

Municipal Setting Designations



MSDs: A new tool for Houston

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Agenda

- Why are we here?
- What is an MSD?
- Whom does it impact?
- Why support an MSD?
- Steps in processing an MSD
- Particulars on this application
(Representatives of Applicant to speak)
- Public comment and questions



- I will talk about the MSD process only.
- The applicant's representative will talk about the site and their clean up activities.
- Please hold your questions about the site until the applicant's presentation.
- Please restrict your questions to the slide that is showing or wait till the end of the presentation



Why Are We Here?

- Inform you about an application for the City to support a Municipal Setting Designation (MSD) on a site
- Learn what an MSD is and what it does for the applicant, the local community, and the City
- Give you a chance to tell the City what you think about the site and the process.

The MSD Approach



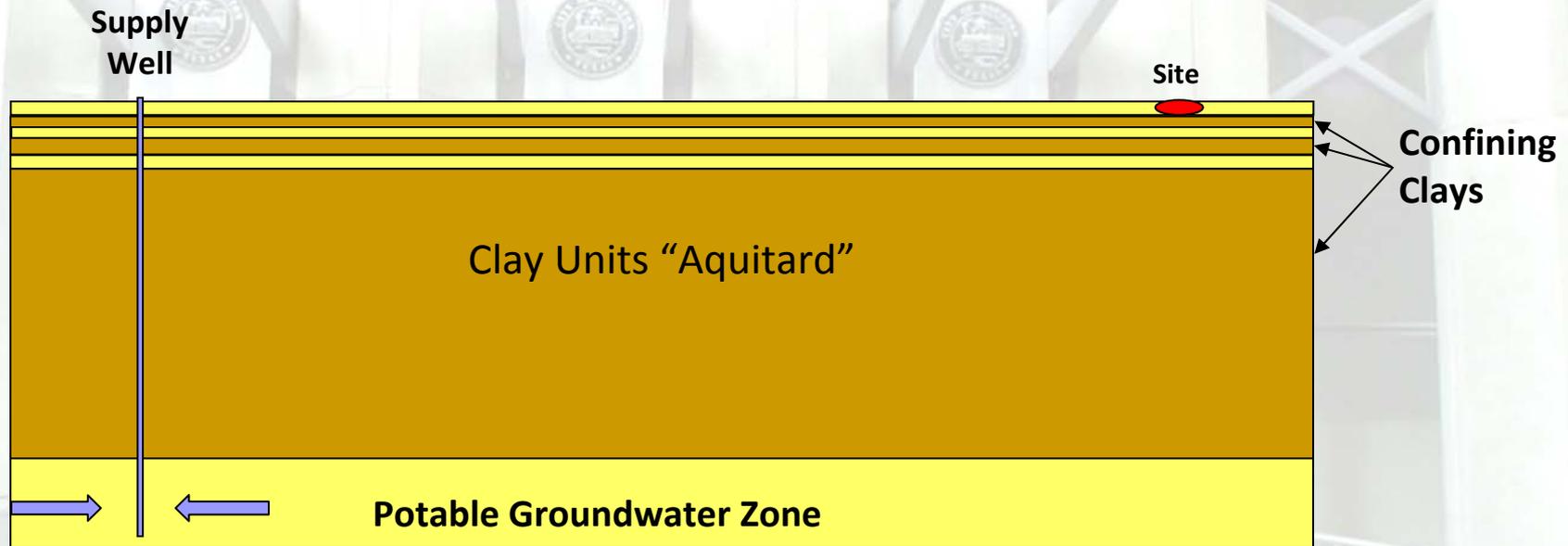
- Voluntary restriction to prevent the use of contaminated groundwater
- Alternate method to address groundwater contamination
 - State program created in 2003, administered by Texas Commission on Environmental Quality (TCEQ)
 - City process created in November 2007, administered by Public Works & Engineering
- Property owner requests participation (can be private or public owners)

Groundwater Contamination



- Houston has shallow groundwater contamination scattered across the city from former uses (industrial sites and businesses)
- Houston's drinking water come from either deep aquifers or surface water
- This program only considers very shallow contamination (up to 200' below the ground surface)

Shallow Contamination



Drinking Water Supply Wells typically get water from 600 feet or deeper below the surface.

Impacted groundwater is typically between 20 and 60 feet below the surface.

