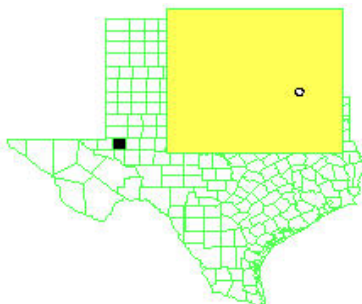


# SPRAGUE ROAD (ECTOR COUNTY) ODESSA, TEXAS



## EPA REGION 6 CONGRESSIONAL DISTRICT 11

EPA ID# TX0001407444  
Site ID: 0605023

Contacts:  
Vincent Malott 214-665-8313

Updated: May 2009

### Current Status

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A site-wide ground water sampling event is scheduled for the week of May 4, 2009.

The EPA completed the five-year review process on September 19, 2008, and a public announcement was posted in the Odessa newspaper on September 28<sup>th</sup>. The report is posted on the EPA Region 6 website and a copy is available at the local repository in Odessa. The five-year review determined that the remedy is currently protective of human health and the environment. The remedy will attain long-term protectiveness after the issues and recommendations identified in the First Five-Year Review Report have been addressed. The issues are related to revising the current ground water model to improve the capture zone evaluation, installation of additional monitoring wells to evaluate the increasing chromium concentrations in select recovery wells, and completion of maintenance and repair to system components.

The completed remedy is a ground water pump and treat (P&T) system composed of 43 active pumping wells and an ion exchange treatment plant (IXTP) to remove the chromium from the extracted ground water. The treated water is then injected back into the Trinity aquifer. A total of 14 extraction wells have been shut-in after reaching the 100 microgram per liter ( $\mu\text{g/L}$ ) cleanup goal. EPA samples the treated water from the IXTP daily and the ground water monitoring wells semi-annually. On-site personnel monitor the IXTP operations. EPA is currently planning a pilot test for in-situ treatment of the chromium plume beneath the former Machine and Casting and National Chromium facilities. The pilot test will evaluate the potential reduction in the time frame for cleanup of the contaminated ground water.

### Benefits

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The P&T system has prevented further migration of the contaminant plume in the Trinity aquifer and chromium concentrations continue to decline across the site. Remediation of the plume will allow unrestricted use of the aquifer, the source of drinking water and irrigation water for the local community.

### National Priorities Listing (NPL) History

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NPL Inclusion Proposal Date:	April 1, 1997
NPL Inclusion Final Date:	September 25, 1997

### Site Description

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The Site is located in Ector County, Texas, immediately north of the Odessa City limits. The population within  $\frac{1}{2}$  mile of the site is approximately 400; the population within 1 mile of the site is approximately 400; the population within 4 miles of the site is approximately 18,600.

The site is approximately 180 acres in size and consists of three separate inactive or abandoned chromium plating facilities within a  $\frac{1}{3}$  mile area - Leigh Metal Plating, Inc., National Chromium Corporation, and

Machine and Casting, Inc. The individual facilities are less than 4 acres in size and located in a residential and light industrial area. Three plumes of chromium contaminated ground water are present at the site. The largest of the three plumes originates from the Leigh Metal Plating Inc. facility; the next largest plume originates from the National Chromium Corporation facility; the smallest plume originates from the Machine and Casting, Inc. facility. The site is a mixture of light to medium commercial operations with private residences mixed throughout the area. While some private residences are connected to the Odessa public water supply system, the majority of residences are dependent on a single, high-quality aquifer for their drinking water.

The Trinity aquifer is the only source of high-quality drinking water in the site area. The water table in the unconfined aquifer is present at approximately 85 feet below the ground surface. The base of the aquifer is present at approximately 145 feet below ground surface. The Triassic red beds form the base of the aquifer. Private wells yield an average of 24 gallons per minute. The City of Odessa has 25 public water supply wells within 4 miles of the site that yield an average of 167 gallons per minute. Ground water flow in the aquifer is to the east-southeast.

## **Wastes and Volumes**

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The cleanup goal for chromium in the ground water is 100 ppb. The three separate chromium plumes defined by the 100 ppb limit extends approximately 750 feet from the Machine and Casting property, 1600 feet from the Leigh Metals property, and 600 feet from the National Chromium property. The highest chromium concentration is measured in the National Chromium plume at 6200 ppb.

## **Health Considerations**

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Chromium in the ground water poses a risk to residents in the area dependent on private water wells for drinking water. Chromium concentrations off-site from the three facilities exceed the MCL of 0.1 mg/L. The private residences and businesses in the vicinity of Leigh Metals are connected to the Odessa City water supply. Private residences in the vicinity of National Chromium and Machine and Casting still utilize private water wells.

