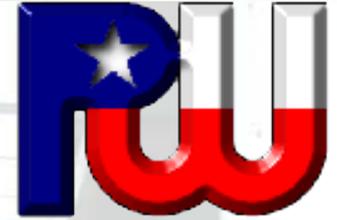


Municipal Setting Designations

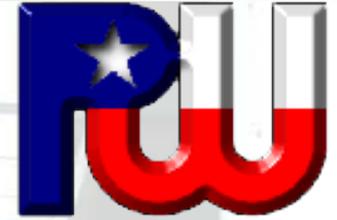


MSDs: Another tool for Houston

Jedediah Greenfield
Program Manager

Municipal Setting Designations (MSDs)

Agenda



■ City of Houston

- Who handles Environmental protection
- What an MSD is
- Who the MSD impacts
- Why support an MSD
- Steps in the MSD process
- Questions / Comments**

■ MSD Applicant

- Specific information on the site
3777 West 12th Street
- Questions / Comments**



Why Are We Here



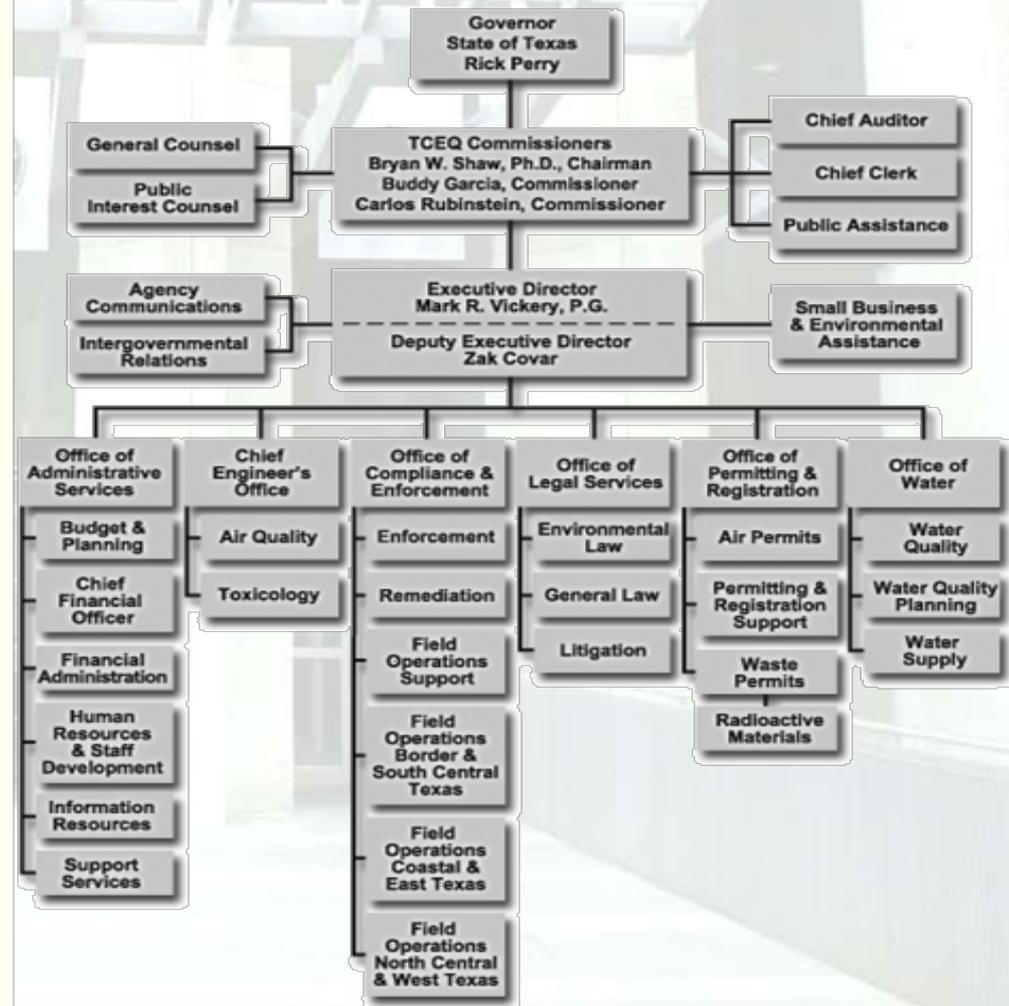
- Inform you about an MSD application
 - Wackman Properties, LLC
 - MSD #2011-038-WPL
- Explain what an MSD is and what it does for the applicant, the local community, and the City
- Protect Public Health
- Receive public comments



Environmental Protection in Texas



- “The TCEQ strives to protect our State’s human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.”