Problems of Traditional Remediation Methods



- Groundwater must be cleaned to drinking water standards even if:
 - There is no need or desire to use it, or
 - Water bearing zone is too silty, too salty, or low producing
- Groundwater remediation to drinking water standards is inefficient, costly, and can take decades



An MSD Does not

- Does not excuse the applicant from reducing other risks to the public
- Owner must still address:
 - Ingestion of contaminated soil
 - Inhalation of vapors
 - Physical contact with contamination
 - Migration to surface water

City's Expectations of an MSD Applicant:



- Site must already be in a State or Federal clean up program
- Site must have been thoroughly investigated
- Data must show that the groundwater plume is stable or diminishing.
- A Professional Engineer (P.E.) or Professional Geologist (P.G.) must be willing to certify that the plume is stable or contracting.

Whom Does It Impact?



- Unless you are the applicant:
 - An MSD does not affect your property
 - An MSD does not affect your water well
 - There are no requirements on you
- Drinking water supplied by the City is not affected



Today's Meeting

- Mandatory step in the process
- Applicant has requested City support for application:
 - MSD # 2009-019-Oliver Street “Harcros Chemicals and UPRR Site”
- Gather input from surrounding property owners
- TCEQ cannot approve an MSD without the City Council's support

Why Support An MSD?



- Protects the public from consumption of shallow contaminated groundwater (drinking water is supplied by the City through a separate system)
- Encourages cleanup of contaminated sites through participation in a State or Federal program
- Promotes redevelopment of under-utilized properties



Next Steps

- Based on input from this meeting and the public hearing, City will consider supporting an MSD
- If supported, applicant submit their application to TCEQ
- TCEQ grants or denies MSD
- If granted, City files restriction on property deed

The MSD Website



www.houstonmsd.org

City of Houston

Home | About Us | Administration | Resources | Services | Departments | Contact Us

Search: [input] [button] My ZIP Code: [input] [button]

You are here: Home > Links > MSD Design > Municipal Settings Designation > Municipal Settings Designation

MSD Home

- Engineering and Construction
- Planning and Development Services
- Public Utilities
- Resource Management
- Right of Way and Road Maintenance
- Traffic and Transportation

Director's Office

- Chief of Staff
- Information Technology

Programs

- Health Services
- Central File Access
- Water Education
- Site Map

General Information:

- The sites that could apply for a MSD are already contaminated.
- The process requires that an applicant must participate in one of the cleanup programs administered by Texas Commission on Environmental Quality (TCEQ) or EPA.
- A MSD only eliminates the requirement that property owners address the risk of consuming groundwater. Assessment will still be required for other means of exposure such as:
 - Inhalation of vapors
 - Contact with contamination during construction projects
 - Ecological impacts, such as, seepage into nearby waterways

Forms and Information

- Application Form
- City Ordinance

FAQ:

- Frequently Asked Questions for Application Process
- Frequently Asked Questions for MSD's (English)
- Frequently Asked Questions for MSD's (Spanish)

Other Websites of Interest:

- TCEQ - Application Form
- TCEQ - A Guide for CDEs

You can request an electronic copy of the full application by e-mail to: msd@cityofhouston.net

For more information concerning the application or process of an MSD in Houston, GW: **Carol Ellinger Haddock**, Senior Assistant Director, PE, PW&E/Planning & Development Services Division, PH 713.837.0928, FX 713.837.0658

Article Title

- 1. MSD Calendar
- 2. MSD Completed
- 3. MSD in Review

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#	Article Title
1	MSD Calendar
2	MSD Completed
3	MSD in Review



Public Hearing



- Date: February 17, 2010
- Time: 9:00 am
- Place: City Council Chambers
- Address: 901 Bagby, Second Floor
- Address: Houston, Texas 77002

Any person wishing to speak on this issue must contact the City Secretary's office at (832) 393-1100 to reserve time not later than 8:30 am on 2/17/10.

