called the daisy wheel, used to enhance mixing of vapors, gas, and air, had been damaged. Additionally, some of the refractory within the oxidizer had been damaged. A new daisy wheel and refractory repair along with additional preventative measures including an additional thermocouple, an additional flame analyzer and a clay filtration unit were installed starting the week of August 22<sup>nd</sup>. The oxidizer was placed back online and the block valve to the well field was opened, and the phase I heaters were set to 10% on August 29, 2014.
- On August 13, 2014, the well field vapors were redirected to the carbon units and heaters were set to idle following the oxidizer shut down. The vapor carbon was changed out every other day during the shutdown.
- During the week of August 4, 2014, the pilot hole for RW-15 was installed. Boring logs from the installation have been reviewed for well screen design and the installation of RW-15 will be scheduled for September.
- Monthly Progress Report (MPR) 69 was submitted on August 10, 2014.
- The monthly IQAT report is attached.

b. September 2014 Planned Project Activities:

- During September 2014, *de maximis* will submit MPR 70.

- During September 2014, TerraTherm will continue operation and sampling of ISTR system.
  - During September 2014, *de maximis* will submit a “root cause and analysis” memo regarding the August 13, 2014 oxidizer shutdown.
  - During September 2014, the installation of RW-15 will commence. It is anticipated that RW-13 and RW-14 will also be redeveloped.
  - During September 2014, TerraTherm will schedule the 2<sup>nd</sup> phase I progress soil sampling event.
  - During September 2014, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – The shutdown of the oxidizer resulted in the heaters being set to idle, delaying active treatment and extending ISTR operations.
- As of August 31, 2014, heaters were energized in Phase I for 91 days and in Phase II for 34 days.
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None





**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
August 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
**de maximis, inc**  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
September 2, 2014



## **IQAT Monthly Report August 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report August 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal wellfield installation portion of the Remedial Action (RA) at the Site during July 2014.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report August 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 Catalytic Combustion Corporation – TerraTherm subcontractor**

Catalytic Combustion Corporation (CCC) is the manufacturer of the oxidizer in use at the Site. CCC was on site to assist TerraTherm with repairs to the oxidizer.

### **2.6 ARCADIS**

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.7 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 8/4/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On August 4, the flame analyzer connected to the oxidizer was clogged and the system was shut down for approximately 4 hours to clear the line.

O&M continued to implement the perimeter air monitoring program.

- Week of 8/11/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system including; installation of a heat exchanger on the discharge pipe from the oxidizer to the sanitary sewer to reduce the temperature of the water entering the vault and performed maintenance/cleaning of the air stripper. Collection of samples is being completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

The oxidizer shut down on 8/13/14 at approximately 5:00 pm and could not be restarted. Upon shut down of the oxidizer, vapor from the wellfield was directed into the back-up carbon vessels. TerraTherm inspected the oxidizer to identify the cause of the problem. The inspection revealed that pre-combustion of vapors outside the combustion chamber had damaged the daisy wheel used to mix the solvent vapor and dilution air. A new daisy wheel was ordered and to optimize use of the carbon vessels until the oxidizer could be restarted a few system adjustments were implemented: On 8/14 the wellfield heaters were set to idle (10% power). The vacuum from the wellfield will be pulsed to sweep the system of potential condensate and vapor (e.g. the well field is “bottled up” for several hours and then vacuum is reintroduced to sweep the vadose zone). Routine carbon change outs are being scheduled.

On 8/12/14, ACRADIS collected groundwater samples from monitoring wells ISTR-4 through ISTR-7.

O&M continued to implement the perimeter air monitoring program.

- Week of 8/18/14 – Work activities conducted during this period include: TerraTherm continued operation, and monitoring of the ISTR treatment system utilizing the back-up carbon vessels until the oxidizer can be repaired. The wellfield heaters remain on idle (10% power) and the vapor through the system is being pulsed on a 4 to 6 hour cycle in order to control the load into the carbon units. Carbon change-out from the vessels is being performed every two days. CCC arrived on Site to remove the damaged daisy wheel and assess the oxidizer for any

additional damage. It was noted that portions of the refractory will need to be adjusted and/or replaced. Several short circuits were observed at the heaters in the wellfield due to the rapid reduction in energy to the heater wells on 8/14. These identified short circuits were repaired. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

O&M continued to implement the perimeter air monitoring program.

- Week of 8/25/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system through the back-up carbon vessels and collection of samples according to the approved schedule provided in the O&M Plan. Clay filtration tanks were installed between the air stripper and the oil-water separator and between the air stripper and the liquid carbon tanks to remove residual LNAPL. An additional flame analyzer was installed to monitor/assess vapor prior to the oxidizer inlet. The daisy wheel was replaced and the damaged refractory was repaired. The oxidizer was put back into operation on 8/29.

O&M continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

As noted above, the oxidizer shut down 8/13 through 8/29, and the power to the wellfield was set to idle (10% heating capacity) during that period. While the oxidizer was not operational, vapor from the wellfield was collected and directed into the back-up carbon vessels. TerraTherm was diligent in changing the carbon within those vessels to eliminate breakthrough and release of VOC to the atmosphere. Some minor Design changes are being implemented to enhance the system and to help prevent a recurrence of the condition that may have caused shutdown of the oxidizer, including; Adding clay filtration tanks, placement of an additional thermocouple to monitor temperature upstream of the combustion chamber, placement of a flame analyzer upgradient of the oxidizer to monitor/assess vapor prior to the oxidizer inlet, and installation of the reinforced daisy wheel. TerraTherm will



## **IQAT Monthly Report August 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

provide an updated Process and Instrumentation Diagram to document the changes.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on August 6<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup>, and 27<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

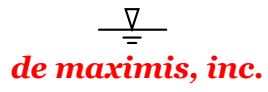
The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the operation of the system is outside the design, however the emergency contingency described in the O&M plan is being appropriately implemented and no releases to the atmosphere or the ground surface have occurred.



**Attachment 1**

**IQAT Daily Reports**



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/1/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/4/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The flame analyzer connected to the oxidizer was clogged and the system was shut down for approximately 4 hours to unclear the line.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/5/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent samples to the oxidizer and liquid influent and midfluent samples from the carbon tanks.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/6/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/7/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/8/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/11/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/12/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm installed a heat exchanger on the discharge line to the sanitary sewer in order to reduce the temperature on the pump in the vault.
3. TerraTherm cleaned the air stripper.
4. ARCADIS collected groundwater samples from monitoring wells ISTR-4 through ISTR-7.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/13/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The oxidizer went down due to unknown reasons approximately 5:00 pm on 8/13 and would not restart. The vapor was diverted into the back-up carbon vessels.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/14/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to inspect the oxidizer in an attempt to identify the cause of the problem for the oxidizer shutdown on 7/13.
2. The wellfield heaters were reduced to idle (at 10% capacity) with vapor treatment continuing through the back-up carbon system.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/15/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to investigate the cause for shutdown of the oxidizer on 8/13. It appears that the shutdown was attributed to failure of the “daisy wheel” which is an in-line mixer/diffuser located on the inlet to the oxidizer. A new part will be fabricated and expected delivery will be during the week of August 18.
2. Vapor treatment is continuing through the back-up carbon system.
3. The carbon was replaced in both back-up carbon vessels.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/18/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 6 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. Carbon was changed in one of the two carbon vessels.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/19/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by approximately 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. TerraTherm collected liquid influent and midfluent samples as wells as vapor influent samples.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/20/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. Carbon from the lead carbon vessel was changed out.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/21/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
CCC	Provide maintenance and repair the oxidizer

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. CCC on site for oxidizer service. Removed the damaged daisy wheel and inspected the oxidizer for additional damage. No damage was observed but the refractors will need to be readjusted.
4. Assessed short circuits that were identified in the wellfield due to rapid reduction in the current to the heaters.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/22/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Brideau Welding and Fabrication	TerraTherm welding subcontractor

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. The carbon in one of the two carbon filtration systems was replaced.
4. Brideau on Site to install sample ports into oxidizer effluent pipe for installation of a new prevex flame analyzer. Also installed port for an additional thermocouple in the oxidizer.
5. Assessed short circuits that were identified in the wellfield due to rapid reduction in the current to the heaters.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/25/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. Performed a carbon changeout of the vapor carbon vessels.
4. TerraTherm installed a clay filtration tank between the air stripper and the oil water separator.
5. Installed an additional clay filter tank between the air stripper and the existing liquid carbon tanks.
6. Received replacement daisy wheel.
7. Installed an additional LFL prenex meter to assess concentration prior to entry into the oxidizer in order to add mix air if necessary to prevent precombustion that led to damaging the daisy wheel.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/26/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
CCC	On Site to reconstruct the oxidizer

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. Vapor treatment is continuing through the back-up carbon system.
3. Replaced the daisy wheel on the oxidizer and repaired the refractory within the oxidizer.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/27/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
CCC	On Site to reconstruct the oxidizer

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continues to operate the system on cycles of vapor removal followed by 4 hours of blower shutdown.
2. The oxidizer piping and electrical was reattached and the additional prevex LFL meter was calibrated.
3. Vapor treatment is continuing through the back-up carbon system.
4. A carbon changeout was performed on one of the back-up carbon vessels.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 8/28/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
CCC	On Site to reconstruct the oxidizer

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. The oxidizer was tested and operated on intake air in order to check calibrations and test the new thermocouple and prevex flame analyzer.
2. Vapor treatment is continuing through the back-up carbon system.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 8/29/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

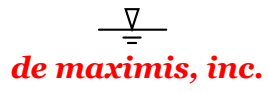
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. The oxidizer was restarted and the block valve was opened for operation. The wellfield heaters remain on idle (at 10% capacity) and the vapor is being directed through the oxidizer
2. Carbon in both vessels was changed.



**Attachment 2**

**Representative Photos**

SRSNE Site August 2014 Monthly Report  
Representative Photographs



Date: 8/12/2014

View of new heat exchanger placed on sanitary discharge line.



Date: 8/12/14

View of TerraTherm cleaning air stripper.



SRSNE Site August 2014 Monthly Report  
Representative Photographs



Date: 8/12/2014  
TerraTherm disassembling oxidizer and removing daisy wheel.



Date: 8/21/2014  
View of damaged daisy wheel.



SRSNE Site August 2014 Monthly Report  
Representative Photographs



Date: 8/22/2014  
View of staged carbon.



Date: 8/22/2014  
View of carbon change out being performed.



**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Derek LaRosee, Kevin Crowder,  
**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes

**Date:** August 13, 2014

---

On August 6, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Alyson Fortune, Steffan Griepke
- ARCADIS - Michael Skowronek, Jeff Holden
- IQAT – Clayton Smith, David Lehnus
- USEPA-Eva Davis, Karen Lumino
- CTDEEP- Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the July 30, 2014 meetings were distributed on August 6, 2014 comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)
  - l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)

- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Vapor and liquid sampling has been performed as scheduled.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 8/5/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Temperature is approximately 95° C in phase I and 45° C in phase II.
    - TerraTherm reported that 75% of centroids have reached 85° C, which is a payment milestone.
    - Mass removal totals, based on Lab data, PID readings and LNAPL, are estimated to be approximately 16,000lbs.
  - d) TerraTherm noted that they have set the Phase II heaters are heating as expected, they are currently at approximately 45° C at 60%, and will continue to ramp up to 70% on 8/7/14 and continue to increase.
  - e) Preliminary results from progress soil sampling at TMP 5 and 10 show impacts in the deep zone/bedrock interface.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Requests included:
  - a) Breaking up mass removal data;
  - b) Adding an environmental monitoring tab that includes Air Monitoring Data and ISTR data with graphs;
  - c) Linking Project Portal environmental data to this;
  - d) Add PID data, graph comparing to lab data;
  - e) Add scatter plot including contract milestones has been updated;
  - f) Add circuit layout drawing to website;
  - g) Added overall summary to weekly report;

- h) Add IDs on scatterplot chart to TMPs that are not performing as expected;
- i) Change “projected” Lab results to a dashed line on the on the Mass removal chart;
- j) Add ISTR wells to wellfield layout map;
- k) Estimate mass removal based on flammability analyzer.

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. The Draft Confirmation Sampling Work Plan has been sent to EPA and DEEP for review. EPA has sent comments and will wait till progress sampling has been completed to make a final decision.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, August 13, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Clayton Smith, David Lehnus

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 8/13/14 Project Call

**Date:** August 20, 2014

---

On August 13, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Alyson Fortune, Derek LaRosee
- ARCADIS - Michael Skowronek, Jeff Holden, Kevin Crowder
- O&M - Ryan Malone
- USEPA-Eva Davis, Karen Lumino
- CTDEEP- Shannon Pociu

## **I. Meeting Minutes**

- A. Minutes from the August 6, 2014 meetings were distributed on August 13, 2014; comments received have been incorporated.

## **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)



- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Bypass heat exchanger directly to oxidizer (8/12/14)
- p) Vapor and liquid sampling has been performed as scheduled.

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period. There has been additional emphasis on safety and housekeeping measures that will need to be observed during operations of the system.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm is making changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 8/12/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - Temperature is approximately 98° C in phase I and 57° C in phase II.
    - Mass removal totals, based on Lab data, PID readings and LNAPL are estimated to be approximately 20,000lbs.
  - d) Results from progress soil sampling show impacts in the deep zone/bedrock interface, Laboratory data from samples taken has been uploaded to the “think-thermal” website.
  - e) TerraTherm completed the bypass of the heat exchanger to the oxidizer.
  - f) TerraTherm is now logging data every 2 minutes from the Flammability Analyzer, as opposed to every 2 hours. This will help gain a better picture of current system operations and adjust overall approach as needed.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up.

### **VI. Engineering and Design Items**

- A. TerraTherm is currently working on uploading current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports (<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requested. Additional requests are below:
  - a) Add removal rate to flammability analyzer;
  - b) Show one line on mass removal.

### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. Data from pilot hole for RW-15 is currently being reviewed to finalize design of well.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, August 20, 2014.



**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 8/20/14 Project Call

**Date:** August 27, 2014

---

On August 20, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson, Rowan Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone, Derek LaRosee
- ARCADIS - Michael Skowronek, Jeff Holden, Kevin Crowder
- IQAT - Clayton Smith, David Lehnus
- O&M - Ryan Malone
- USEPA-Eva Davis, Karen Lumino
- CTDEEP- Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the August 13, 2014 meetings were distributed on August 20, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Bypass heat exchanger directly to oxidizer (8/12/14)
- p) Oxidizer shut down (8/13/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 8/19/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - The thermal oxidizer shut down on Wednesday, August 13<sup>th</sup> and upon investigation discovered that a piece of equipment (daisy wheel) had been damaged inside the oxidizer. TerraTherm is still unsure of the root cause of the damage, but is currently reviewing data to look for a cause and measures that could be installed to prevent this type of incident from happening in the future.
    - The backup vapor carbon system has been online since shutdown and carbon change out is occurring every other day.
    - The wellfield heaters are currently idling at 10% with vapor treatment through carbon
    - Temperature is approximately 98° C in phase I and 68° C in phase II.
  - d) A clay filter has been place in the treatment system to remove NAPL that has not been removed by the oil water separator and scrubber.
  - e) TerraTherm anticipates that the oxidizer will be back on line on Wednesday, August 27.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up.

### **VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/> username: srsnegroup, password: cleanup2014) where the data during ISTR will be posted was given by TerraTherm, the website can be adjusted to show additional data as requeste

### **VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer offline

**VIII. Other Business**

- A. None

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, August 27, 2014.



***de maximis, inc.***

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

October 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 71 – September 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 71.