## **Record of Decision (ROD)**

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A Final Record of Decision was signed on September 29, 2000.

## **Site Contacts**

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EPA Remedial Project Manager:	Vincent Malott	214-665-8313
EPA Site Attorney:	Anne Foster	214-665-2169
EPA Regional Public Liaison:	Donn R. Walters	214-665-6483
TCEQ Project Manager	Subhash Pal	512-239-4513

EPA Superfund Region 6 Toll Free Number: 1-800-533-3508

**Information Repository:** Ector County Public Library in Odessa, Texas

## **Site Map**

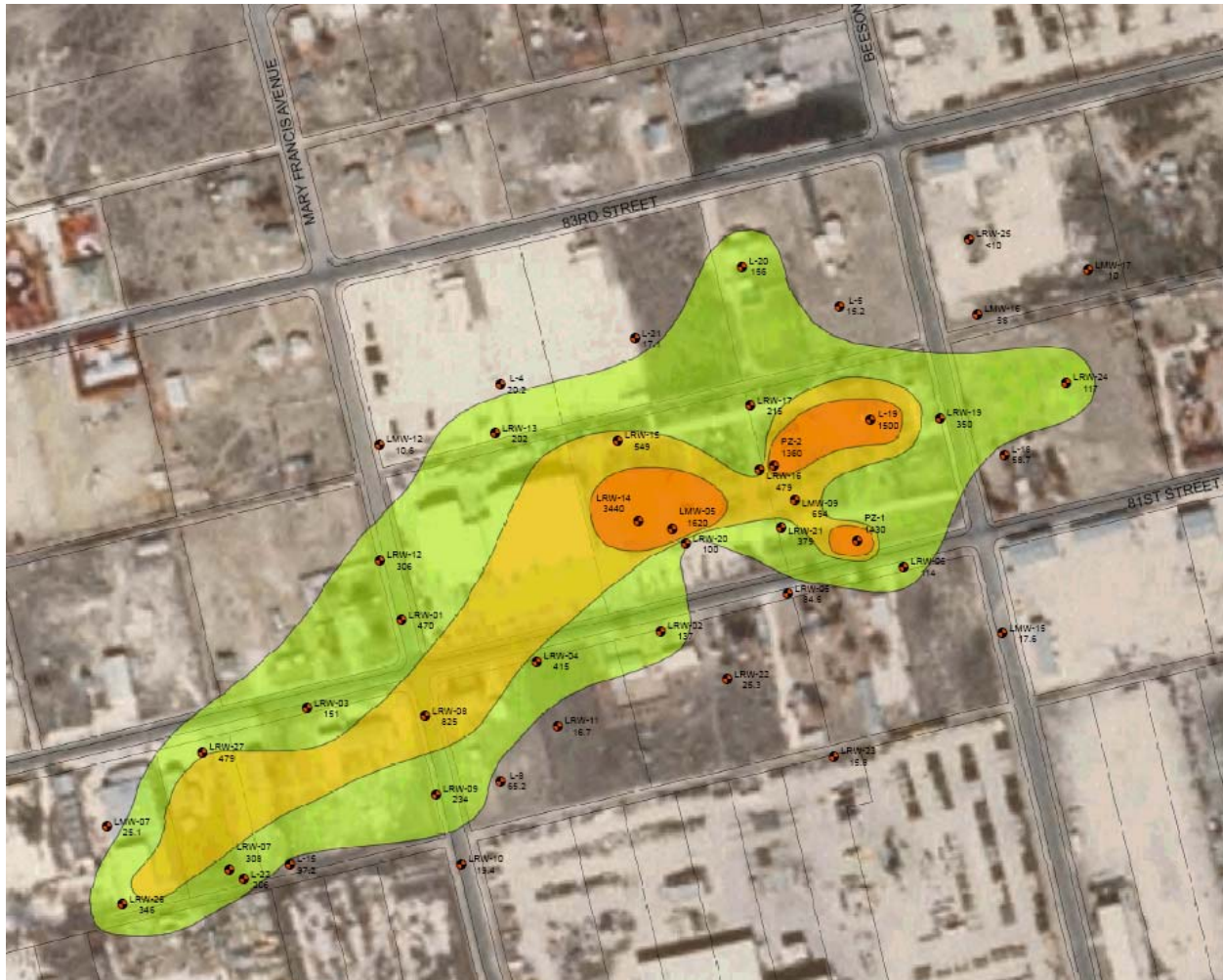
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The following site maps illustrate the March 2008 sampling results and the extent of the chromium plumes based on the 100 µg/L cleanup goal for the Machine and Casting site, Leigh Metals site, and the National Chromium site.

## Machine and Casting site



## Leigh Metals Site



## National Chromium site