Contact Information



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&

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**Public Works & Engineering
City of Houston,
611 Walker, 19th Floor
Houston, Texas 77002**

**msd@cityofhouston.net
(713) 837-0928**

Municipal Setting Designations (MSDs)

**City of Houston Municipal Setting
Designation (MSD) Application
MSD# 2009-019-Oliver Street**

*Harcros Chemicals, Inc.
and Union Pacific Railroad Company
1701 and 1610 Oliver Street, Houston, TX 77007*

**Public Meeting
West End Multi Service Center
January 13, 2010**

MSD Co-Applicants

- **Harcros Chemicals, Inc.:**

1701 Oliver Street

Houston, TX 77007

Contact: Mr. Jeff O'Neill

Kansas City, KS

- *Prepared by Brown & Caldwell, Houston, TX*

Ms. Christina M. Higginbotham, P.G.

chigginbotham@brwncald.com

(713) 759-0999

- **Union Pacific Railroad:**

1610 Oliver Street

Houston, TX 77007

Contact: Mr. Geoffrey Reeder, UPRR

Spring, TX

- *Prepared by Pastor, Behling & Wheeler, LLC, Round Rock, TX*

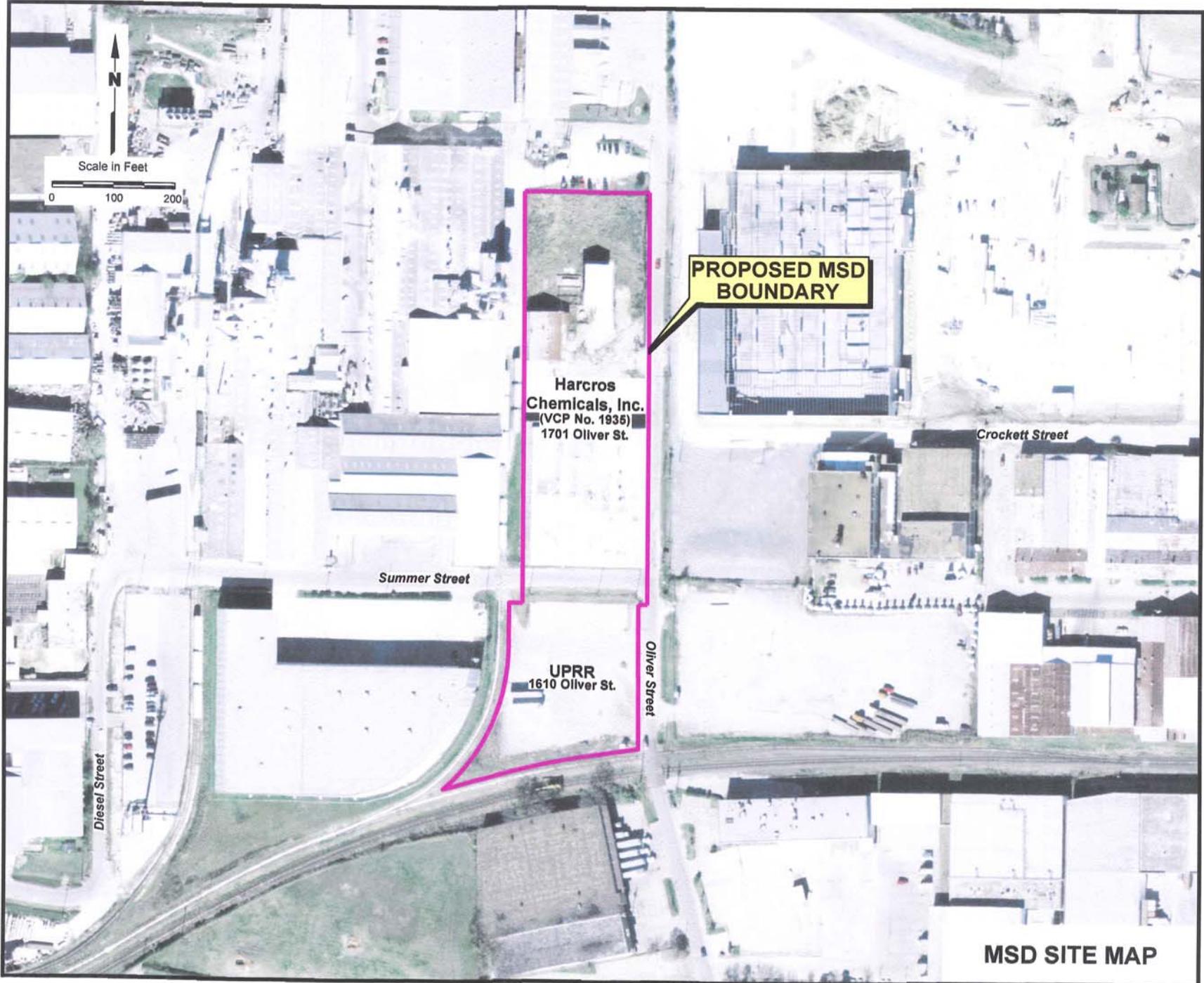
Mr. Eric Matzner, P.G.

eric.matzner@pbwllc.com

(512) 671-3434

MSD Overview

- Two landowners within a commercial/industrial area applying for one, contiguous MSD:
 - **Property A: Harcros Chemicals, Inc:** 1701 Oliver St.
 - Approx. 2.75 acres, owned by Harcros.
 - **Property B: Union Pacific Railroad Company:** 1610 Oliver St.,
 - Approx. 1.37 acres, owned by the railroad.