This report covers the period from September 1-30, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 71**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**September 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

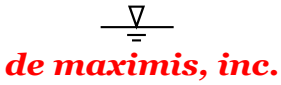
a. September 2014 Project Activities:

- From September 1, 2014 to September 30, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule.
- During the week of September 2, 2014, phase I heaters were ramped up to full power and vapors continue to be routed through the oxidizer.
- During the week of September 15, 2014, groundwater samples were collected from ISTR-1 through ISTR-7.
- On September 15, 2014, the Memorandum of Agreement was signed by EPA.
- Submitted on September 16, 2014, an analysis supporting a proposed clean up level for dioxin in soil.
- On September 18, 2014, *de maximis* submitted a “root cause analysis” memo summarizing the likely cause and resulting precautions and safety factors that have been put in place following the August 13, 2014 oxidizer shutdown.
- Monthly Progress Report (MPR) 70 was submitted on September 10, 2014.
- The monthly IQAT report is attached.

b. October 2014 Planned Project Activities:

- During October 2014, *de maximis* will submit MPR 71.
- During October 2014, TerraTherm will continue operating and sampling of ISTR system.
- During October 2014, *de maximis* will submit an addendum to “root cause and analysis” memo, submitted on September 18, 2014. The addendum will provide an analysis of the August 13<sup>th</sup> shutdown by Focus Environmental, Inc.

- Starting the week of October 6, 2014, the installation of RW-15 will commence. RW-13 and RW-14 will also be redeveloped during this time period.
  - Starting the week of October 13, 2014, TerraTherm will begin the 2<sup>nd</sup> phase I progress soil sampling event.
  - During October 2014, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – The shutdown of the oxidizer resulted in the heaters being set to idle, delaying active treatment, this resulted in an extension of the ISTR operations. An updated schedule will be submitted in October 2014.
- d. Results of Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
September 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
**de maximis, inc**  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
October 7, 2014





## **IQAT Monthly Report September 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report September 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal wellfield installation portion of the Remedial Action (RA) at the Site during July 2014.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report September 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 9/2/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. The Phase I heaters were ramped up to 40% of maximum capacity as recovery of the system continued following the extended shut down of the oxidizer (shutdown occurred on 8/13/14 and the oxidizer was restarted on 8/25 as noted in the August IQAT Report). Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

ARCADIS collected groundwater samples from ISTR-1 through 3 to complete sampling efforts that were initiated before oxidizer shutdown.



## IQAT Monthly Report September 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

An ARCADIS wetland scientist inspected the wetlands for invasive species and removed identified species.

O&M continued to implement the perimeter air monitoring program.

- Week of 9/8/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. The Phase I heaters were ramped up to approximately 60% to 70% of maximum capacity. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. The clay filter was taken offline because of foaming in the air stripper causing high level alarms. A foam control solution (Foamtrol) was placed in-line with the oil/water separator discharge to the air stripper in order to reduce the volume of foam that is forming in the air stripper. Approximately 100 gallons of LNAPL was removed from the oil/water separator and stored in drums located within the system containment pad.

ARCADIS and O&M personnel continued to remove invasive species from the wetland areas.

O&M continued to implement the perimeter air monitoring program.

- Week of 9/15/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. A number of weak and damaged vapor extraction hoses were replaced due to deterioration. Approximately 60 gallons of LNAPL was removed from the oil/water separator.

ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-7 as part of regularly scheduled monthly event. ARCADIS also collected groundwater sample from monitoring well MW-1001R due to abnormal analytical data from previous sampling event.

O&M continued to implement the perimeter air monitoring program.

- Week of 9/22/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

O&M continued to implement the perimeter air monitoring program.

- Week of 9/22/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

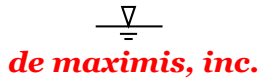
Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### 3.4 IQAT Photo Documentation of Work

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### 3.5 Project Construction Meetings

The IQAT participated at Construction Progress Meetings conducted via teleconference on September 3<sup>th</sup>, 10<sup>th</sup>, and 24<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.



## **IQAT Monthly Report September 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.6 Air Quality Monitoring**

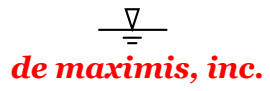
The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 9/2/14

Initial when  
complete: D.L

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. The Phase I Heaters were ramped up to 30% capacity following running on idle (at 10% capacity) over the Labor Day weekend.
2. ARCADIS inspected the wetlands to identify and remove invasive species.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/3/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The Phase I Heaters were ramped up to approximately 33% capacity.
3. ARCADIS collected groundwater samples from ISTR-1 through ISTR-3 to complete sampling efforts that were initiated before oxidizer shutdown during August.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/4/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The Phase I Heaters were ramped up to approximately 35% capacity.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/5/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The Phase I Heaters were ramped up to ~40% capacity.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/8/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The Phase I Heaters were ramped up to ~50% capacity.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/9/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS and O&M removed invasive species from the swale and wetlands on the eastern side of the Site.
3. The clay filter was taken offline because of foaming in the air stripper causing high level alarms. TerraTherm to assess the solution to the foam forming in the air stripper and continue to run without the clay filter until it is resolved.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/10/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS and O&M removed invasive species from the swale and wetlands on the eastern side of the Site.
3. The Phase I heaters were ramped up to ~60% - 70% capacity.
4. TerraTherm removed approximately 40 gallon of LNAPL from the oil/water separator.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/11/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/12/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 20 gallon of LNAPL from the oil/water separator.
3. A foam control solution (Foamtrol) was placed inline with the oil/water separator discharge to the air stripper in order to reduce the volume of foam that is forming in the air stripper.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/15/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 20 gallon of LNAPL from the oil/water separator.
3. The Foamtrol solution appears to have successfully reduced the foam content in the air stripper.
4. TerraTherm filled small gaps, were needed, with cement to control any potential issue associated with release of vapor and/or odors (gaps were located between steel heater/ or vapor extraction wells and the concrete cap) and repaired a damaged pipe coupling.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/16/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			GW sampling of MW-1001R
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Vapor influent and effluent samples and liquid influent and midfluent samples were collected.
3. TerraTherm removed approximately 20 gallon of LNAPL from the oil/water separator.
4. ARCADIS collected a groundwater sample from monitoring well MW-1001R to verify some abnormal analytical data from a previous sampling event.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/17/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			GW sampling of ISTR wells
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 20 gallon of LNAPL from the oil/water separator.
3. ARCADIS collected groundwater samples from monitoring wells ISTR-1, and ISTR-5 through ISTR-7 as part of regularly scheduled sampling event.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 9/18/14

Initial when  
complete:

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Repairs to vapor extraction well tubing and well sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm replaced some vapor extraction well tubing that started to show signs of wear, as needed.
3. ARCADIS collected groundwater samples from monitoring wells ISTR-2 through ISTR-4 as part of regularly scheduled event.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/19/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Well sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS collected groundwater samples from monitoring well ISR-2, ISTR, 3, ISTR-4, and ISTR-6 as part of the regularly scheduled monthly event.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/22/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/23/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/24/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/25/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/26/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Arcadis collected composite samples of the spent carbon from the emergency tanks for disposal characterization.
3. TerraTherm shored a concrete step from the wellfield that had begun to sag and pull away from the concrete cap.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/29/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 30 gallons of LNAPL from the oil water separator.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 9/30/14

**Initial when  
complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

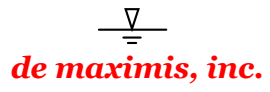
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.



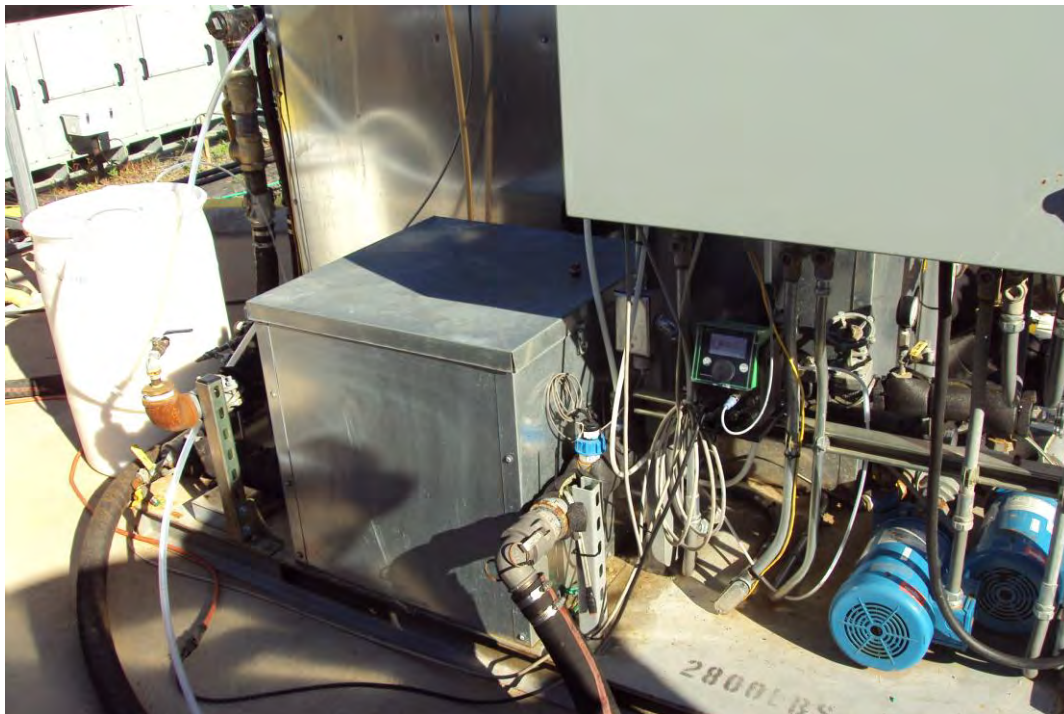
**Attachment 2**

**Representative Photos**

SRSNE Site September 2014 Monthly Report  
Representative Photographs



Date: 9/3/2014  
Sampling ISTR groundwater monitoring well ISTR-4



Date: 9/12/14  
View of foam control solution (Foamtrol) equipment that is placed in-line with the oil/water separator discharge to the air stripper, to reduce the volume of foam that is forming in the air stripper.



SRSNE Site September 2014 Monthly Report  
Representative Photographs



Date: 9/16/2014

Sampling groundwater monitoring well MW-1001R



Date: 9/18/2014

View of old vapor extraction well tubing that has been replaced with new tubing.



SRSNE Site September 2014 Monthly Report  
Representative Photographs



Date: 9/18/2014

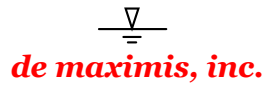
View of cement placed to fill expansion gap between Heater well and concrete cap.



Date: 9/30/2014

View of drummed LNAPL recovered from the oil/water separator being sent off-site for disposal. The material is being sent to the Clean Harbors Facility located in Deer Park, TX.





**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Clayton Smith

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 9/3/14 Project Call

**Date:** September 10, 2014

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On September 3, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Derek LaRosee
- ARCADIS - Michael Skowronek, Jeff Holden, Kevin Crowder
- IQAT - David Lehnus
- O&M - Ryan Malone
- USEPA- Eva Davis, Karen Lumino
- CTDEEP - Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the August 27, 2014 meetings were distributed on September 3, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 –8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 9/2/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - The thermal oxidizer shut down on Wednesday, August 13<sup>th</sup> and upon investigation discovered that a piece of equipment (daisy wheel) had been damaged inside the oxidizer. The oxidizer was repaired and an additional thermocouple and flame analyzer were added to prevent this type of incident from happening in the future. A root cause analysis memo is being completed and will be issued after it is reviewed.
    - The wellfield heaters are currently at 40% and the oxidizer is online.
    - Temperature is approximately 95° C in phase I and 65° C in phase II.
  - d) A clay filter has been placed in the treatment system to remove NAPL that has not been removed by the oil water separator prior to scrubber.
  - e) TerraTherm will keep the phase I heaters at 40% to observe the system and will increase phase I heaters on Monday and possibly increase phase II heaters at the end of next week.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up but has lapsed since the shutdown of the oxidizer..

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer offline

**VIII. Other Business**

- A. None

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, September 10, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Clayton Smith

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 9/10/14 Project Call

**Date:** September 23, 2014

---

On September 10, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Derek LaRosee
- ARCADIS - Michael Skowronek, Jeff Holden, Kevin Crowder
- IQAT - David Lehnus
- O&M - Ryan Malone
- USEPA- Eva Davis, Karen Lumino
- CTDEEP - Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the September 3, 2014 meetings were distributed on September 10, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 9/8/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - The root cause analysis memo, following the August 13<sup>th</sup> shutdown, is currently being finalized.
    - The phase I well field heaters are currently between 60 and 70% and the oxidizer is online.
    - Temperature is approximately 95° C in phase I and 70° C in phase II.
  - d) An antifoaming agent has been added to air stripper because of excessive foaming most likely caused by the clay filter that has been placed online.
  - e) TerraTherm will continue to observe the system and analyze data received from flame analyzers moving forward, possibly increasing phase II heaters at the end of next week.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up but has lapsed since the shutdown of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. None

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit “root cause analysis memo”
- C. TerraTherm to submit an updated schedule

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, September 17, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Ryan Malone

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 9/24/14 Project Call

**Date:** October 1, 2014

---

On September 24, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Derek LaRosee
- ARCADIS - Michael Skowronek, Jeff Holden, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- USEPA- Eva Davis, Karen Lumino
- CTDEEP - Shannon Pociu

**I. Meeting Minutes**

- A. Minutes from the September 10, 2014 meetings were distributed on September 23, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)



- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 9/23/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - The root cause analysis memo, following the August 13<sup>th</sup> shutdown, was submitted on September 18<sup>th</sup>, the memo will be revised or an addendum will be completed following final analysis from Prevex.
    - The phase I well field heaters have recovered to the temperatures they were before the oxidizer shutdown.
    - Phase II temperatures continue to rise most likely from phase I heaters and thermal costing.
  - d) An antifoaming agent has been added to air stripper because of excessive foaming most likely caused by the clay filter that has been placed online.
  - e) TerraTherm will continue to observe the system and analyze data received from flame analyzers moving forward, possibly increasing phase II heaters at the end of the month is it appears that the system is properly operating and phase I is coming off peak.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. None

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit revised or addendum to “root cause analysis memo”
- C. TerraTherm to submit an updated schedule the end of next week.
- D. Installation of RW-15 to commence the week of October 6<sup>th</sup>
- E. TerraTherm plans to perform the second progress soil sampling starting the wee

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, October 1, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

November 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 72 – October 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 72.

This report covers the period from October 1-31, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 72**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**October 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. October 2014 Project Activities:

- From October 1, 2014 to October 31, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule.
- TerraTherm continues to maintain optimum temperatures (100°C) in phase I heaters. Phase II heaters have been ramped up to 85% power and Phase II soils are currently at approximately 97°C.
- RW-15 was installed during the week of October 6, 2014. Weston Solutions is currently working to tie in the electrical and plumbing to bring the well on-line. RW-13 and RW-14 were also redeveloped during the installation of RW-15.
- TerraTherm performed the 2<sup>nd</sup> phase I progress soil sampling event from October 13, 2014 to October 21, 2014. Results indicated that one boring near TMP-70 had concentrations of xylenes slightly above Interim NAPL cleanup levels.
- On October 15, 2014, *de maximis* submitted the draft Supplemental Containment Action Plan (SCAP) to the Agencies for review and comment.
- On October 30, 2014, *de maximis* submitted a draft Revised Confirmatory Sampling Work Plan to the Agencies for review and comment.
- Monthly Progress Report (MPR) 71 was submitted on October 10, 2014.
- The monthly IQAT report is attached.

b. November 2014 Planned Project Activities:

- During November 2014, *de maximis* will submit MPR 72.
- During November 2014, TerraTherm will continue operation and sampling of ISTR system.
- Starting the week of November 10, 2014, *de maximis* will begin confirmation sampling of phase I, sampling is expected to take approximately 2 weeks.

