

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Former Kil-Tone Site Emergency Response (RV1) - Removal Polrep  
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** **POLREP #2**  
**Final**  
**Former Kil-Tone Site Emergency Response (RV1)**  
**A24N**  
**Vineland, NJ**  
**Latitude: 39.4784099 Longitude: -75.0254889**

**To:**  
**From:** Kimberly Staiger, OSC  
**Date:** 9/30/2015  
**Reporting Period:** July 4, 2015 to September 30, 2015

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A24N	<b>Contract Number:</b>	EP-S2-15-02
<b>D.O. Number:</b>	007	<b>Action Memo Date:</b>	8/10/2015
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	7/1/2015	<b>Start Date:</b>	7/1/2015
<b>Demob Date:</b>	9/29/2015	<b>Completion Date:</b>	9/29/2015
<b>CERCLIS ID:</b>	NJN000201303	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	07/01/2015
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Emergency Removal Action

#### 1.1.2 Site Description

The Former Kil-Tone Company Site is located at 527 East Chestnut Avenue in a mixed use area within the City of Vineland, Cumberland County, NJ. The Kil-Tone Company manufactured arsenic-based pesticides from the late 1910s until the late 1930s. Specific compounds manufactured by the company include lead arsenate and copper lime calcium arsenate dust. During the late 1800s and early 1900s, arsenical pesticides were popular and commonly used in agriculture.

The Site property is currently owned by Urban Manufacturing LLC, a holding company with Urban Sign & Crane, Inc. as a tenant. Urban Sign & Crane, Inc. fabricates and installs commercial signage. Operations are conducted within the building, with the outside portions of the lot used for storage of equipment and vehicles. A large portion of the property is unpaved, with asphalt paving located around the eastern and northern perimeter of the property.

##### 1.1.2.1 Location

The Site is located in a mixed use residential/commercial/light industrial neighborhood of Vineland, New Jersey. The Site is bounded to the north by East Cherry Street, to the south by Paul Street, to the east by South Sixth Street and to the west by South East Boulevard. The nearest residential property to the Former Kil-Tone Company Site property sits immediately adjacent the property. The Third Street Complex, a public park funded by NJDEP Green Acres, is located less than 0.25 miles west of the Site on East Chestnut Avenue, and the Gloria M. Sabater Elementary School is located 0.25 miles north of the Site on Almond Street.

The residential area immediately surrounding the Former Kil-Tone Site property are mostly older structures constructed in the early 1900s. The majority of the properties are single family homes or duplexes that have been converted into tenant occupied apartment buildings.

##### 1.1.2.2 Description of Threat

Soil sampling conducted by the New Jersey Department of Environmental Protection (NJDEP) in August 2014 discovered high concentrations of arsenic and lead in the soils at the Site property and several neighboring residential properties. NJDEP referred the site for removal action consideration on November 14, 2014.

Soil sampling conducted by the NJDEP in August 2014 detected elevated concentrations of arsenic on the Site property. Arsenic is present in the top 6" of soil as high as concentrations as high as 740 ppm and at depth as high as 5,800 ppm. Groundwater samples collected from temporary well points on the Site have arsenic concentrations that range from 8.1 ppb to 14,000 ppb.

EPA collected 27 surface soil samples in a grid pattern from the unpaved portions of the Former Kil-Tone Company Site property on January 15, 2015 and detected arsenic concentrations in the top 3" of soil that range from 2 ppm to 2,300 ppm. Lead concentrations within the top 3" of soil range from 5 ppm to 460 ppm.

EPA's Environmental Response Team (ERT) performed a high-resolution characterization of the Site soils using a Cone Penetrometer/X-Ray Fluorescence (CPT/XRF) from June 22 – July 1, 2015. A Geoprobe was used to collect soil cores to obtain visual comparisons for the CPT logs and to run confirmation lab analyses on the XRF data. The CPT/XRF detected arsenic concentrations as high as 47,000 ppm and lead concentrations as high as 119,280 ppm in the soils near the former rail spur.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

On July 1st at 12:15 hours the CPT/XRF drill probe punctured a pressurized water line that fed the fire suppression system for the Urban Sign & Crane facility. The Vineland City Water Department shut off the water at the main approximately 100 minutes after the pipe break. The 8" diameter pipe is located adjacent the main loading dock closest to Chestnut Avenue, near the former rail spur. This area of the property contained the highest concentrations of arsenic and lead based upon the CPT/XRF readings.

The water line break caused contaminated soil and sediments to release into a storm sewer that drains to the Tarklin Branch. A release was called into the National Response Center (#1121577), and the NJDEP created a state case number (State Case #15-07-01-1927-51). Verbal authorization was received on July 1, 2015 to conduct an emergency removal action to initiate repairs of the fire suppression line and to address the release of hazardous materials into the storm sewer located at the northwestern corner of the Site property.