**PROPOSED MSD
BOUNDARY**

**Harcros
Chemicals, Inc.
(VCP No. 1935)
1701 Oliver St.**

Crockett Street

Summer Street

**UPRR
1810 Oliver St.**

Oliver Street

Diesel Street

MSD SITE MAP

MSD Overview

- As discussed in the first presentation, an MSD ordinance ensures that affected groundwater cannot be used as a water source.
- This is allowed for properties within a city provided that there is public water distribution system capable of supplying city water to the property.
- There is a public water supply system for businesses and residents in this area.

MSD Overview

- The proposed MSD boundary includes both properties and adjacent City of Houston easements/streets.
- Shallow groundwater impacts related to historical operations at both properties are stable and not expanding.
- Both sites are being managed under the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP). The TCEQ is the agency in Texas that oversees remediation of industrial properties.

Historical Land Uses

- **Harcros Property:**
 - Thompson Hayward Chemical Company (predecessor to Harcros) purchased the site in 1955.
 - From 1955 through approximately 2000, the property was used for chemical warehousing and distribution.

Historical Land Uses

■ UPRR Property:

- Purchased by Southern Pacific Railroad (now owned by UPRR) in 1935.
- Leased to United Creosoting Company from 1937 to 1958 for wood-treating activities.
- Leased from 1960 to 1990 used for warehouse storage of building materials.
- Since 1990, leased to Glazier Foods for truck parking.

Current Land Uses

- **Harcros Property:** commercial/industrial land, currently not in use.
- **UPRR Property:** commercial/industrial land, currently leased for short-term truck parking.
- Surrounding properties are used for commercial/industrial purposes.

Municipal Water System

- City of Houston public water system provides drinking water service to the MSD area.
- Closest municipal well is about 0.4 miles southeast from the Site
 - Screened from 1,100 feet to 1,960 feet deep
 - Shallow groundwater at the MSD Property will not affect this municipal well since there are confining layers between this shallow water-bearing zone and the aquifer into which the closest municipal well has been drilled.

Investigation and Remediation Efforts

■ **Harcros Property**

- *Investigation* - Entered TCEQ Voluntary Cleanup Program (VCP) in 2006.
- *Remediation* - Approx. 20,000 cubic yards of impacted soil was excavated and disposed of off-site.