- During November 2014, *de maximis* will submit an addendum to “root cause and analysis” memo, submitted on September 18, 2014. The addendum will provide an analysis of the August 13<sup>th</sup> shutdown by Focus Environmental, Inc.
  - During November 2014, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – The shutdown of the oxidizer resulted in the heaters being set to idle, delaying active treatment, this resulted in an extension of the ISTR operations. An updated schedule has been submitted.
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



***Disclaimer:*** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
October 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
***de maximis, inc***  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
November 6, 2014



## **IQAT Monthly Report October 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes





## **IQAT Monthly Report October 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the In-Situ Thermal Remediation (ISTR) portion of the Remedial Action (RA) at the Site during October 2014.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report October 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm Inc.**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 Aquifer Drilling and Testing Inc.**

Aquifer Drilling and Testing Inc. (ADT) was contracted by TerraTherm to provide drilling services to support collection of the interim soil sampling being performed in the Phase I portion of the ISTR area during this period.

### **2.6 ARCADIS**

ARCADIS responsibilities include overall technical support to the SRSNE Group and Project Coordinator during progression of work. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.7 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 10/1/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. TerraTherm continued collection of samples according to the approved sampling schedule and monitoring is being performed as provided in the O&M Plan.



## IQAT Monthly Report October 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

O&M continued to implement the perimeter air monitoring program.

- Week of 10/6/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system, replaced the heater and liner in HO-497 due to short circuits from the heater element damaging the liner, replaced approximately 20 VEW hoses and repaired minor cracks that developed in the concrete cover in the area of heater cans, as necessary. TerraTherm continued collection of samples according to the approved sampling schedule and monitoring is being performed as provided in the O&M Plan.

Weston oversaw the installation and development of recovery well RW-15 in the vicinity of RW-13 and RW-14. Installation of the recovery pump and connection of the water and utility lines to be completed at a later date.

O&M continued to implement the perimeter air monitoring program.

- Week of 10/13/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. TerraTherm continued collection of samples according to the approved sampling schedule and monitoring is being performed as provided in the O&M Plan.

TerraTherm oversaw the collection of interim soil samples from targeted areas located in the Phase I area. Samples were collected from soil borings located adjacent to temperature monitoring point TMP-16, 17, 34, 36, 47, 48, 57, 58, 59, 70, 74, and 75. Several of the sampling locations required placement of the drill rig with a crane due to obstructions from vapor extraction system lines.

ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-7 as part of regularly scheduled monthly event.

O&M continued to implement the perimeter air monitoring program.

- Week of 10/20/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Spent vapor carbon and filtration clay were sent offsite for disposal. The filter on the sanitary discharge pipe was cleaned to resolve high level alarms caused by the clogged filter. Phase I



## IQAT Monthly Report October 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

interim soil samples were collected from locations near TMP-2, 3, 9, 10, 12, 20, and 22.

TerraTherm continued collection of samples according to the approved sampling schedule and monitoring is being performed as provided in the O&M Plan.

O&M continued to implement the perimeter air monitoring program.

- Week of 10/27/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. TerraTherm continued collection of samples according to the approved sampling schedule and monitoring is being performed as provided in the O&M Plan.

The sanitary sewer transfer pump failed. A frac tank was delivered to accept the sanitary discharge water while a new pump was obtained and the discharge line was cleared of buildup that may also be constricting the flow.

O&M continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### 3.4 IQAT Photo Documentation of Work

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.



## **IQAT Monthly Report October 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on October 1st, 8th, 22nd, and 29th. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

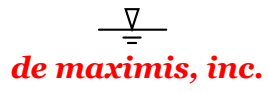
The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/1/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/2/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 25 gallons of LNAPL from the oil/water separator.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/3/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm removed approximately 15 gallons of LNAPL from the oil/water separator.
3. TerraTherm collected a vapor influent sample in an attempt to further characterize the content of the vapor entering the oxidizer.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/6/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent sample with a summa canister in order to determine BTU levels of the vapor entering the oxidizer.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/7/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected weekly vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.
3. TerraTherm collected vapor influent sample with a summa canister in order to determine BTU levels of the vapor entering the oxidizer.
4. Weston began installation of RW-15.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 10/8/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected weekly vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.
3. TerraTherm replaced the heater and liner in HO-497 due to short circuits from the heater element damaging the liner.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/9/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm replaced approximately 20 VEW hoses and repaired minor cracks in the concrete cover surrounding heater cans in 7 locations.
3. Weston completed installation of RW-15.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/10/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued to repair minor cracks in the concrete cover, as necessary, in the area of heater cans.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/13/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm began collection of confirmatory soil samples of Phase I treatment area. Samples collected from 21-24' interval of TMP-74. Coring was started at TMP-75 but refusal was encountered. Will return tomorrow to finish boring.
3. ARCADIS collected monthly groundwater samples from monitoring wells ISTR-7, ISTR-6, and ISTR-5.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/14/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Sampling monitoring wells, drilling, shoring the driveway for crane access.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent and liquid influent and midfluent samples as part of the weekly schedule.
3. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-75 (23 feet) TMP-70 (4 ft, 6.5 ft, 18 ft and 20 ft) and TMP-59 (2 ft and 19 ft).
4. ARCADIS collected monthly groundwater samples from monitoring wells ISTR-1 through ISTR-4.
5. Weston rebuilt the roadway along the northern boundary of the wellfield so that a crane could access the western side of the wellfield to place the drill rig for confirmatory sampling.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/15/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Sampling monitoring wells, drilling, shoring the driveway for crane access.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-48 (16 feet), TMP-47 (16 ft), and TMP-58 (2 ft, 19 ft).

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/16/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Sampling monitoring wells, drilling, shoring the driveway for crane access.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.
3. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-57 (4 feet), TMP-36 (12 ft, 15 ft), and TMP-34 (2 ft, 16 ft).

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/17/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-16 (2 feet, 16 ft), and TMP-17 (4 ft).

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/20/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken	X			Moving the geoprobe with the crane.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-17 (4 feet), and TMP-9 (13 ft), TMP-3 (4 ft), and TMP-2 (4 ft, 9 ft, 11 ft) .
3. TerraTherm patched concrete around the heater cans.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/21/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling & Testing (ADT)	TerraTherm subcontractor providing drilling services (geoprobe).

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent and liquid influent and midfluent samples as part of the approved sampling schedule.
3. TerraTherm collected confirmatory soil samples of Phase I treatment area from borings advanced near TMP-10 (2 feet, 5 feet), TMP-12 (2 ft, 14 ft) TMP-20 (4 ft), and TMP-22 (4 ft).

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 10/22/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/24/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Liquid carbon was removed and replaced, and clay from the clay filter was removed and disposed off-site.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 10/27/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/28/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected weekly vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.
3. The sanitary sewer transfer pump failed and became unable to discharge water into the sanitary sewer. A frac tank was delivered to accept the sanitary discharge water until a new pump can be installed.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/29/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. The sanitary sewer transfer pump was temporarily repaired, however the flow rate is reduced and a fraction of the water will continue to be discharged into a frac tank until a new pump has been installed.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 10/30/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
ARCADIS	Provide consulting support.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Chlorine tablets were introduced into the vault effluent at the sanitary sewer transfer pump in an effort to clear the pipes of fowling that is constricting the flow. The flow rate improved and it appears that the pump is able to maintain a discharge rate sufficient to avoid a high level alarm.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 10/31/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

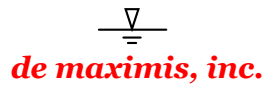
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by Arcadis	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm and O&M constructed a drum containment pad to store the LNAPL drums that are collecting on the process pad.



**Attachment 2**

**Representative Photos**

SRSNE Site October 2014 Monthly Report  
Representative Photographs



Date: 10/13/2014  
Preparing to extract soil sample during Phase I interim sampling.



Date: 10/13/14  
Typical example of cooling hot soil sample (collected during Phase I interim sampling).



SRSNE Site October 2014 Monthly Report  
Representative Photographs



Date: 10/13/2014

ARCADIS collecting a groundwater sample from monitoring well ISTR -7.



Date: 10/14/2014

View of hot groundwater sample being collected from ISTR-5.



SRSNE Site October 2014 Monthly Report  
Representative Photographs

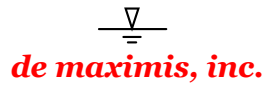


Date: 10/14/2014  
Process of drilling to collect a Phase I interim soil sample.



Date: 10/17/2014  
Completing installation of recovery well RW-15.





**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Bruce Thompson, Ryan Malone, Jeff Holden

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 10/1/14 Project Call

**Date:** October 8, 2014

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On October 1, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Derek LaRosee
- ARCADIS - Michael Skowronek,, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- USEPA- Eva Davis, Karen Lumino
- CTDEEP - Shannon Pociu

## **I. Meeting Minutes**

- A. Minutes from the September 24, 2014 meetings were distributed October 1, 2014; comments received have been incorporated.

## **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)

- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 9/29/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, a copy of their weekly report is included, some items to note:
    - An Addendum to the root cause analysis memo, following final analysis from Prevex, is currently being reviewed by TerraTherm. The root cause analysis memo was submitted on September 18<sup>th</sup> following the August 13<sup>th</sup> shutdown.
    - The phase I well field heaters have recovered to the temperatures they were before the oxidizer shutdown and have reached the third temperature milestone.
    - Phase II heaters will be ramped up over the weekend and TerraTherm hopes to reach full power in Phase II by the end of next week.
  - d) TerraTherm will continue to observe the system and analyze data received from flame analyzers moving forward, possibly increasing phase II heaters at the end of the month is it appears that the system is properly operating and phase I is coming off peak.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. TerraTherm plans to submit a revise schedule by the end of the week
- B. The 2<sup>nd</sup> Phase I progress sampling event is scheduled to start the week of October 13th

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit revised or addendum to “root cause analysis memo”
- C. TerraTherm to submit an updated schedule the end the week.
- D. Installation of RW-15 to commence the week of October 6<sup>th</sup>
- E. TerraTherm to submit phase I progress sampling locations by the end of next week.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, October 8, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Bruce Thompson, Ryan Malone

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 10/8/14 Project Call

**Date:** October 22, 2014

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On October 8, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Derek LaRosee, Gorm Heron, Nikole Stone
- ARCADIS - Michael Skowronek, , Jeff Holden, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- USEPA- Eva Davis, Karen Lumino
- CTDEEP - Shannon Pociu

## **I. Meeting Minutes**

- A. Minutes from the October 1, 2014 meetings were distributed October 8, 2014; comments received have been incorporated.

## **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)

- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) //Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 10/6/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The phase I well field has reached optimum temperature, phase I heater temperature will be scaled down to maintain current phase I well field temperatures. The phase I well field temperature is currently approximately 102°C.
    - Phase II heaters have been ramped up to full power and phase II well field temperatures continue to increase. The phase II well field temperature is currently approximately 70°C.
    - The 2<sup>nd</sup> progress sampling event is scheduled to begin next week, sampling is expected to take approximately 10 days.
    - TerraTherm noted that approximately 200,000 lbs of mass has been removed and they continue to adjust their removal calculations as they received additional lab data.
    - Terratherm also noted that the bulk of the mass being removed is from phase II
    - The oxidizer continues to be run using additional manual dilution air as a safety factor.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period

C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014
- C. TerraTherm to submit 2nd progress sampling locations by the end of the week.
- D. The Phase I confirmation sampling will be scheduled after reviewing the 2<sup>nd</sup> progress sampling results. The confirmation sampling locations will be reviewed and adjusted after receiving the results.

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. Installation of RW-15 is currently underway and expected to be completed by the end of the week and developed next week.

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit revised or addendum to “root cause analysis memo”
- C. TerraTherm to submit an updated schedule the end the week.
- D. TerraTherm to submit phase I progress sampling locations by the end of next week.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, October 22, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Bruce Thompson, Ryan Malone, Derek LaRosee, Jeff Holden, Shannon Pociu

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 10/22/14 Project Call

**Date:** October 29, 2014

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On October 22, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call.

Participating in the meeting were the following:

- de maximis – Jessie McCusker
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone
- ARCADIS - Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- USEPA- Eva Davis, Karen Lumino

## **I. Meeting Minutes**

- A. Minutes from the October 8, 2014 meetings were distributed October 22, 2014; comments received have been incorporated.

## **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)
  - k) Adjusted length of heater 590 due to short circuiting (7/22/14)
  - l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)



- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 10/6/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The phase I well field has reached optimum temperature, phase I heater temperature will be scaled down to maintain current phase I well field temperatures. The phase I well field temperature is currently approximately 100°C.
    - Phase II heaters have been bumped up to 75% power and phase II well field temperatures continue to increase. The phase II well field temperature is currently approximately 87°C.
    - The 2<sup>nd</sup> progress sampling event is scheduled has been completed and results received thus far show that only one sample, T-70 at 9’, has xylene concentrations slightly above Interim NAPL cleanup levels. TerraTherm expects to receive the remaining results by the end of the week
    - TerraTherm noted that approximately 300,000 lbs of mass has been removed and they continue to adjust their removal calculations as they received additional lab data.
    - Terratherm also noted that they continue to see mass coming from phase I.
    - TerraTherm plans to schedule the 1<sup>st</sup> progress sampling event for phase II in the next 2 weeks.
- B. ARCADIS / QA

- a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014
- C. The Phase I confirmation sampling will be scheduled after reviewing the 2<sup>nd</sup> progress sampling results. The confirmation sampling locations work plan will be reviewed and adjusted after receiving the results. The revised work plan along with additional data and changes to the hot soil sampling SAP will be presented to the Agencies for their review.

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. Installation of RW-15 been completed and Weston is currently working on installing the plumbing and electrical to bring the well online.

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit revised or addendum to “root cause analysis memo”
- C. Submit progress soil sampling results and additional data to agencies for review.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, October 29, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Derek LaRosee

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 10/29/14 Project Call

**Date:** November 5, 2014

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On October 29, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone, Gorm Heron
- ARCADIS - Jeff Holden
- O&M- Ryan Malone
- IQAT - David Lehnus, Clayton Smith
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the October 22, 2014 meetings were distributed October 29, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 10/6/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The phase I well field has reached optimum temperature, phase I heater temperature have been scaled down to maintain current phase I well field temperatures. The phase I well field temperature is currently approximately 100°C.
    - Phase II heaters have been bumped up to 80% power and phase II well field temperatures continue to increase. The phase II well field temperature is currently approximately 95°C.
    - The 2<sup>nd</sup> progress sampling event has been completed and results show that only one sample, T-70 at 9’, has xylene concentrations slightly above Interim NAPL cleanup levels.
    - Terratherm noted that they continue to see mass coming from phase I.
    - TerraTherm plans to schedule the 1<sup>st</sup> progress sampling event for phase II in the next 2 weeks.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period

C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014
- C. The confirmation sampling locations work plan has been reviewed and adjusted after receiving the results from the 2<sup>nd</sup> phase I progress sampling event. The revised work plan along with additional data and changes to the hot soil sampling SOP has been presented to the Agencies for their review. These revisions were discussed with the agencies and it was agreed that Phase I confirmation sampling will be scheduled. Any comments/revisions provided by the agencies will be addressed/incorporated prior to the sampling event.

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. Installation of RW-15 been completed and Weston is currently working on installing the plumbing and electrical to bring the well online.