Municipal Setting Designations (MSDs)

Environmental Protection in Texas



■ Environmental Complaints



- By Phone: 1-888-777-3186
- Online: <http://www5.tceq.texas.gov/oce/complaints/>

■ Environmental Complaints



- By Phone: 311
- Online: http://webintake.houstontx.gov/web_intake/Controller

What an MSD is



- Voluntary deed restriction to prevent the use of contaminated groundwater
- Another tool to address groundwater contamination
- Public Health Protection



What an MSD is



- State Program
Created in 2003

- Texas
Commission on
Environment
Quality (TCEQ)



- City Program
Created in 2007

- Public Works &
Engineering



MSD Notice Letters



CITY OF HOUSTON
Public Works and Engineering Department

Annie D. Parker
Mayor

Michael S. Marotta, P.E., D.WRE, ECEE
Director
P.O. Box 1562
Houston, Texas 77251-1562

www.houstontx.gov

February 3, 2010

RE: MSD Application #2009-022-FCE
1111 Lockwood Drive, Houston, TX 77020

Dear Recipient:

Enclosed is a public meeting notice about an upcoming meeting in your area. This is an informational meeting about a property at 1111 Lockwood Drive, Houston, TX 77020 that has contaminated groundwater. We welcome you to attend the public meeting, but it is not mandatory that you come.

The public meeting will be held at:
3/11/2010
6:00 PM
Ripley House
4410 Navigation, Houston, TX 77011

The following notice will give you additional details about the type of contamination that has been found at the site. Please note: the groundwater contamination at the site is very shallow and is not the groundwater that the City of Houston uses for some of its drinking water. Most of the City's drinking water is now from surface water (Lakes Houston, Conroe, and Livingston).

The purpose of this public meeting is to inform you, the nearby neighbors and well owners, about the Municipal Settings Designation (MSD) program and the application. During the meeting a representative from the city will talk about the MSD program and then the MSD applicant will talk about the site. You may come to the meeting just to listen or you can share a comment. Comments can be given in person at the meeting or you can send them to the State of Texas and/or to the City of Houston at the following addresses.

Mr. Scott Settemeyer
Remediation Division
Texas Commission on Environmental Quality
P.O. Box 13087, MC-225
Austin, Texas 78711.

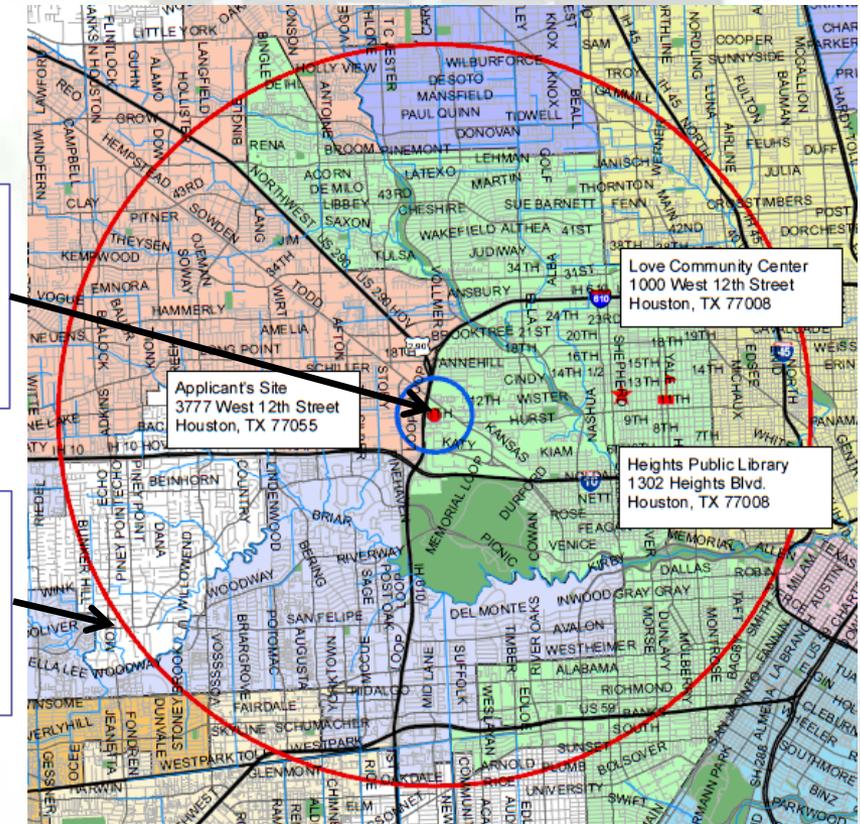
Richard Chapin
Public Works and Engineering Department
City of Houston
611 Walker, 19th Fl.
Houston, Texas 77002
msd@cityofhouston.net
(713) 837-0928