#### 2.1.2 Response Actions to Date

EPA activated a Region 2 Emergency and Rapid Response Services (ERRS) contractor on July 1, 2015 to assist in removal operations. The ERRS contractor mobilized to the Site to make the necessary repairs to the fire suppression line and halt the migration of contaminated sediments and soils into the storm sewer.

The area of the water line break was excavated to a depth of 5' b.g. to expose the water line and determine the location of the break. Repairs to the water line were completed on July 3, 2015 at 1630 hours and the building was removed from a fire watch after the sprinkler system was flushed and pressure tested.

Soils and liquids removed from the excavation were containerized and secured on Site awaiting the transportation and disposal to an appropriate disposal facility. Waste water generated during the water line repair were transported off-site for disposal on August 13, 2015. The contaminated soils staged in roll offs on site were stabilized and prepped for disposal on September 28, 2015. The waste was transported off-site for disposal on September 29, 2015.

On September 4, 2015, EPA was notified about a sewer backup on the Former Kil-Tone Company Site property. The clean out is located approximately two feet from the side of the building. According to Landis Sewerage Authority, the sewage has been dispensing onto the ground for several weeks and was not occurring prior to EPA's subsurface soil investigation. Tracing of the line indicates that it runs on a diagonal from the cleanout and enters a concrete vault. Soil boring ERT-CPT-60 was installed in the location of the traced sewer line near the concrete vault; this line was not marked out during the subsurface investigation.

Investigation of the sewer line determined that the property is serviced by a septic system and not City Sewer. The septic was pumped to determine if EPA subsurface investigation activities had impacted the pipeline entering the tank. Both the Vineland Health Dept and Landis Sewerage Authority (LSA) were on site during the pumping operation. A total of 1,250 gallons of liquid and sludge was removed from the tank. Immediately after the pumping, both toilets were flushed, and the contents drained into the septic tank. A riser was installed on the tank to bring the lid of the septic to current grade.

LSA records indicate that a 1988 permit was submitted to connect to the city sewer, however there are no records of the property connecting to the sewer main. Historic septic plans on file at the Vineland Health Department indicate that the septic was installed by Progresso at an unknown date, and the leach field is located adjacent the corner of the building near the loading dock, between the parking lot and the Chestnut Avenue sidewalk. The Vineland Health Department and LSA will be working with the property owner to address the sewer.

On September 29, 2015, all work proposed in the Action Memorandum was completed.

#### 2.1.3 Progress Metrics

Wastestream/Contaminant(s) of Concern	Medium	Volume	Containment-Migration Control	Treatment	Disposal
Lead and Arsenic contaminated soil	Soil	60 cu yds	ERRS contractor mobilized to the Site to make the necessary repairs to the fire suppression line	N/A	Republic Environmental Systems 2869 Sandstone Drive

			and halt the migration of contaminated sediments and soils into the storm sewer. Soils and liquids removed from the excavation were containerized and secured on Site awaiting the transportation and disposal to an appropriate disposal facility. The contaminated soils staged in roll offs on site were stabilized and prepped for disposal on September 28, 2015. The waste was transported off-site for disposal on September 29, 2015.		Hatfield, PA 19440
Lead and Arsenic contaminated liquid	Liquid	1,620 gallons	ERRS contractor mobilized to the Site to make the necessary repairs to the fire suppression line and halt the migration of contaminated sediments and soils into the storm sewer. Soils and liquids removed from the excavation were containerized and secured on Site awaiting the transportation and disposal to an appropriate disposal facility. Waste water generated during the water line repair were transported off-site for disposal on August 13, 2015.	N/A	Environmental Recovery Corp. of PA 1076 Old Manheim Pike, Lancaster PA 17601

## 2.2 Planning Section

### 2.2.1. Planned Response Activities

No additional activities are planned for this removal action.

### 2.2.2 Issues

None

## 2.3 Logistics Section

All equipment and crew have been demobilized from the Site.

## 2.4 Finance Section

No information available at this time.

## 2.5 Other Command Staff

None

## 3. Participating Entities

### 3.1 Cooperating Agencies

City of Vineland Water Department

City of Vineland Fire Department

Landis Sewerage Authority

City of Vineland Health Department

#### **4. Personnel On Site**

EPA

ERRS Contractors

#### **5. Definition of Terms**

No information available at this time.

#### **6. Additional sources of information**

##### **6.1 Internet location of additional information/report**

Additional information on the Former Kil-Tone Company Site can be found at:

<http://www.epa.gov/region2/superfund/removal/kiltone/>

#### **7. Situational Reference Materials**

No information available at this time.