**IX. New Action Items**

- A. Review website as current data is uploaded.
- B. Submit revised or addendum to “root cause analysis memo”
- C. Schedule Confirmation sampling event.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, November 5, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

December 10, 2014

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 73 – November 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 73.

This report covers the period from November 1-30, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 73**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**November 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. November 2014 Project Activities:

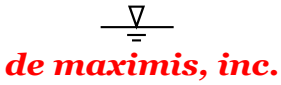
- From November 1, 2014 to November 30, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule. TerraTherm has performed additional personal breathing zone sampling as a result of concerns of odors within the well field.
- TerraTherm continued to maintain optimum temperatures (100°C) in phase I heaters and phase II heaters have been ramped up to 85% and are currently at approximately 98°C.
- RW-15 has been installed, developed, and is currently online. RW-13 and RW-14 were redeveloped during the installation and development of RW-15. All three wells have been throttled back and are currently producing approximately 39 GPM combined.
- Confirmation sampling for the phase I ISTR was performed from November 11<sup>th</sup>, 2014 to November 19<sup>th</sup>, 2014. Sixty (60) soil samples were collected from twenty-eight (28) locations throughout the phase I well field. All sample results were below the Interim NAPL clean up levels.
- On November 10, 2014, de maximis received approval of the Supplemental Containment Action Plan (SCAP) from the Agencies. A final version of the SCAP has been submitted.
- On November 24, 2014, de maximis, TerraTherm, and ARCADIS participated on a conference call with EPA and CTDEEP to present and discuss the Phase 1 sampling results.
- Monthly Progress Report (MPR) 72 was submitted on November 10, 2014.
- The monthly IQAT report is attached.

b. December 2014 Planned Project Activities:

- During December 2014, *de maximis* will submit MPR 73.
- During December 2014, TerraTherm will continue operation and sampling of ISTR system.



- During December 2014 TerraTherm will submit results from additional personal breathing zone samples taken.
  - TerraTherm will collect phase II progress soil samples during the 1<sup>st</sup> week of December.
  - During December 2014 *de maximis* will submit a summary of phase I operations and sampling results along with a proposal to shut down a portion of the phase I heater wells and continue to run the phase I vapor recovery system.
  - During December 2014, *de maximis* will submit an addendum to “root cause and analysis” memo, submitted on September 18, 2014. The addendum will provide an analysis of the August 13<sup>th</sup> shutdown by Focus Environmental, Inc.
  - During December 2014, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – The shutdown of the oxidizer resulted in the heaters being set to idle, delaying active treatment, this resulted in an extension of the ISTR operations. An updated schedule has been submitted.
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



***Disclaimer:*** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
November 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
***de maximis, inc***  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
December 6, 2014



## **IQAT Monthly Report November 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report November 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal wellfield installation portion of the Remedial Action (RA) at the Site during July 2014.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report November 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include collection of confirmatory soil borings, review of work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Aquifer Drilling and Testing**

Aquifer Drilling and Testing (ADT) was contracted by ARCADIS to perform the drilling for the completion of the Phase I confirmatory soil sampling.

### **2.7 O&M Inc.**

O&M Inc is responsible for implementing the perimeter air monitoring program. Mr. Ryan Malone is the primary contact for their work.

### **2.8 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.



### **3. Summary of Activities and Observations this Reporting Period**

#### **3.1 General Overview of Site Activities**

- Week of 11/3/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. The 1/3 hp sanitary transfer pump was replaced with a 1 hp pump in order to increase the flow rate and prevent over flow of the vault. Fiberboard insulation was affixed to the insulating cap on the north side of the wellfield in order to replace the small area of the concrete cap that was removed in order to provide access for the crane to the west side of the wellfield. Carbon from the liquid carbon tanks was exchanged and disposed.

O&M continued to implement the perimeter air monitoring program.

- Week of 11/10/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm checked and replaced defective heaters on one of the circuits that faulted and shut down over the weekend and added heat tape to the water lines within the treatment system as a winterization measure and to prevent freezing.

ARCADIS collected monthly groundwater samples from the ISTR wells and initiated confirmatory soil sampling for the Phase I area in order to confirm that target soil concentrations of specified volatile organic compounds have been met.

O&M continued to implement the perimeter air monitoring program.

- Week of 11/17/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm covered water lines within the treatment system with insulation as a winterization measures in order to prevent freezing.



## **IQAT Monthly Report November 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

ARCADIS completed Phase I confirmatory soil sampling program. An additional exploratory soil boring was advanced adjacent to ISTR-2 to assess whether NAPL is present in soils outside the well. No NAPL was observed in the soil from these borings. Well ISTR-2 was gauged following completion of the borings and approximately 0.5 inches of NAPL was observed in the well.

O&M continued to implement the perimeter air monitoring program.

- Week of 11/24/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

O&M continued to implement the perimeter air monitoring program.

### **3.2 IQAT Field Report**

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report.

### **3.3 Significant Issue Reporting**

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on November 5<sup>th</sup>, 12<sup>th</sup> and 24<sup>th</sup>. The primary purpose of the



## **IQAT Monthly Report November 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

meetings is to discuss progress of work associated with the ISTR project. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

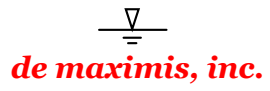
### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.





**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/3/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/4/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Weekly vapor influent and effluent and liquid influent and midfluent samples were collected as scheduled.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/5/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. 24 drums of LNAPL were removed from the Site by EQ.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/6/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
---	----

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Weekly vapor influent and effluent and liquid influent and effluent samples were collected as scheduled.
3. The 1/3 hp sanitary transfer pump was replaced with a 1 hp pump in order to increase the flow rate and prevent over flow of the vault. Following pump replacement, the flow rate remained the same (30 gpm).
4. Fiberboard insulation was affixed to the insulating cap on the north side of the wellfield in order to maintain the 8 ft radius around VEW wells following the removal of the insulating cap to allow the crane access to the west side of the wellfield to place the drill rig during interim soil sampling.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/7/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
---	----

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Carbon from the liquid carbon tanks was exchanged and disposed.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/10/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
---	----

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm checked and replaced defective heaters on one of the circuits that faulted and shut down over the weekend.
3. TerraTherm added heat tape to the water lines within the treatment system to prevent freezing due to the potential for sub-freezing temperatures.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/11/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program and collected groundwater samples from ITSR monitoring wells

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS performed confirmatory sampling collecting samples from 3 discrete depths from sampling locations CSL-037 and CSL-039.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/12/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program and collected groundwater samples from ISTR monitoring wells

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS performed confirmatory sampling collecting samples from 2 discrete depths from sampling locations CSL-013 and CSL-005 and CSL-012. Refusal was encountered above the target depth in CSL-013 (17 feet) and the interval could not be collected.
3. ARCADIS collected monthly groundwater samples from ISTR monitoring wells ISTR-4, ISTR-5, ISTR-6, and ISTR-7.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/13/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS performed confirmatory sampling collecting samples from 2 discrete depths from sampling locations CSL-001, CSL-002, CSL-003, CSL-007, and CSL-008.
3. ARCADIS collected monthly groundwater samples from ISTR monitoring wells ISTR-1, ISTR-2, and ISTR-3. Approximately 1 inch of LNAPL was observed in monitoring well ISTR-2.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/14/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS performed confirmatory sampling collecting samples from 2 discrete depths from sampling locations CSL-009, CSL-010, CSL-014, CSL-015, and CSL-016. Refusal was encountered in SCL-015 at 10.5 feet, above the target depth of 12 feet. A sample was collected from the 10.5 foot interval.
3. Groundwater samples were recollected from ISTR-3 to replace samples collected on 11/12/14 as the lab was not able to analyze the original samples submitted.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/17/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS performed confirmatory sampling collecting samples from 2 discrete depths from sampling locations CSL-017, CSL-038, and CSL-040.
3. TerraTherm insulated liquid lines in order to prevent freezing.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/18/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Vapor influent and effluent samples and liquid influent and effluent samples were collected as scheduled.
3. TerraTherm insulated liquid lines in order to prevent freezing.
4. ARCADIS performed confirmatory sampling collecting samples from 2 discrete depths at sampling locations CSL-020, CSL-027, and CSL-028, CSL-029, and CSL-030.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 11/19/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	ARCADIS drilling subcontractor for confirmatory sampling
ARCADIS	Oversaw confirmatory soil sampling program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued to insulate liquid lines in order to prevent freezing.
3. ARCADIS completed confirmatory sampling collecting samples from 2 discrete depths at sampling locations CSL-004, CSL-011, CSL-018, and CSL-019.
4. An additional exploratory soil boring was advanced adjacent to ISTR-2 to assess whether NAPL is present in soils outside the well. No NAPL was observed in the soil from these borings. Well ISTR-2 was gauged following completion of the borings and approximately 0.5 inches of NAPL was observed in the well.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/20/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued to insulate liquid lines in order to prevent freezing.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/21/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued to insulate liquid lines in order to prevent freezing.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/24/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/25/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Terra Therm collected weekly vapor influent and effluent samples and liquid influent and midfluent samples as scheduled.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 11/26/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

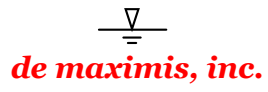
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.



**Attachment 2**

**Representative Photos**

SRSNE Site November 2014 Monthly Report  
Representative Photographs



Date: 11/5/2014

Containment area for the LNAPL and carbon drums.



Date: 11/11/14

Drillers extracting the sampling liners from the core barrel during Phase I confirmatory soil sampling event.



SRSNE Site November 2014 Monthly Report  
Representative Photographs



Date: 11/11/2014

Stainless steel liners in an ice bath collected during the Phase I confirmatory soil sampling event.



Date: 11/12/2014

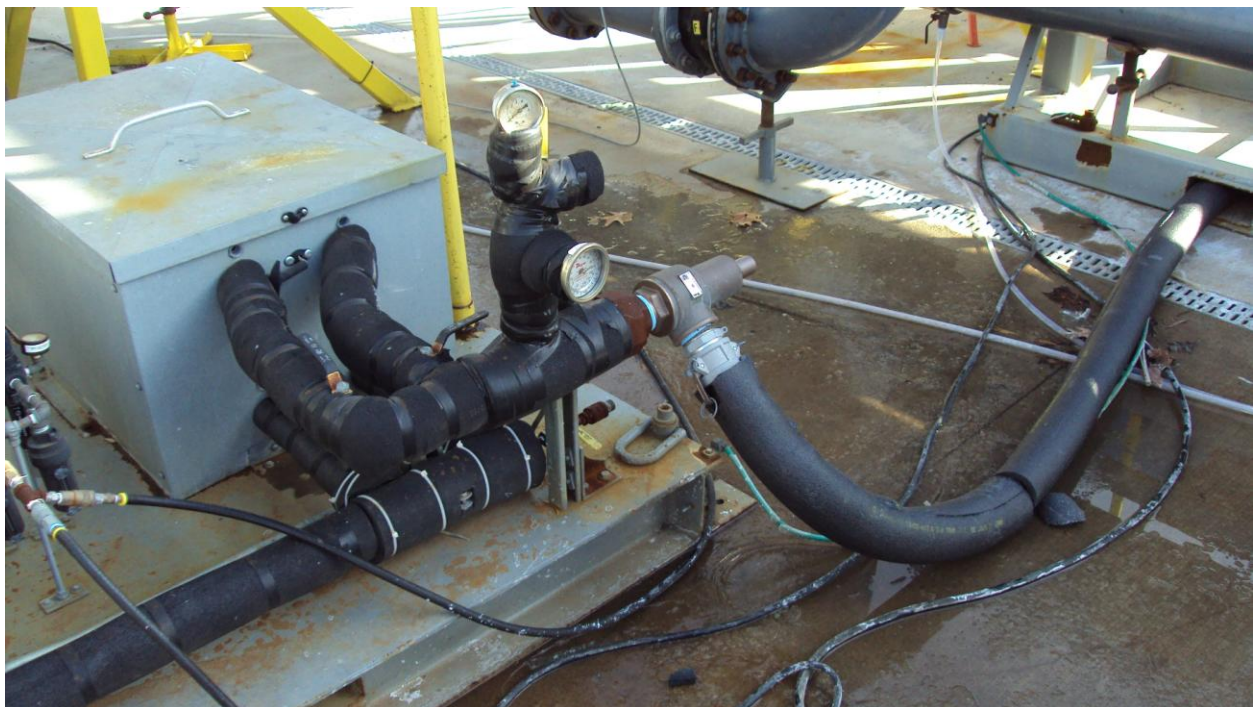
Process of placing the geoprobe onto the wellfield with a crane for the Phase I confirmatory soil sampling event.



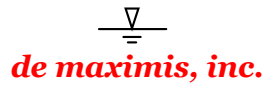
SRSNE Site November 2014 Monthly Report  
Representative Photographs



Date: 11/12/2014  
ARCADIS collecting groundwater sample from ISTR-2



Date: 11/19/14  
Winterization of liquid lines sealed with heat tape and insulation.



**Attachment 3**

**Progress Meeting Minutes**



**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt, Derek LaRosee

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 11/05/14 Project Call

**Date:** November 12, 2014

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On November 5, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Jessie McCusker, Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone
- ARCADIS - Jeff Holden, Kevin Crowder
- O&M- Ryan Malone
- IQAT - David Lehnus, Clayton Smith
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the October 22, 2014 meetings were distributed October 29, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 11/4/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The phase I well field has reached optimum temperature, phase I heater temperature have been scaled down to maintain current phase I well field temperatures. The phase I well field temperature is currently approximately 100°C.
    - Phase II heaters have been bumped up to 85% power and phase II well field temperatures continue to increase. The phase II well field temperature is just shy of 100°C.
    - Summa canister data from samples collected from manifold legs has just been received, TerraTherm plans to review and distribute the data
    - Terratherm noted that they continue to see mass coming from phase I.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.  
B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014  
C. The confirmation sampling locations work plan has been reviewed and adjusted after receiving the results from the 2<sup>nd</sup> phase I progress sampling event. Revisions were incorporated and the work plan has been approved along by the Agencies. The confirmation sampling event is scheduled to commence on Tuesday, November 11<sup>th</sup>.

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. Installation of RW-15 been completed and Weston is currently working on installing the plumbing and electrical to bring the well online.

**IX. New Action Items**

- A. Review website as current data is uploaded.  
B. Submit revised or addendum to “root cause analysis memo”  
C. Distribute summa data from legs.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, November 12, 2014.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

January 12, 2015

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 74 – December 2014**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 74.

This report covers the period from December 1-31, 2014, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 74**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**December 2014**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. December 2014 Project Activities:

- From December 1, 2014 to December 31, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule.
- On December 1, 2014 *de maximis* submitted a summary of phase I operations and sampling results along with a proposal to shut down a portion of the phase I heater wells and continue to run the phase I vapor recovery system. The agencies approved the partial shutdown on December 3, 2014 and the approved phase I heaters were shut down on December 8, 2014.
- A revised Phase 1 Report was submitted on December 9, 2014 in response to Agency comments received on December 3, 2014. EPA approved this report on December 29, 2014.
- During December 2014, TerraTherm continued to maintain optimum temperatures 100°C in phase II heaters.
- Progress sampling for the phase II ISTR was performed from December 1, 2014 to December 8, 2014. Twenty-two (22) soil samples were collected throughout the phase II well field. Results indicated that confirmation sampling could be initiated during early January, 2015.
- On December 17, 2014, *de maximis* submitted a draft confirmation sampling locations figure to the agencies for review. Comments have been received, locations have been adjusted according to comments, and the figure has been resubmitted.
- On December 18, 2014, representatives of *de maximis* and ARCADIS participated on a conference call with EPA and CTDEEP to brief the new EPA technical support representative (Hydrogeologist Lee Thomas) on the project and site.
- Monthly Progress Report (MPR) 73 was submitted on December 10, 2014.
- On December 31, 2014, a response to comments and revised proposed dioxin clean up level memorandum was submitted for Agency review.
- The monthly IQAT report is attached.