A MSD is the way the city can legally say that the contaminated groundwater at a property cannot be used for drinking water now or in the future, thereby protecting public health. It may also help a contaminated site develop or redevelop because the state's requirements to clean up contaminated groundwater may be set at levels based on this restriction. The MSD does not excuse the applicant from clean up activities such as removing the surface soil or reducing other risks to the public.

Council Members: Brenda Stapp, Jenis Johnson, Anna Cullenbass, Wanda Adams, Mike Sullivan, Al Hoang, Oliver Pennington, Edward Gonzalez, James D. Rodriguez, Stephen C. Canale, Sue Lovell, Wanda Rodriguez, G.O. "Shel" Bradford, Amanda de Jesus, Commander Ronald C. Green

Property Owners
First-Class Mail
½-Mile Radius
City Requirement

Water Well Owners
Certified Mail
5-Mile Radius
State Requirement



Municipal Setting Designations (MSDs)

Who the MSD Impacts



- Property Owners on the MSD Application
 - 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



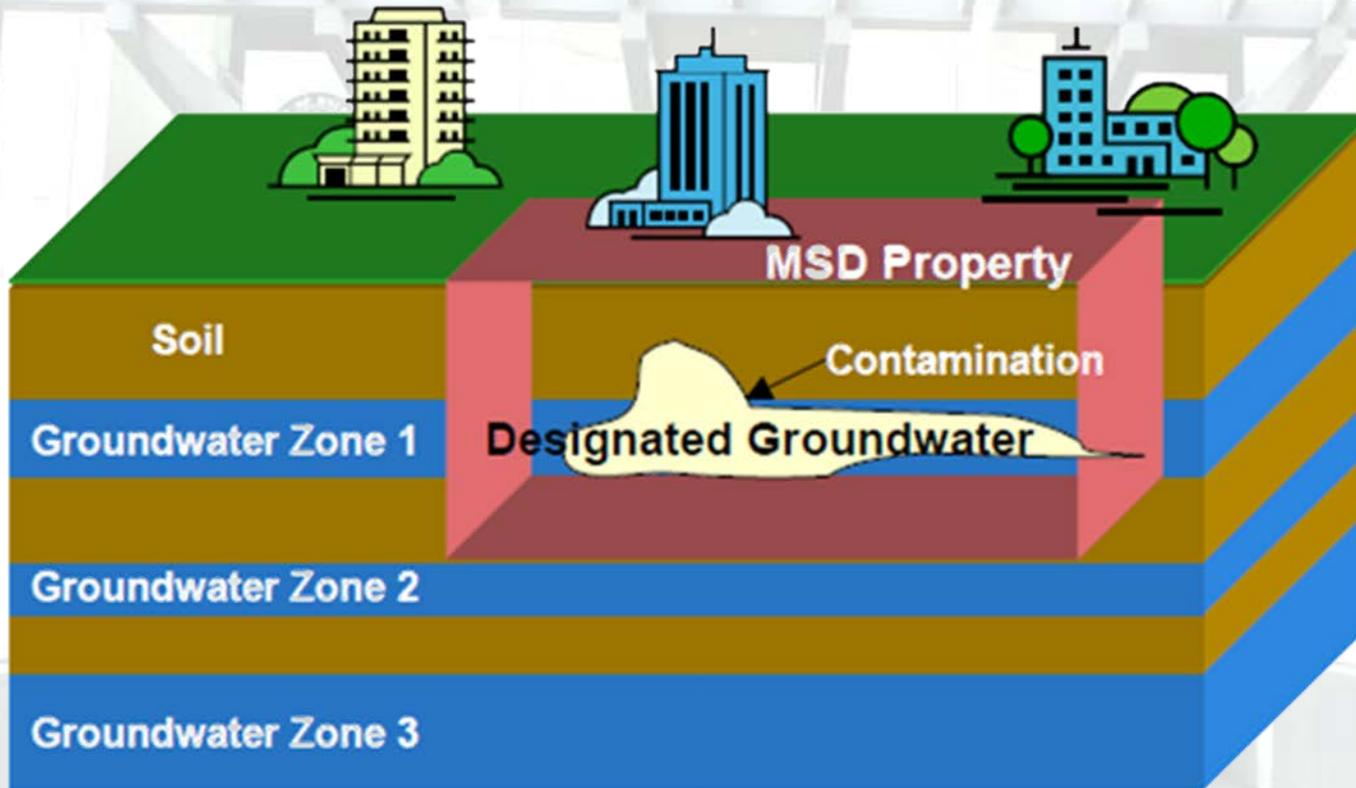
City Water Supply



- Houston's drinking water comes from either deep aquifers (20%) or surface water (80%)
 - Surface water supply
 - Lake Houston
 - Lake Conroe
 - Lake Livingston
 - Trinity River
 - Public Supply Well
 - Distance - .93 miles
 - Depth - 1,037 feet