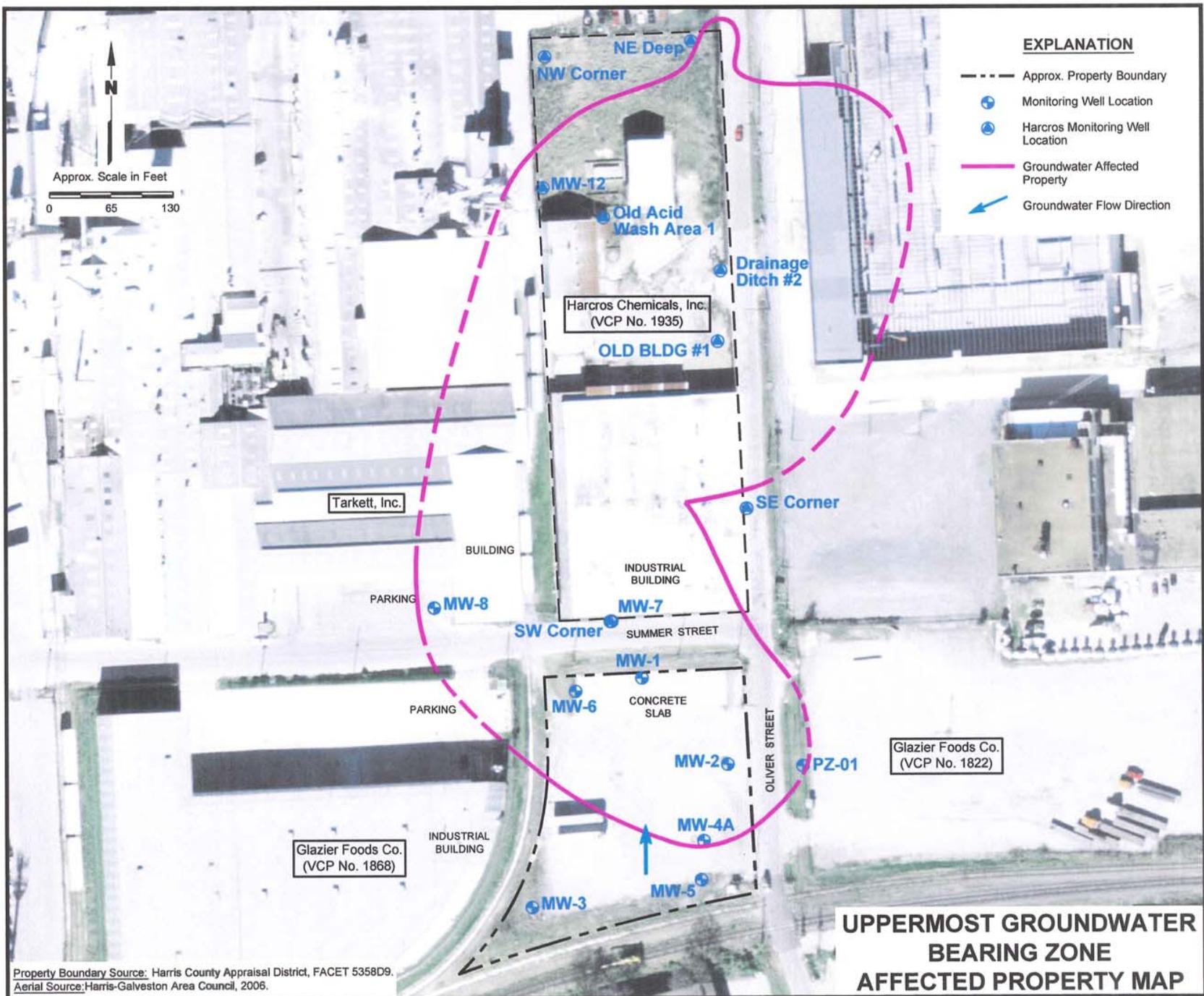
Investigation and Remediation Efforts

- **UPRR Property**

- *Investigation* - Began environmental site investigation in 1999.
- *Remediation* – Approximately 4,200 cubic yards of impacted soil has been removed.

MSD Groundwater Issues

- **Constituents in the shallow water-bearing zone include:**
 - **Harcros Property:** Chemicals associated with chlorinated hydrocarbons/solvents.
 - **UPRR Property:** Chemicals associated with creosote wood-treating activities.



EXPLANATION

- Approx. Property Boundary
- ⊕ Monitoring Well Location
- ⊙ Harcros Monitoring Well Location
- Groundwater Affected Property
- ↙ Groundwater Flow Direction

Approx. Scale in Feet
0 65 130

Glazier Foods Co.
(VCP No. 1868)

Harcros Chemicals, Inc.
(VCP No. 1935)

Glazier Foods Co.
(VCP No. 1822)

UPPERMOST GROUNDWATER BEARING ZONE AFFECTED PROPERTY MAP

Property Boundary Source: Harris County Appraisal District, FACET 5359D9.
Aerial Source: Harris-Galveston Area Council, 2006.

Groundwater Plume

- The shallow groundwater bearing unit is about 2 to 10 feet thick and is about 15 to 40 feet below ground surface in the MSD area.
- The groundwater plume is stable and is not expected to move beyond its current location.
 - Releases from former owners/operators likely occurred more than 50 years ago on the UPRR Property and more than 20 to 50 years ago on the Harcros Property
 - No expansion has been observed during the site investigations

Ongoing TCEQ Oversight

- TCEQ must certify the MSD once approved by the city.
- TCEQ will continue to oversee the approval of response actions leading to regulatory closure.

Conclusions

In conclusion:

1. The groundwater contaminant plumes associated with the Harcros and UPRR sites are stable and are not expanding.
2. The companies have removed from the properties source areas that caused the groundwater contamination.
3. The affected water-bearing zone is very shallow and will not impact any drinking water aquifers.
4. The TCEQ will continue to oversee current response actions to ensure that the public is protected.