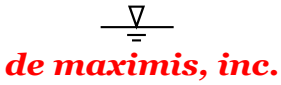
b. January 2015 Planned Project Activities:

- During January 2015, *de maximis* will submit MPR 74.
- During January 2015, TerraTherm will continue operation and sampling of ISTR system.
- Starting the week of January 5, 2015, phase II confirmation soil samples will be collected.
- Starting the week of January 12, 2015, ISTR groundwater samples will be collected.
- During January 2015 results from the phase II confirmation sampling and the ISTR groundwater will be submitted to the agencies to help determine if the ISTR system is ready for shutdown.
- During January 2015, *de maximis* will submit an addendum to “root cause and analysis” memo, submitted on September 18, 2014. The addendum will provide an analysis of the August 13<sup>th</sup> shutdown by Focus Environmental, Inc.
- During January 2015, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.

c. Problems Encountered or Anticipated – None

d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.

e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
December 2014**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
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**Date:**  
January 8, 2015





## **IQAT Monthly Report December 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

- Attachment 1 - IQAT Daily Reports
- Attachment 2 - Representative Photos
- Attachment 3 - Progress Meeting Minutes



## **IQAT Monthly Report December 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal treatment system operations portion of the Remedial Action (RA) at the Site during December 2014.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report December 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include collection of confirmatory soil borings, collection of groundwater samples, review of work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

### **2.7 Aquifer Drilling and Testing**

Aquifer Drilling and Testing (ADT) was contracted by TerraTherm to perform the drilling for the completion of the Phase I confirmatory soil sampling.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 12/1/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm initiated Phase II interim soil sampling. EPA provided approval for shut down of heaters in Phase I



## IQAT Monthly Report December 2014

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

with the exception of select locations on the perimeter of the Phase II area. TerraTherm is developing a plan to isolate those Phase I heaters that will remain operational. The power to all other Phase I heater wells is gradually being reduced by 5 to 10%. The step down goal is to gradually reduce power to the Phase I heaters.

O&M continued to implement the perimeter air monitoring program.

- Week of 12/8/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm completed Phase II interim soil sampling. Vapor carbon was exchanged. Fifty heaters were adjusted to redistribute the heat into zones that were lagging in temperature in the Phase II area.

O&M continued to implement the perimeter air monitoring program.

- Week of 12/15/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm re-wired the Silicon Controlled Rectifiers (SCR) units so that Phase I circuits to be left on could be connected to active SCR units so that out-of-service Phase I heaters could be de-energized. Six containers of spent carbon were removed from the Site.

ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-7 and collected groundwater samples from monitoring wells MW-1002-DR, MW-1003-DR, MW-707-DR, and P20-2M using hydrasleeve samplers.

O&M continued to implement the perimeter air monitoring program.

- Week of 12/22/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.



## **IQAT Monthly Report December 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

O&M continued to implement the perimeter air monitoring program.

- Week of 12/29/14 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm began breaking down Phase I by disconnecting and removing electrical wiring from the heater boxes. Six containers of spent carbon were removed from the Site.

O&M continued to implement the perimeter air monitoring program.

### **3.2 IQAT Field Report**

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### **3.3 Significant Issue Reporting**

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. A few representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on December 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, and 29<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project and to discuss completion and shutdown of the ISTR system. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.



## **IQAT Monthly Report December 2014**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.6 Air Quality Monitoring**

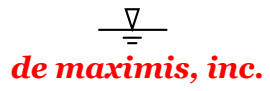
The perimeter air monitoring program is being implemented by O&M inc. and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

One incident occurred this period and an incident report was prepared by TerraTherm to document the event. On December 8, the ADT drilling helper was assisting the drill operator with operation of the geoprobe when the geoprobe came in contact with the helper's foot. The incident did not require medical treatment.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/1/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and oversee interim soil sampling.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	TerraTherm subcontractor for drilling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm began interim soil sampling within the Phase 2 area. Samples were collected from soil borings advanced near TMP-29, TMP-31, TMP-50, and TMP-51.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/2/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and oversee interim soil sampling.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	TerraTherm subcontractor for drilling.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Interim drilling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected weekly liquid and vapor influent and effluent samples as scheduled.
3. TerraTherm began interim soil sampling within Phase 2 area. Five samples were collected from soil borings advanced near TMP-40, TMP-52, TMP-54, and TMP-56.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/3/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and oversee interim soil sampling.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	TerraTherm subcontractor for drilling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Interim drilling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm began interim soil sampling within Phase 2 area. Five samples were collected from soil borings advanced near TMP-62, TMP-63, TMP-64, TMP-72, TMP-79, and TMP-82.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/4/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and oversee interim soil sampling.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	TerraTherm subcontractor for drilling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Interim drilling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued interim soil sampling within Phase 2 area. Five samples were collected from soil borings advanced near TMP-80, TMP-81, TMP-92, and TMP-97.
3. EPA provided approval for shut down of heaters in Phase I with the exception of select locations on the perimeter of the Phase II area. TerraTherm is developing a gradual shut down of heaters. Rewiring of some of the circuits will be required in order to isolate specific heaters.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/5/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and oversee interim soil sampling.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	Terratherm subcontractor for drilling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Interim drilling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued interim soil sampling within Phase 2 area. Five samples were collected from soil borings advanced near TMP-49, TMP-71, TMP-92, and TMP-97.
3. Select heaters in Phase I were reduced in power ranging from 5 to 10%. The step down goal is to reduce power between 5 and 10% per day so that next week the approved heaters will be completely off in Phase I.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/8/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy and complete interim soil sampling in Phase II
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing (ADT)	TerraTherm drilling subcontractor

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported	X			See note 4 below.
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm completed the interim soil sampling within the Phase 2 area. Five samples were collected from soil borings advanced near TMP-60 and TMP-76. A hole was cored into the concrete near TMP-29 and the hole was screened instead of collecting samples because the area is inaccessible and would need a crane to lift the geoprobe into place.
3. Select heaters in Phase I were turned off following gradually ramping down the electricity to the heaters over the weekend.
4. The ADT drilling assistant's foot came in contact with the geoprobe mast while the mast was being lowered to the ground. TerraTherm prepared an incident report to document the event.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/9/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Weekly vapor influent and effluent and carbon influent and midfluent samples were collected as part of the regularly scheduled monitoring program.
3. Vapor carbon was cleaned and exchanged and removed from the Site.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 12/10/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm raised 50 heaters in an attempt to redistribute the heat into areas that were lagging in temperature in Phase 2.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 12/11/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor and vacuum data from the wellfield.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/12/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor and vacuum data from the wellfield.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/15/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Collected groundwater samples

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS collected groundwater samples from monitoring wells ISTR-1 through ISTR-4 and installed hydrasleeve samplers into monitoring wells MW-1002-DR, MW-1003-DR, MW-707-DR, and P20-2M. Samplers to be retrieved on 12/16.
3. Six bags of waste carbon were removed from the Site.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/16/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Collected groundwater samples.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS collected groundwater samples from monitoring wells ISTR-5 through ISTR-7 and retrieved hydrasleeve samplers from monitoring wells MW-1002-DR, MW-1003-DR, MW-707-DR, and P20-2M.
3. TerraTherm collected vapor influent and effluent samples and liquid influent and midfluent samples as scheduled in the O&M Plan.
4. TerraTherm re-wired SCR units so that phase I circuits to be left on could be connected to active SCR units in order to de-energize unused units.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 12/17/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 12/18/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/18/14

**Initial when  
complete:**

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/22/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/23/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm collected vapor influent and effluent and liquid influent and midfluent samples as scheduled in the O&M plan.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 12/24/14

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/29/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. Six bags of waste carbon were removed from the Site.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/30/14

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 12/31/14

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

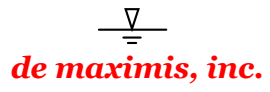
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm began breaking down circuits from Phase I.



**Attachment 2**

**Representative Photos**

SRSNE Site December 2014 Monthly Report  
Representative Photographs



Date: 12/1/2014

View of geoprobe during Phase II interim soil sampling.



Date: 12/1/14

View of soil samples collected during Phase II interim soil sampling event.



SRSNE Site December 2014 Monthly Report  
Representative Photographs



Date: 12/5/2014

View of PID reading being taken from a Phase II vapor extraction manifold.



Date: 12/12/2014

View of TerraTherm re-wiring the Silicon Controlled Rectifiers (SCR) units so that some of the Phase I circuits and heater wells can remain active.



SRSNE Site December 2014 Monthly Report  
Representative Photographs



Date: 12/31/2014

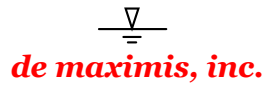
TerraTherm is disconnecting and removing wiring to Phase I heater wells that are no longer active (view looking toward southwest).



Date: 12/31/14

TerraTherm is disconnecting and removing wiring to Phase I heater wells that are no longer active (view looking toward northeast).





**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 11/05/14 Project Call

**Date:** December 10, 2014

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On December 3, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Gorm Heron, Derek LaRossee
- ARCADIS - Jeff Holden, Kevin Crowder, John LaChance
- O&M- Ryan Malone
- IQAT - David Lehnus, Clayton Smith
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the November 12 meeting was distributed November 19, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 12/1/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The phase I well field has reached optimum temperature, phase I heater temperature have been scaled down to maintain current phase I well field temperatures. The phase I well field temperature is currently approximately 100°C.
    - Phase II heaters have been equilibrated as the optimum temperature average of 100°C has been achieved.
    - Based on calculations using previous using pre-treatment VOC mass, more than 99% of the mass has been removed to date, totaling 408,000 lbs (197,000 lbs from Phase I and 211,000 from Phase II)

- Terratherm noted that they continue to see a total of ~250 lbs of mass coming from phase I per day, approximately 0.13% of total mass removed to date. Based upon the results of the confirmatory soil sampling data, this mass does not appear to be emanating from within the overburden material of the wellfield but is suspected to be generated from the bedrock.
- In order to assess the odor issues observed by DEEP during a previous Site visit, TerraTherm will perform personal air monitoring for VOCs and metals during Phase II interim soil sampling efforts.

B. ARCADIS / QA

- a) No QA issues were noted during this period

C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. Installation of RW-15 been completed and the well is currently online.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, December 17, 2014.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, John Hunt

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 12/10/14 Project Call

**Date:** December 17, 2014

---

On December 10, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Gorm Heron, Derek LaRossee
- ARCADIS - Jeff Holden, Kevin Crowder, John LaChance
- O&M- Ryan Malone
- IQAT - David Lehnus, Clayton Smith
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the December 3, 2014 meeting was distributed December 10, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)

- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I heaters shutdown (12/8/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 12/15/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - The portions phase I well field, that were approved by the EPA, have been shut down.
    - Phase II heaters are being adjusted to concentrate heat in areas where temperatures are lower.
    - Phase II progress sampling has been performed, final results will be distributed within the next few days
    - Personal breathing zone monitoring has been performed as a result for concern of odors on site. Results will be distributed when they are received.
- B. ARCADIS / QA

- a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. TerraTherm continues to upload current data to website.
- B. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. Oxidizer shutdown delayed progress

**VIII. Other Business**

- A. A survey of RW-15 been completed and all three wells are currently online.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting is Wednesday, December 17, 2014, 2:00pm (EST)

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, Robin Swift, Derek LaRossee, Ryan Malone

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 12/29/14 Project Call

**Date:** January 7, 2015

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On December 29, 2014 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) –, Tim Mahoney
- ARCADIS - Jeff Holden, Kevin Crowder, John LaChance
- IQAT - David Lehnus, Clayton Smith
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the December 10, 2014 meeting was distributed December 17, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)
  - j) Set Phase II heaters to 20% (7/16/14)



- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I select heaters ramp down (12/4/14-12/8/14)
- ii) Phase II progress sampling (12/1/14-12/8/14)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 12/28/14 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
    - Select Phase I heaters have been shut down.
    - 90 % of Phase II TMP’s have reached an average temperature of 100°C. TMP-92, 95, and 97 remain under 90°C.
    - Based on calculations using previous using pre-treatment VOC mass, more than 99% of the mass has been removed to date, totaling approximately 417,831 lbs

B. ARCADIS / QA

- a) No QA issues were noted during this period

C. IQAT

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. A revised phase II confirmation sampling locations figure was sent to the agencies for review, comments with suggested location changes have been provided. The locations will be reviewed and incorporated.
- B. Phase II confirmation sampling is set to begin on Monday, January 5, 2015. Sampling will take approximately 10 days.
- C. The next round of ISTR groundwater sampling is scheduled to begin on January 12, 2015.
- D. TerraTherm continues to upload current data to website.
- E. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. None.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, January 7, 2015.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

February 10, 2015

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 75 – January 2015**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 75.

This report covers the period from January 1-31, 2015, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 75**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**January 2015**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. January 2015 Project Activities:

- From January 1, 2015 to January 31, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule. TerraTherm has started breaking down circuits and removing wiring from heaters in the Phase I area that has been approved for shutdown.
- From January 1, 2015 to January 31, 2014, O&M Inc. continued to implement the perimeter air monitoring of the site, no alerts or alarms have been received during this time period.
- On January 5, 2014 *de maximis* received EPA approval of revised Phase II confirmation sampling locations plan.
- Confirmation sampling for the Phase II ISTR was performed from January 5 2015 to January 13, 2014. Sixty-one (61) soil samples were collected throughout the phase II well field. Results indicated that samples collected at Three (3) locations, CSL-32, 33, and 34, were above the Interim NAPL cleanup levels.
- On January 9, 2015, the oxidizer shutdown for short period (3.5 hours) as a result of a frozen pump and the fact the internet was down at the site so that the automatic alarms did not alert TerraTherm staff to the problem.
- On January 9, 2015, *de maximis* submitted an addendum to the “root cause and analysis” memo, submitted on September 18, 2014. The addendum provides further analysis by Focus Environmental of the August 13, 2014 oxidizer shutdown.
- On January 9, 2015, *de maximis* requested approval to shut down the oxidizer and divert vapors through the carbon system. The request was submitted after the town of Southington health department and the Southington Fire chief visited the site after receiving an odor complaint from the neighboring police station, during the oxidizer shut down. The agencies approved this request and the oxidizer was taken offline on January 10, 2015. TerraTherm continues to collect influent and effluent samples as described in the approved sampling plan.

- Starting January 10, 2015, two layers of insulation were added to the cap and the heaters were raised in area where soil samples CSL-32, 33, & 34 were collected. These measures were taken to help raise the temperature in the area where soil samples did not meet Interim NAPL cleanup levels.
  - On January 12, 2015, Anita Masih of CTDEEP's Air Bureau visited the site to inspect and address the odor issue.
  - On January 26, 2014, *de maximis* submitted a proposal with two options, "A & B", that requested shutdown to portions of phase I & II where soil sampling results were below Interim NAPL cleanup levels. Comments were received and a third option "C" was submitted. On January 29, 2015 the agencies approved option "C" and the approved circuits within phase I & II were shut down.
  - Monthly Progress Report (MPR) 74 was submitted on January 12, 2015.
  - The monthly IQAT report is attached.
- b. February 2015 Planned Project Activities:
- During February 2015, *de maximis* will submit MPR 75.
  - During February 2015, TerraTherm will continue operation and sampling of ISTR system.
  - During February 2015, O&M Inc. will continue to implement the perimeter air monitoring system on the site.
  - Starting the week of February 2, 2015, additional soil samples will be collected from the three (3) areas where results did not meet Interim NAPL Cleanup levels.
  - Starting the week of February 2, 2015, ISTR groundwater samples will be collected.
  - During February results from the phase II re-sampling and additional ISTR groundwater will be submitted to the agencies to help determine if the ISTR system is ready for shutdown.
  - During January 2015, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.

- c. Problems Encountered or Anticipated – None
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
January 2015**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
**de maximis, inc**  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
February 4, 2015





## **IQAT Monthly Report January 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report January 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal treatment system operations portion of the Remedial Action (RA) at the Site during January 2015.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



## **IQAT Monthly Report January 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include collection of confirmatory soil borings, collection of groundwater samples, review of work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

### **2.7 Aquifer Drilling and Testing**

Aquifer Drilling and Testing (ADT) was contracted by ARCADIS to perform the drilling for the completion of the Phase 2 confirmatory soil sampling.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 1/5/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm completed breaking down circuits from the Phase 1 area and removing wiring from those heater



## IQAT Monthly Report January 2015

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

boxes that are no longer in use. On January 9, the ISTR treatment system temporarily shut down from approximately 5:30 AM to 9:00AM. On January 10, the oxidizer was permanently shut down and the recovered vapor is being routed through the carbon vessels.

During this period the Town of Southington Director of Health visited the Site to discuss an off-site odor complaint they recently received. The Southington Director of Health was provided with site data/results concerning perimeter air monitoring, oxidizer screening, and personal air monitoring data. In addition, CTDEEP was notified of the off-site odor complaint.

ARCADIS started confirmatory soil sampling within the Phase 2 area.

O&M continued to implement the perimeter air monitoring program.

- Week of 1/12/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

ARCADIS completed initial confirmatory soil sampling within the Phase 2 area. Three of the sampling locations (CSL-32, CSL-33 and CSL-34) were above the project cleanup goals. Based on those results TerraTherm added two layers of R-10 insulation to a rectangular area of the concrete cap surrounding the CSL-32/CSL-33/CSL-34 locations to help minimize heat loss through the concrete cap within that area.

A 69 vapor waste drums were removed by EQ (34 clay, 35 vapor granular activated carbon).

O&M continued to implement the perimeter air monitoring program.

- Week of 1/19/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm raised 20 heaters by approximately 1-foot within the CSL-32/CSL-33/CSL-34 area in order to redistribute the heat into the shallower subsurface area.

O&M continued to implement the perimeter air monitoring program.

- Week of 1/26/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan.

On January 26, based on receiving EPA and CTDEEP approval, TerraTherm shut off heater wells within the Phase 2 area, with the exception of those heater wells around the CSL-32/CSL-33/CSL-34 soil boring area and along VEW 16 branch line.

O&M continued to implement the perimeter air monitoring program.

### 3.2 IQAT Field Report

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### 3.3 Significant Issue Reporting

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### 3.4 IQAT Photo Documentation of Work

The IQAT is performing photo documentation of the work. Representative photos for this period are provided in Attachment 2 of this Report.

### 3.5 Project Construction Meetings

The IQAT participated at Construction Progress Meetings conducted via teleconference on January 7<sup>th</sup>, 16<sup>th</sup>, 21<sup>st</sup>, and 28<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project and to discuss completion and shutdown of the ISTR system. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.



## **IQAT Monthly Report January 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.6 Air Quality Monitoring**

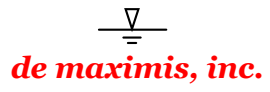
The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). With the exception of the off-site odor complaint noted above, no issues associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/5/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm continued breaking down circuits from Phase 1.
3. ARCADIS began confirmatory soil sampling from Phase 2. Samples were collected from select intervals of CSL-22, CSL-24 ,and CSL-26.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/6/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. TerraTherm finished breaking down circuits from Phase 1. All of the wires have been removed from the heater boxes.
3. ARCADIS continued confirmatory soil sampling from Phase 2 area. Samples were collected from select intervals of CSL-33, CSL-34 ,CSL-35, and CSL-36.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/7/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Confirmatory soil sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS continued confirmatory soil sampling from Phase 2 area. Samples were collected from select intervals of CSL-34, CSL-35 ,CSL-45, and CSL-46.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/8/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Confirmatory soil sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening.
2. ARCADIS continued confirmatory soil sampling from Phase 2 area. Samples were collected from select intervals of CSL-42, CSL-43 and CSL-44.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/9/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing oxidizer influent and effluent screening. The ISTR system temporarily shut down from approximately 5:30 AM to 9:00 AM due to a frozen pump.
2. The Town of Southington Director of Health visited the Site to discuss an odor complaint they recently received. The Southington Director of Health was provided with site data/results concerning perimeter air monitoring, oxidizer screening, and personal air monitoring data. In addition CTDEEP was notified of the odor complaint and it is expected that a DEEP specialist would visit the Site to further review the odor issue.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/12/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Confirmatory soil sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. On January 10, the oxidizer was permanently shut down and the recovered vapor has been re-routed through the carbon vessels.
1. TerraTherm continued to monitor the treatment system and is performing carbon vessel influent and effluent screening.
2. Anita Masih of CT DEEP visited the site to further assess the odor complaint received during the previous week.
3. ARCADIS continued confirmatory sampling with borings collected from CSL-21, CSL-31, and CSL-41.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/13/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Confirmatory soil sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon vessel influent and effluent screening.
2. ARCADIS continued confirmatory soil sampling from CSL-47, CSL-48, CSL- 49, and CSL-50.
3. A total of 69 vapor waste drums were removed by EQ (34 clay, 35 vapor GAC).

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 1/14/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Oversee completion of confirmatory soil sampling program.
Aquifer Drilling and Testing	ARCADIS drilling subcontractor.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Confirmatory soil sampling
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon vessel influent and effluent screening.
2. Soil borings CSL-032, CSL-033, and CSL-034 were resampled to reassess the data that exceeded interim characteristics.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/15/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon vessel influent and effluent screening.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/16/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Installation of insulation cover over CSL-32 through CSL-34
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and is performing carbon vessel influent and effluent screening.
2. TerraTherm is placing two layers of R-10 insulation to an area surrounding soil boring CSL-32, CSL-33 and CSL-34 locations to reduce the potential for heat loss through the concrete cap in those areas.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/19/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and is performing carbon vessel influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/20/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and is performing carbon vessel influent and effluent screening.
2. TerraTherm collected vapor influent and effluent and liquid influent and effluent samples according to the O&M plan.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 1/21/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and is performing carbon vessel influent and effluent screening.
2. TerraTherm raised 20 heaters within the areas surrounding soil borings CSL-32, CSL-33 and CSL-34.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/22/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm performed weekly screening of vacuum and PID readings from the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/23/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/26/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/27/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 1/28/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/29/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. EPA and CT DEEP provided approval to shut off most of the heater wells in the Phase 2 area, with the exception of those heater wells around the CSL-32/CSL-33/CSL-34 soil boring area and along VEW 16 branch line.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 1/30/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

SRSNE Site January 2015 Monthly Report  
Representative Photographs



Date: 1/5/2015

TerraTherm is disconnecting and removing wiring to Phase I heater wells that are no longer active.



Date: 1/5/15

View of groundwater sample being collected from monitoring well ISTR-3.



SRSNE Site January 2015 Monthly Report  
Representative Photographs



Date: 1/12/2015

View of geoprobe preparing to conduct boring for collection of Phase II confirmatory soil sample.



Date: 1/14/2015

View of geoprobe being decontaminated following collection of confirmatory soil samples.



SRSNE Site January 2015 Monthly Report  
Representative Photographs



Date: 1/16/2015

View of Terra Therm placing R-10 insulation to a rectangular area of the concrete cap surrounding the soil boring CSL-32/CSL-33/CSL-34 locations to help minimize heat loss through the concrete cap within that area.



Date: 1/16/15

View of R-10 insulation in the area of soil borings CSL-32/CSL-33/CSL-34 locations.

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, Jeff Holden, Kevin Crowder, ,

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 1/21/14 Project Call

**Date:** January 28, 2015

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On January 21, 2015 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone, Derek LaRossee
- ARCADIS - John LaChance
- IQAT - David Lehnus, Clayton Smith
- O&M - Ryan Malone
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

## **I. Meeting Minutes**

- A. Minutes from the December 29, 2014 meeting was distributed January 7, 2014; comments received have been incorporated.

## **II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)

- j) Set Phase II heaters to 20% (7/16/14)
- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I select heaters ramp down (12/4/14-12/8/14)
- ii) Phase II progress sampling (12/1/14-12/8/14)
- jj) Phase II confirmation sampling (1/5/14 – 1/13/15)
- kk) Oxidizer shutdown and vapor routed to carbon (1/10/15)
- ll) Phase II heaters raised and insulation added to select area (1/21/15)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 1/19/15 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:



- Phase II TMP's have reached an average temperature of 103°C. Influent concentrations remain at approximately 400ppm, this estimate is based on PID as the oxidizer has been taken offline.
- Based on calculations using previous using pre-treatment VOC mass, more than 99% of the mass has been removed to date, totaling approximately 425,565 lbs. Phase I and Phase II daily mass removal rates are 31 & 76 lbs/day, respectively.

**B. ARCADIS / QA**

- a) No QA issues were noted during this period

**C. IQAT**

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. Shutdown of select Phase II heaters
- B. Phase II confirmation re-sampling of select areas is set to begin on Monday, February 2, 2015. Sampling will take approximately 10 days.
- C. The next round of ISTR groundwater sampling is scheduled to begin on February 2, 2015.
- D. TerraTherm continues to upload current data to website.
- E. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. None.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, January 28, 2015.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

March 10, 2015

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 76 – February 2015**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 76.

This report covers the period from February 1-28, 2015, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 76**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**February 2015**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. February 2015 Project Activities:

- From February 1, 2015 to February 28, 2014, TerraTherm continued operation of the ISTR system and collected liquid and vapor samples as outlined in the approved sampling schedule. TerraTherm continued breaking down circuits and removing wiring from heaters in the phase I area that has been approved for shutdown.
- From February 1, 2015 to February 28, 2014, O&M Inc. continued to implement the perimeter air monitoring of the site, no alerts or alarms have been received during this time period.
- Re-sampling in the vicinity of the three locations (CSL-32, 33, and 34) that did not meet Interim NAPL cleanup levels (INCLs) was performed February 3 & 4, 2015. Eighteen (18) samples were collected at three (3) different depths. One sample, CSL-32s, exceeded the Interim NAPL Cleanup Levels (INCLs), this location was re-sampled on February 17, 2015. Results from the re-sampled location met the INCLs.
- On February 27, 2015, *de maximis* submitted the In-Situ Thermal Remediation Demonstration of Attainment of Interim NAPL Cleanup Levels and Recommendations report that summarized ISTR operations, sampling, results and recommended ending heating of the ISTR wellfield while continuing to treat vapors until the wellfield is below 100°C.
- Monthly Progress Report (MPR) 75 was submitted on February 10, 2015.
- The monthly IQAT report is attached.

b. March 2015 Planned Project Activities:

- During March 2015, *de maximis* will submit MPR 76.
- During March 2015, TerraTherm will continue treatment of vapors from the wellfield and will begin decommissioning the ISTR system.
- During March 2015, O&M Inc. will continue to implement the perimeter air monitoring system on the site.

- During March, 2015, post ISTR groundwater equilibrium sampling will be scheduled.
  - During March 2015, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – None
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
February 2015**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
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**Date:**  
March 6, 2015



## **IQAT Monthly Report February 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report February 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal treatment system operations portion of the Remedial Action (RA) at the Site during February 2015.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.





## **IQAT Monthly Report February 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include oversight of perimeter air monitoring systems and to review work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

### **2.7 Aquifer Drilling and Testing**

Aquifer Drilling and Testing (ADT) was contracted by TerraTherm to perform the drilling for the completion of the Phase 2 confirmatory soil re-sampling.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 2/2/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. TerraTherm performed confirmatory soil sampling with two additional samples adjacent to CSL-32 through CSL-



## IQAT Monthly Report February 2015

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

34. Samples were collected from the 2', 10', and 15' interval of borings CSL-34S, CSL-32N, and CSL-32S. Confirmatory soil sampling data indicated that the concentration of several VOCs in CSL-32S at a depth of 2 feet below the ground surface were present above the interim cleanup criteria.

TerraTherm collected PCB wipe samples from the oxidizer influent and effluent for waste characterization.

O&M continued to implement the perimeter air monitoring program.

- Week of 2/9/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. Wires from unused heaters within Phase 2 were disconnected.

In response to the elevated VOC concentrations detected in CSL-032S, TerraTherm relocated some of the insulation on the wellfield from the CSL-34 area to the CSL-32 area in order to provide further insulation around the location where the exceedances of the interim soil criteria occurred and raised the heaters approximately 1 foot in an effort to more evenly distribute the heat through the shallow area.

O&M continued to implement the perimeter air monitoring program.

- Week of 2/16/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. Wiring and hardware from unused heater boxes in Phase 1 were disconnected and removed.

TerraTherm oversaw the collection of confirmatory soil samples from two borings adjacent to CSL-32S at depths of 2 feet below grade. TerraTherm also installed three additional heater cans to a depth of 5 feet in the event that additional heaters will be required to address any remaining contamination above the interim cleanup criteria.

ARCADIS and O&M collected groundwater samples from ISTR-1 through ISTR-7.



## **IQAT Monthly Report February 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

O&M continued to implement the perimeter air monitoring program.

- Week of 2/23/15 – Work activities conducted during this period include: TerraTherm continued operation, optimization, and monitoring of the ISTR treatment system. Collection of samples was completed according to the approved sampling schedule and monitoring is performed as provided in the O&M Plan. The wiring from the remaining unused heaters were disconnected and removed. Approximately 10 tons of waste vapor carbon were sent off-site for disposal.

O&M continued to implement the perimeter air monitoring program.

### **3.2 IQAT Field Report**

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### **3.3 Significant Issue Reporting**

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. Representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on February 11<sup>th</sup>, 18<sup>th</sup>, and 27<sup>th</sup>. The primary purpose of the meetings is to discuss progress of work associated with the ISTR project and to discuss completion and shutdown of the ISTR system. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.



## **IQAT Monthly Report February 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.6 Air Quality Monitoring**

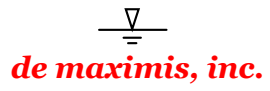
The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No alarms or alerts associated with the perimeter air monitoring were identified during this reporting period.

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

## **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/2/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

Yes

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. Due to heavy snow, confirmatory soil sampling was postponed to Tuesday 2/3/15.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/3/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing	Subcontractor to TerraTherm to perform drilling services for the Phase 2 confirmatory soil sampling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm performed confirmatory soil sampling with two additional samples adjacent to CSL-32 through CSL-34. Samples were collected from the 2', 10', and 15' interval of borings CSL-34S, CSL-32N, and CSL-32S.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/4/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
Aquifer Drilling and Testing	Subcontractor to TerraTherm to perform drilling services for the Phase 2 confirmatory soil sampling.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm performed confirmatory soil sampling with two additional samples adjacent to CSL-32 through CSL-34. Samples were collected from the 2', 10', and 15' interval of borings CLS-32S, CSL-32N, and CSL-34S.
3. TerraTherm collected PCB wipe samples from the oxidizer influent and effluent for waste characterization.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/5/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/6/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. Confirmatory soil sampling data indicated that the concentration of several VOCs in CSL-32S at a depth of 2 feet below the ground surface. TerraTherm to develop a plan to address these exceedances.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/9/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/10/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm collected vapor influent and effluent samples and liquid influent and midfluent samples as scheduled in the O&M plan.
3. TerraTherm relocated some of the insulation on the wellfield from the CSL-34 area to the CSL-32 area in order to provide further insulation around the location where the exceedances of the interim soil criteria was documented in the shallow soil interval (based on the data collected on 2/4/15).

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/11/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/12/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/13/15

Initial when  
complete: D.L>

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm disconnected heaters from within Phase 2 that are no longer in use.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/16/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

Yes

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm thawed several pipes and pumps from the treatment system in order to allow liquid and vapor flow to continue.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By: David Lehnus**

**Date:** 2/17/15

**Initial when  
complete:**

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program.
ADT, Inc.	Drilling subcontractor for TerraTherm.
ARCADIS	On-site to assist with collection groundwater samples.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. ARCADIS and O&M collected groundwater samples from ISTR-5, ISTR-6, and ISTR-7.
3. TerraTherm oversaw the collection of confirmatory soil samples from two borings adjacent to CSL-32 at depths of 2 feet below grade. TerraTherm also installed three additional heater cans to a depth of 5 feet in the event that additional heaters will be required to address any remaining contamination above the interim cleanup criteria.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/17/15

**Initial when  
complete:**

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	On-site to assist with collection groundwater samples.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. ARCADIS and O&M collected groundwater samples from ISTR-1 through ISTR-4.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/17/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm disconnected wiring from heaters in Phase I.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/20/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm disconnected wiring from heaters in Phase I and removed heater hardware.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/23/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. Approximately 10 tons of waste carbon were sent off-site for disposal.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 2/25/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
---	----

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/26/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 2/27/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

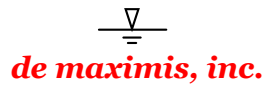
**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.





**Attachment 2**

**Representative Photos**

SRSNE Site February 2015 Monthly Report  
Representative Photographs



Date: 2/3/2015

View of geoprobe preparing to conduct boring for collection of Phase II confirmatory soil sample at the CSL-032S location.



Date: 2/3/15

View of cooling confirmatory soil sample after collection.



SRSNE Site February 2015 Monthly Report  
Representative Photographs



Date: 2/17/2015

View of geoprobe preparing to conduct boring for collection of Phase II confirmatory soil sample at the CSL-032N location.



Date: 2/17/2015

View of groundwater sample being collected from monitoring well ISTR-4.



SRSNE Site February 2015 Monthly Report  
Representative Photographs



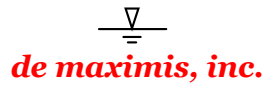
Date: 2/23/2015

View of Terra Therm placing spent carbon into roll-off container for off-site disposal.



Date: 2/23/15

View of Terra Therm placing spent carbon into roll-off container for off-site disposal.



**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 1/28/15 Project Call

**Date:** February 11, 2015

---

On January 28, 2015 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone, Derek LaRossee
- ARCADIS - John LaChance, Jeff Holden, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- O&M - Ryan Malone
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the January 21, 2014 meeting was distributed January 28, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)

- j) Set Phase II heaters to 20% (7/16/14)
- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I select heaters ramp down (12/4/14-12/8/14)
- ii) Phase II progress sampling (12/1/14-12/8/14)
- jj) Phase II confirmation sampling (1/5/14 – 1/13/15)
- kk) Oxidizer shutdown and vapor routed to carbon (1/10/15)
- ll) Phase II heaters raised and insulation added to select area (1/21/15)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 1/25/15 and is included on the “think-thermal” website.
  - c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:

- Phase II TMP's have reached an average temperature of 103°C. Influent concentrations remain at approximately 300 ppm, this estimate is based on PID as the oxidizer has been taken offline.
- Based on calculations using previous using pre-treatment VOC mass, more than 99% of the mass has been removed to date, totaling approximately 427,200 lbs. Phase I and Phase II daily mass removal rates are 10.9 & 46 lbs/day, respectively.
- Insulation has been added around soil samples CSL-32, 33, & 34 and heaters have been raised around CSL-34.

**B. ARCADIS / QA**

- a) No QA issues were noted during this period

**C. IQAT**

- a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

**VI. Engineering and Design Items**

- A. Shutdown of select Phase II heaters option "A" and "B"
  - a) Agencies request an option "C" that includes all wells in option "A" and all wells along SV-16.
- B. Phase II confirmation re-sampling of select areas is set to begin on Monday, February 2, 2015.
- C. The next round of ISTR groundwater sampling is scheduled to begin on February 2, 2015.
- D. TerraTherm continues to upload current data to website.
- E. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

**VII. Identification of Problems that May Impede Planned Progress**

- A. None

**VIII. Other Business**

- A. None.

**IX. New Action Items**

- A. Review website as current data is uploaded.

**X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, February 11, 2015.



**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 2/11/15 Project Call

**Date:** February 18, 2015

---

On February 11, 2015 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone
- ARCADIS - John LaChance, Jeff Holden, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- O&M - Ryan Malone
- CTDEEP- Shannon Pociu
- USEPA- Eva Davis, Karen Lumino, Lee Thomas

**I. Meeting Minutes**

- A. Minutes from the January 28, 2014 meeting was distributed February 11, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)

- j) Set Phase II heaters to 20% (7/16/14)
- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I select heaters ramp down (12/4/14-12/8/14)
- ii) Phase II progress sampling (12/1/14-12/8/14)
- jj) Phase II confirmation sampling (1/5/14 – 1/13/15)
- kk) Oxidizer shutdown and vapor routed to carbon (1/10/15)
- ll) Phase II heaters raised and insulation added to select area (1/21/15)
- mm) Select Heaters in Phase II ramped down (1/30/15)
- nn) Phase II ISTR soil re-sampling-18 samples (2/3/15 -2/4/15)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.
  - b) A copy of the weekly SRS ISTR Summary Report was distributed on 2/9/15 and is included on the “think-thermal” website.

- c) TerraTherm summarized current operational conditions of the ISTR system, some items to note:
  - Phase II TMP's have reached an average temperature of 100°C. Influent concentrations remain at approximately 450 ppm, this estimate is based on PID as the oxidizer has been taken offline.
  - Based on calculations using previous using pre-treatment VOC mass, more than 99% of the mass has been removed to date, totaling approximately 427,900 lbs. Phase I and Phase II daily mass removal rates are 18 & 19 lbs/day, respectively.
  - As a result of the failure of the soil re-sampled at CSL-32, the insulation around soil samples CSL-32 has been adjusted and heaters have been raised approximately ½-foot.
  - May add sleeves around CSL-32 for additional heaters during next sampling event.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

#### **VI. Engineering and Design Items**

- A. Re-sampling CSL-32 (2-3 samples) tentatively scheduled for Tuesday, February 17, 2015 .
- B. The next round of ISTR groundwater sampling is scheduled to begin on Tuesday, February 17, 2015.
- C. TerraTherm continues to upload current data to website.
- D. Continue to review and submit suggestions to the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

#### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

#### **VIII. Other Business**

- A. None.

#### **IX. New Action Items**

- A. Review website as current data is uploaded.

#### **X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, February 18, 2015.



*de maximis, inc.*

200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
(860) 298-0541  
(860) 298-0561 FAX

April 10, 2015

Ms. Karen Lumino  
Office of Site Remediation and Restoration  
CT Superfund Section  
USEPA Region 1  
5 Post Office Square, Suite 100  
Mailcode OSRR07-4  
Boston, MA 02109

**Subject: Solvents Recovery Service of New England Inc. Superfund Site  
Southington, Connecticut  
Monthly Progress Report No. 77 – March 2015**

Dear Ms. Lumino:

Pursuant to Section X, paragraph 32 of the Consent Decree (CD) for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. Superfund Site entered on March 26, 2009 by the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE), and in accordance with Paragraph VIII.A of the Statement of Work (SOW) attached to the CD as Appendix B, enclosed please find Monthly Progress Report No. 77.

This report covers the period from March 1-31, 2015, and is submitted on behalf of the Respondents to the CD.

Please contact me if you have any questions.

Sincerely,

Bruce Thompson  
Project Coordinator

Enclosure

cc: Shannon Pociu, CTDEEP  
SRSNE Executive Committee

## **Monthly Progress Report No. 77**

Solvents Recovery Service of New England Inc.  
Superfund Site  
Southington, Connecticut

**March 2015**

Activities conducted during the previous month and planned for the next month, including submission of deliverables required by the Consent Decree and actions such as data collection and implementation of work plans:

a. March 2015 Project Activities:

- On March 2, 2015, the Agencies conditionally approved the request to terminate heating across the ISTR wellfield. Heating of the wellfield has ceased, vacuum has been increased and recovered vapors will continue to be treated until the wellfield temperatures reach less than 100 °C.
- From March 1, 2015 to March 31, 2015, TerraTherm continued breaking down circuits and removing wiring from heaters.
- From March 1, 2015 to March 31, 2014, O&M Inc. continued to implement the perimeter air monitoring of the site, no alerts or alarms have been received during this time period.
- On March 17-18, 2015, post ISTR groundwater equilibrium sampling was performed.
- On March 16, 2015, *de maximis* received comments on the In-Situ Thermal Remediation Demonstration of Attainment of Interim NAPL Cleanup Levels and Recommendations report.
- Monthly Progress Report (MPR) 76 was submitted on March 10, 2015.
- The monthly IQAT report is attached.

b. April 2015 Planned Project Activities:

- During April 2015, *de maximis* will submit MPR 77.
- During April 2015, *de maximis* will submit a response to comments and a revised In-Situ Thermal Remediation Demonstration of Attainment of Interim NAPL Cleanup Levels and Recommendations report.
- During April 2015, TerraTherm will continue to disassemble the ISTR wellfield in areas where temperatures are less than 100 °C and will begin to decommission the ISTR system system.
- During April 2015, O&M Inc. will continue to implement the perimeter air monitoring system on the site.

- During March 2015, *de maximis* will participate in weekly conference calls with the Agencies to discuss project activities, plans, and to provide an update of the ISTR activities.
- c. Problems Encountered or Anticipated – None
- d. Results on Environmental Monitoring, Sampling, and Tests and All Other Data Received or Generated in the Previous Month- No alarms, alerts, or issues have been encountered with the perimeter air monitoring.
- e. Activities Undertaken in Support of the Community Relations Support Plan during the Previous Month and Planned for the Following Month-None



**Disclaimer:** *This document is a DRAFT document prepared by the SRSNE Site Group under a government Consent Decree. This document has not undergone formal review by the EPA and CT DEEP. The opinions, findings, and conclusions, expressed are those of the author and not those of the U.S. Environmental Protection Agency or the CT Department of Energy and Environmental Protection.*

**Independent Quality  
Assurance Team (IQAT)  
Monthly Report  
March 2015**

Solvents Recovery Service of  
New England (SRSNE)  
Superfund Site  
Southington, Connecticut

**Prepared for:**  
SRSNE Site Group

**Prepared by:**  
**de maximis, inc**  
200 Day Hill Road  
Suite 200  
Windsor, CT 06095  
Tel (860) 298-0541  
Fax (860) 298-0561

**Date:**  
April 7, 2015





## **IQAT Monthly Report March 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

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### **Attachments**

Attachment 1	-	IQAT Daily Reports
Attachment 2	-	Representative Photos
Attachment 3	-	Progress Meeting Minutes



## **IQAT Monthly Report March 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **1. Introduction**

Pursuant to the Independent Quality Assurance Team (IQAT) Work Plan dated April 2010 and addendum dated April 2013 for the Remedial Design/Remedial Action at the Solvents Recovery Service of New England, Inc. (SRSNE, the Site), this Monthly IQAT Report provides summary of observations during the thermal treatment system operations portion of the Remedial Action (RA) at the Site during March 2015.

To further clarify activities being performed by the various firms in support of the ISTR work, ARCADIS prepared the Thermal Wellfield Implementation Support Plan (TWISP), dated April 2013. The overall purpose of the TWISP is to provide a consolidated plan of activities that are being performed by the various firms in support of the ISTR work.

The TerraTherm O&M Manual dated May 2014 provides specific information and procedures that will be used throughout the thermal operation period. TerraTherm will conduct operations and maintain the Site during the thermal operation period in accordance with the ISTR Design, Remedial Action Work Plan, Project Operations Plan and all other applicable approved project plans.

### **2. Site Team and Roles/Responsibilities**

#### **2.1 Project Coordinator**

The SRSNE Site Group has retained de maximis, inc, (de maximis) as their Project Coordinator. de maximis serves as the primary contact with the SRSNE Site Group, Environmental Protection Agency (EPA), Connecticut Department of Energy and Environmental Protection (CTDEEP), Remedial Design Consultants and Remedial Action Contractors. On behalf of the SRSNE Site Group, Mr. Bruce Thompson serves as the Project Coordinator and Mr. John Hunt serves as the Alternate Project Coordinator.

#### **2.2 Construction Manager (CM)**

de maximis acts as the on-site contact for all field work. Ms. Jessie McCusker is acting as the CM on behalf of de maximis. The CM coordinates with and directs all the various consultants, contractors, and third parties to facilitate implementation of work and ensure documentation of the work is completed in accordance to approved project documents and work plans.



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Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **2.3 Independent Quality Assurance Team (IQAT)**

Mr. David Lehnus and Mr. Clayton Smith of de maximis perform the IQAT function and are the primary contact for the IQAT work. The role of the IQAT is to perform independent construction quality assurance inspections of the work as needed to assess compliance with work plans; and report results and findings.

### **2.4 TerraTherm**

The SRSNE Site Group has retained TerraTherm, Inc. (TerraTherm) to design and perform the In-Situ Thermal Remediation (ISTR) portion of the Site remedy. Ms. Robin Swift is the primary contact for TerraTherm.

### **2.5 ARCADIS**

ARCADIS responsibilities include collection of confirmatory soil borings, collection of groundwater samples, review of work plans and construction documents. Mr. Jeff Holden of Arcadis is the primary contact for their work.

### **2.6 Weston Solutions, Inc.**

Weston Solutions, Inc. (Weston) continues to operate the Hydraulic Containment Treatment System (HCTS) treatment system.

### **2.7 Aquifer Drilling and Testing**

Aquifer Drilling and Testing (ADT) is contracted by TerraTherm to assist with decommissioning of the ISTR well field.

## **3. Summary of Activities and Observations this Reporting Period**

### **3.1 General Overview of Site Activities**

- Week of 3/2/15 – Work activities conducted during this period include: On March 2, EPA provided conditional approval of the SRSNE Group's request to terminate heating across the entire ISTR area. The heaters were ramped down gradually and were turned off completely on March 6. Blowers were turned up to increase ambient air flow into the subsurface to expedite the cooling of the soil. Vapors collected during cool down will



## IQAT Monthly Report March 2015

Solvents Recovery Services  
of New England, Inc.  
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continue to be filtered through the carbon vessels until the soil temperature drops below 100 degrees Celsius. TerraTherm began removal of heaters from the Phase I area where soil temperatures have dropped below 100°C.

O&M continued to implement the perimeter air monitoring program.

- Week of 3/9/15 – The blowers continued to operate drawing vapor from the wellfield as the subsurface soil cools. TerraTherm continued the disassembly of the wellfield with the removal of heaters, liners, and jumper cables.

O&M continued to implement the perimeter air monitoring program.

- Week of 3/16/15 – Work activities conducted during this period include: TerraTherm continued disassembly of the wellfield and operation of the blowers.

ARCADIS collected groundwater samples using hydrasleeve samplers from monitoring wells MWL-304, TW-08D, TW-08B, TW-08A, MW-413, MW-415, MWL-307, MW-902D, MW-902 M, and MW-416. Samples were analyzed for VOCs and monitored natural attenuation parameters.

O&M continued to implement the perimeter air monitoring program.

- Week of 3/23/15 – Work activities conducted during this period include: TerraTherm continued disassembly of the wellfield and operation of the blowers. Temperatures in the Phase I area dropped below 100 degrees and disassembly of the Vapor Extraction Well (VEW) hoses and piping was initiated in the Phase I area. The piping and hoses are being stored on plastic sheeting pending delivery of roll-offs containers and off-site disposal. Non-contact equipment associated with the oxidizer were removed and packed for removal from the Site.

O&M continued to implement the perimeter air monitoring program.

- Week of 3/30/15 –Work activities conducted during this period include: TerraTherm continued disassembly of the wellfield and operation of the blowers.

O&M continued to implement the perimeter air monitoring program



## **IQAT Monthly Report March 2015**

Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.2 IQAT Field Report**

The IQAT completed a field Report for each day on-Site. The IQAT Field Report includes a list of Contractors on-Site and brief summary of work performed by each Contractor. The IQAT Field Reports are provided in Attachment 1 of this Report

### **3.3 Significant Issue Reporting**

Consistent to the IQAT Work Plan, the IQAT will provide written notification to the Project Coordinator and the RA Contractors' Manager (s) of work inconsistency. No Significant issue notifications were necessary during this reporting period.

### **3.4 IQAT Photo Documentation of Work**

The IQAT is performing photo documentation of the work. Representative photos for this period are provided in Attachment 2 of this Report.

### **3.5 Project Construction Meetings**

The IQAT participated at Construction Progress Meetings conducted via teleconference on March 4<sup>th</sup> and 11<sup>th</sup>. The primary purpose of the meetings is to discuss the shutdown of the treatment system and demobilization efforts, including waste disposal. Meeting minutes are being prepared by the de maximis Construction Manager and those minutes received this period are provided in Attachment 3 of this Report.

### **3.6 Air Quality Monitoring**

The perimeter air monitoring program is being implemented by O&M and work zone monitoring is being performed by TerraTherm. The IQAT Daily Report notes when air quality monitoring is being performed and outcome of the monitoring (i.e. whether additional engineering controls were necessary or upgrade to personal protection equipment was necessary). No alarms or alerts associated with the perimeter air monitoring were identified during this reporting period.



## **IQAT Monthly Report March 2015**

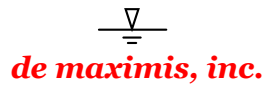
Solvents Recovery Services  
of New England, Inc.  
(SRSNE) Superfund Site

### **3.7 Health & Safety Incidents / Near Miss Reporting**

As identified in the Site Specific Health & Safety Plan, every employee injury must be reported within 24 hours of the injury. There was no employee safety incidents recorded during this reporting period.

### **4. IQAT Conclusions**

Based upon review of the IQAT Site inspections and supplemental project information/data, the work appears to be implemented in accordance with the site-specific approved Work Plans.



**Attachment 1**

**IQAT Daily Reports**

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/2/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. On March 2, EPA provided conditional approval of the SRSNE Group's request to terminate heating across the entire ISTR area.
2. TerraTherm began ramping down the energy to the remaining heaters. The blowers will continue to operate in order to remove residual vapor until the soil temperature drops below 100°C.



Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/3/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm began removal of heaters from the Phase I area heater wells.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/4/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. TerraTherm continued removal of heaters from the Phase I area heater wells.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/5/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the treatment system and performing carbon influent and effluent screening.
2. Heaters were ramped down to approximately 60% and the blowers were increased in order to allow cool ambient air into the subsurface at a greater rate to accelerate the cooling of soil.
3. TerraTherm continued to remove heaters from the Phase I area heater wells.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/6/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Active Heaters were ramped down to approximately 50%.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/9/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Removal of heaters and liners.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Heaters and liners were removed from wells in the northeastern portion of the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/10/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Removal of heaters and liners.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Heaters and liners were removed from wells in the northeastern portion of the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/11/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Removal of heaters and liners.
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Jumper wires and Temperature Monitoring Probe boxes were removed from the wellfield.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/12/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Grounding wires, jumper wires, and heaters were removed from the wellfield.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/13/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Grounding wires and jumper wires were removed from the wellfield.
3. Carbon from the vapor treatment vessels was replaced. Bags of spent carbon were placed on the secondary containment pad.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/16/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. Continued to remove heaters and liners from the wellfield.
3. Continued to removed jumper cables.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/17/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Collection of groundwater samples.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters and liners from the wellfield.
3. ARCADIS set hydrasleeve samplers into 10 groundwater monitoring wells.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/18/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ARCADIS	Collection of groundwater samples.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters/liners and jumper cables from the wellfield.
3. ARCADIS retrieved hydrasleeve samplers from monitoring wells MWL-304, TW-08D, TW-08B, TW-08A, MW-413, MW-415, MWL-307, MW-902D, MW-902 M, and MW-416. Samples were analyzed for VOCs and monitored natural attenuation parameters.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/19/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Cutting of a heater well using down-hole cutting tool
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm removed heaters and liners from the wellfield and performed a pilot test of a cutting tool to cut heater wells below grade. The cutting tool was effective on one well but became too dull to complete a second well. An alternative cutting method will be considered.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/20/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			Cutting of a heater well using down-hole cutting tool
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters and liners from the wellfield.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/23/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters and liners from the wellfield.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/24/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm removed heaters and liners from the wellfield and began disconnecting the Vapor Extraction Well piping in the Phase I area and staging the fiberglass piping on plastic sheeting until a roll-off container is delivered.



**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/25/15

**Initial when complete:** D.L.

Did weather impede on project progress (Yes or No)? If yes, provide further detail below.	No
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**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken		X		
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters/liners from the wellfield, disconnecting the VEW piping and staging the fiberglass piping on plastic sheeting.

**Solvents Recovery Service of New England (SRSNE) Site – Southington, CT**  
**Thermal Wellfield Installation**  
**Independent Quality Assurance Team (IQAT)**  
**Daily Report**

**Prepared By:** David Lehnus

**Date:** 3/26/15

**Initial when complete:** D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program
ADT, Inc.	TerraTherm subcontractor for abandonment of ISTR related wells.

**IQAT Observations**

<b>Activity</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Description (if necessary)</b>
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to removed heaters/liners from the wellfield, disconnecting the VEW piping, and staging the fiberglass piping on plastic sheeting until.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/27/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued removal of heaters/liners from the wellfield and disassembling of the VEW piping and valves.
3. TerraTherm began disassembly of the oxidizer.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/30/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued removal of heaters/liners from the wellfield and disassembly of the VEW piping and valves.

Solvents Recovery Service of New England (SRSNE) Site – Southington, CT  
Thermal Wellfield Installation  
Independent Quality Assurance Team (IQAT)  
Daily Report

Prepared By: David Lehnus

Date: 3/31/15

Initial when  
complete: D.L.

Did weather impede on project progress  
(Yes or No)?  
If yes, provide further detail below.

No

**Contractors on-Site and Summary of Work Performed**

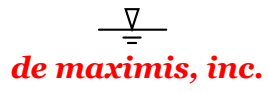
de maximis, Inc. (Jessie McCusker)	Performed Construction Management activity.
TerraTherm	Provided direct oversight and operation of the In-Situ Thermal Remediation (ISTR) portion of the Site remedy.
O&M, Inc.	Managing implementation of the perimeter air monitoring program

**IQAT Observations**

Activity	Yes	No	N/A	Description (if necessary)
Tailgate Safety Meeting Conducted	X			
Any Health & Safety Incidents Reported		X		
Perimeter Air Monitoring Performed by O&M	X			
IQAT Photo Documentation Taken	X			
ISTR Treatment System Monitoring being Performed by TerraTherm	X			

**Additional Comments**

1. TerraTherm continued to monitor the vapor recovery and treatment of the wellfield until subgrade temperatures drop below 100 degrees.
2. TerraTherm continued to remove heaters/liners from the wellfield and disassemble the VEW piping and valves.



**Attachment 2**

**Representative Photos**

SRSNE Site March 2015 Monthly Report  
Representative Photographs



Date: 3/9/2015

View of heater being removed from a heater well located in north east portion of site.



Date: 3/9/15

View of north east area of site following removal of vapor piping and most of the electrical components.



SRSNE Site March 2015 Monthly Report  
Representative Photographs



Date: 3/23/2015

View of north western portion of site following removal of the vapor extraction piping.



Date: 3/23/2015

View of vapor extraction piping being stockpiled in preparation for disposal.



SRSNE Site March 2015 Monthly Report  
Representative Photographs



Date: 2/24/2015

View of ISTR well field looking east. Terra Therm is in the process of breaking down components of the well field.



Date: 3/31/15

View of ISTR well field looking west. Terra Therm continues the process of breaking down components of the well field.



**Attachment 3**

**Progress Meeting Minutes**

**To:** MEMO TO FILE

**From:** Jessie McCusker

**cc:** Attendees, Lee Thomas, Eva Davis

**Re:** Solvents Recovery Service of New England, Inc. Superfund Site  
Meeting- ISTR Construction- DRAFT Meeting Minutes 3/4/15 Project Call

**Date:** March 11, 2015

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On March 3, 2015 a Meeting for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site (Site) In-Situ Thermal Remediation (ISTR) construction was held at the **de maximis, inc.** (de maximis) field office located in Southington, CT and via conference call. Delivery

Participating in the meeting were the following:

- de maximis – Bruce Thompson
- TerraTherm, Inc (TerraTherm) – Robin Swift, Tim Mahoney, Nikole Stone
- ARCADIS - Jeff Holden, Kevin Crowder
- IQAT - David Lehnus, Clayton Smith
- O&M - Ryan Malone
- CTDEEP- Shannon Pociu, Tom RisCassi
- USEPA- Karen Lumino

**I. Meeting Minutes**

- A. Minutes from the February 27, 2014 meeting was distributed March 3, 2014; comments received have been incorporated.

**II. Schedule/Progress Review**

- A. Work completed this period and the proposed remaining ISTR construction schedule is summarized below:
- a) Start-up Phase I (5/15/14)
  - b) SCRs at design kW output (5/22/14)
  - c) Final commissioning of oxidizer (5/29/14)
  - d) Data uploaded to “Think-Thermal” website (5/27/14)
    - Data plotter is live
    - All graphs at data are updated weekly
    - Progress reports will be issued weekly on Mondays
  - e) Installed turbulators to increase efficiency of heat exchange for process air to oxidizer, as a result gas usages has dropped by approximately 25% (6/6/14)
  - f) Replaced power supplies and wiring harnesses to 2 Phase I SCRs and all of Phase II SCRs to help maintain consistent power to controller. This changes was made based on concerns in reliability and on recommendations from the manufacturer (6/10/14-6/11/14)
  - g) Shut dilution air valve, valve was open to minimize amount of water pulled into system (6/20/14)
  - h) Adjusted temperature sensor locations for TMP 74 & 75 (7/3/14)
  - i) Set Phase II heaters to idle (7/9/14)

- j) Set Phase II heaters to 20% (7/16/14)
- k) Adjusted length of heater 590 due to short circuiting (7/22/14)
- l) Backup heat exchanger removed for repair (7/23/14) repaired and reinstalled (7/30/14)
- m) Progress sampling- 5 borings were advanced near TMP-5, 10, 47, 24, & 74, three samples from each boring were submitted to the lab for analysis. Samples submitted were chosen based on PID and visual observations as well as a sample at the bedrock interface. (7/28/14 – 7/30/14)
- n) Replace discharge pump (7/31/14)
- o) Heat exchanger added to sanitary discharge line (8/11/14)
- p) Bypass heat exchanger directly to oxidizer (8/12/14)
- q) Oxidizer shut down, heaters set to idle, vapor routed to carbon (8/13/14)
- r) CCC onsite to assess oxidizer damage and perform repairs (8/21/14-8/28/14)
- s) Placement and calibration of additional thermocouple and flame analyzer (8/22/14 – 8/29/14)
- t) Clay filtration unit put online between the oil water separator and the scrubber (8/25/14)
- u) Replacement of daisy wheel and damaged refractory (8/26/14)
- v) Oxidizer online, block valve open, & heaters set to 10% (8/29/14)
- w) Phase I heaters set to 20% (9/1/14)
- x) Phase I heaters set to 30% (9/2/14)
- y) Phase I heaters set to 40% (9/3/14)
- z) Phase I heaters set to 50% (9/8/14)
- aa) Phase I heaters set between 60-70% (9/10/14)
- bb) Clay filter and carbon swap out (10-1-14)
- cc) Phase II heaters ramped up from 20-40% (10/5-8/14)
- dd) Heat exchange coil added to oil water separator to reduce bio-foaming (10/7/14)
- ee) 2<sup>nd</sup> progress sampling event (10/13/14-10/21/14)
- ff) Phase I confirmatory sampling event (11/11/14-11/19/14)
- gg) EPA approved shutdown of phase I heaters with the exception of select locations on the perimeter of the Phase II area as proposed. (12/3/14)
- hh) Phase I select heaters ramp down (12/4/14-12/8/14)
- ii) Phase II progress sampling (12/1/14-12/8/14)
- jj) Phase II confirmation sampling (1/5/14 – 1/13/15)
- kk) Oxidizer shutdown and vapor routed to carbon (1/10/15)
- ll) Phase II heaters raised and insulation added to select area (1/21/15)
- mm) Select Heaters in Phase II ramped down (1/30/15)
- nn) Phase II ISTR soil re-sampling-18 samples (2/3/15 -2/4/15)
- oo) Remaining heaters ramped down (3/3/15)

### **III. Safety/Housekeeping**

- A. TerraTherm continues to conduct daily tailgate safety meetings at the start of each workday.
- B. TerraTherm noted that there has been no safety incidents reported during this period.

### **IV. Record Keeping**

- A. O&M staff maintains the perimeter monitoring stations and submits maintenance documents to de maximis and ARCADIS. The current alarm limit is 1ppm as measured with a PID.

### **V. Quality Control / Quality Assurance**

- A. TerraTherm / QC
  - a) TerraTherm continues to make changes as requested to the “think-thermal” website.

- b) A copy of the weekly SRS ISTR Summary Report was distributed on 3/2/15 and is included on the “think-thermal” website.
- B. ARCADIS / QA
  - a) No QA issues were noted during this period
- C. IQAT
  - a) IQAT noted that all is going to plans and that TerraTherm has been following the updated sampling plan since start-up and following shutdown and restart of the oxidizer.

#### **VI. Engineering and Design Items**

- A. The remaining heaters will be completely offline by 3/6/15; vapors will continue to be treated until wellfield is below 100°C, this will take approximately 3weeks.
- B. TerraTherm is currently working on a demobilization plan and has been removing wiring and heater.
- C. Per the SOW ISTR completion triggers a post construction inspection which intern triggers the construction completion report.
- D. Sampling of downgradient wells 3x a year until equilibrium is reached has been triggered and will be scheduled.
- E. IC plan will be revised to use current ELUR form.
- F. One more round of groundwater sampling will be performed of the ISTR wells and will include sampling for dioxin.
- G. TerraTherm continues to upload current data to website.
- H. Continue to review the website and weekly reports  
(<http://www.think-thermal.com/>)  
username: srsnegroup,  
password: cleanup2014

#### **VII. Identification of Problems that May Impede Planned Progress**

- A. None

#### **VIII. Other Business**

- A. None.

#### **IX. New Action Items**

- A. Review website as current data is uploaded.

#### **X. Upcoming Meetings**

- A. The next progress meeting will be held at 2:00 pm EST on Wednesday, March 11, 2015.