Shallow Contamination

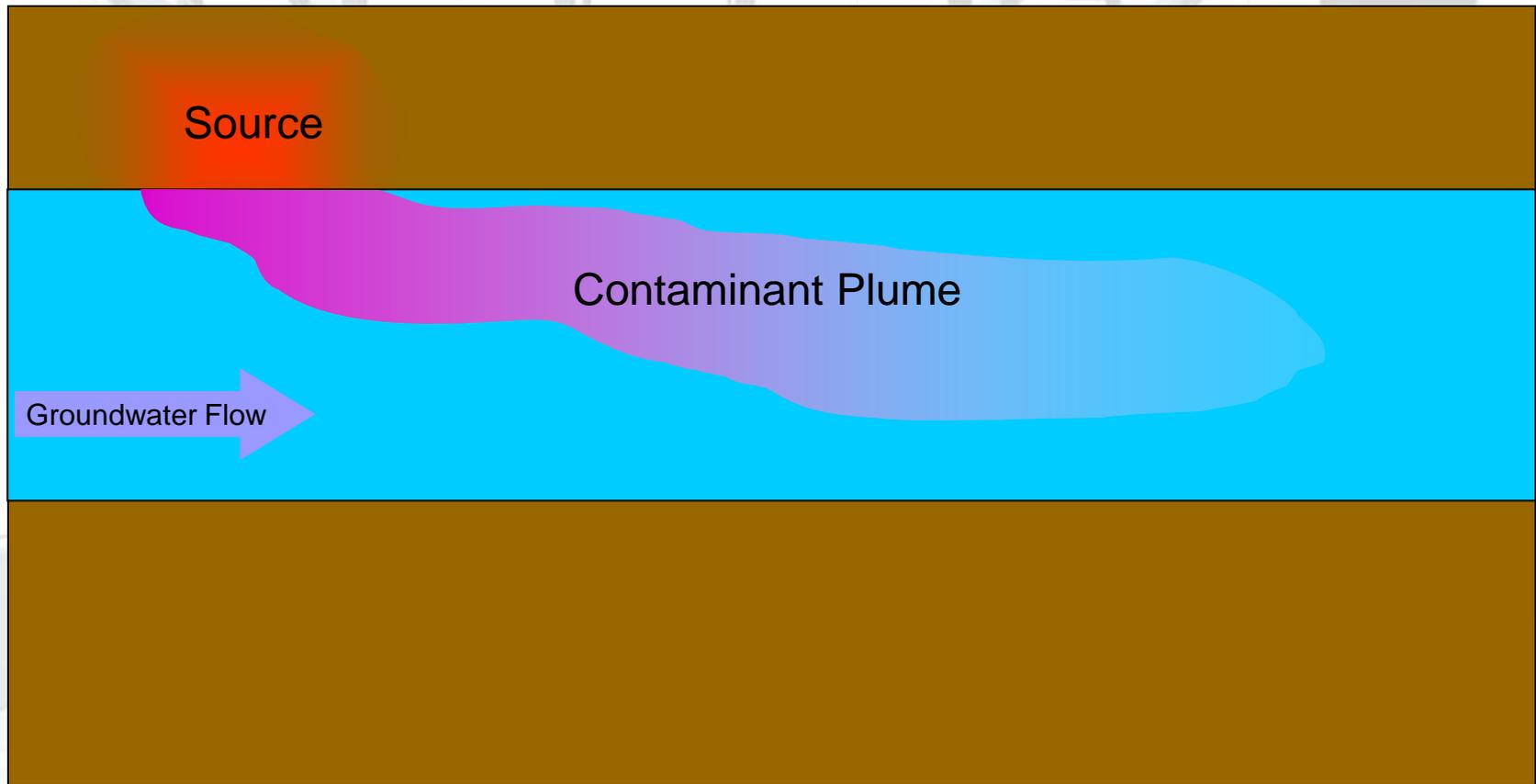


Impacted groundwater is typically between 20 and 60 feet below the surface.

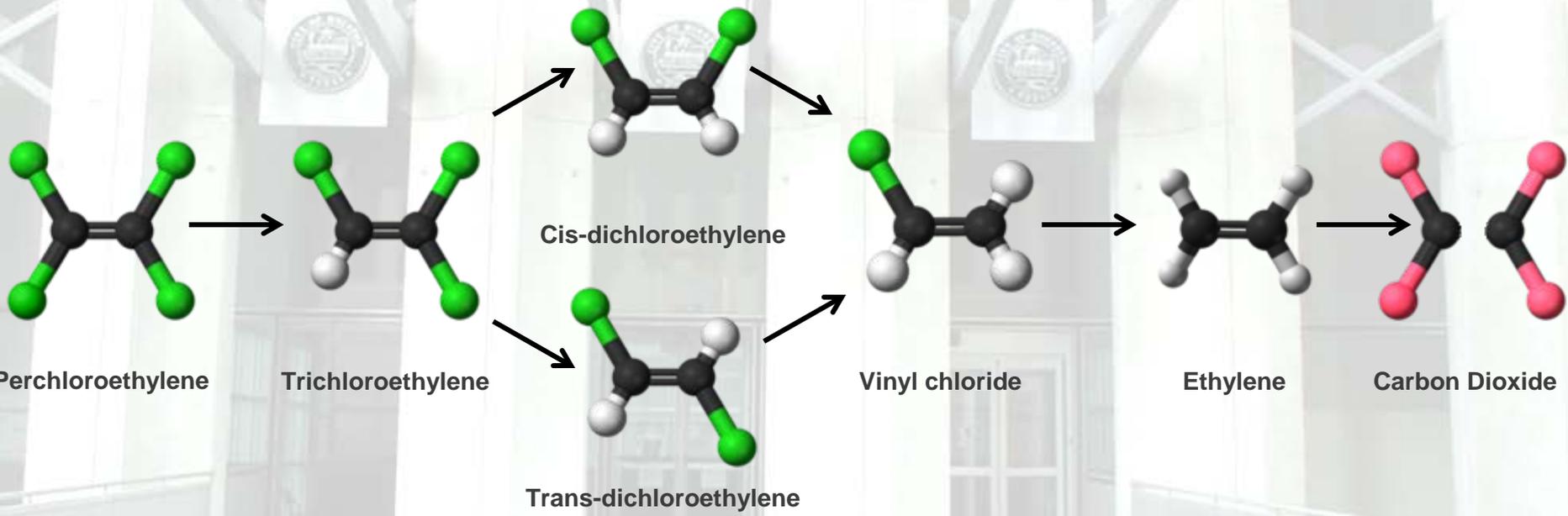
Drinking Water Supply Wells typically get water from 600 feet or deeper below the surface.

- *Please Note: Houston has shallow contaminated groundwater scattered across the City*

Contaminant Flow



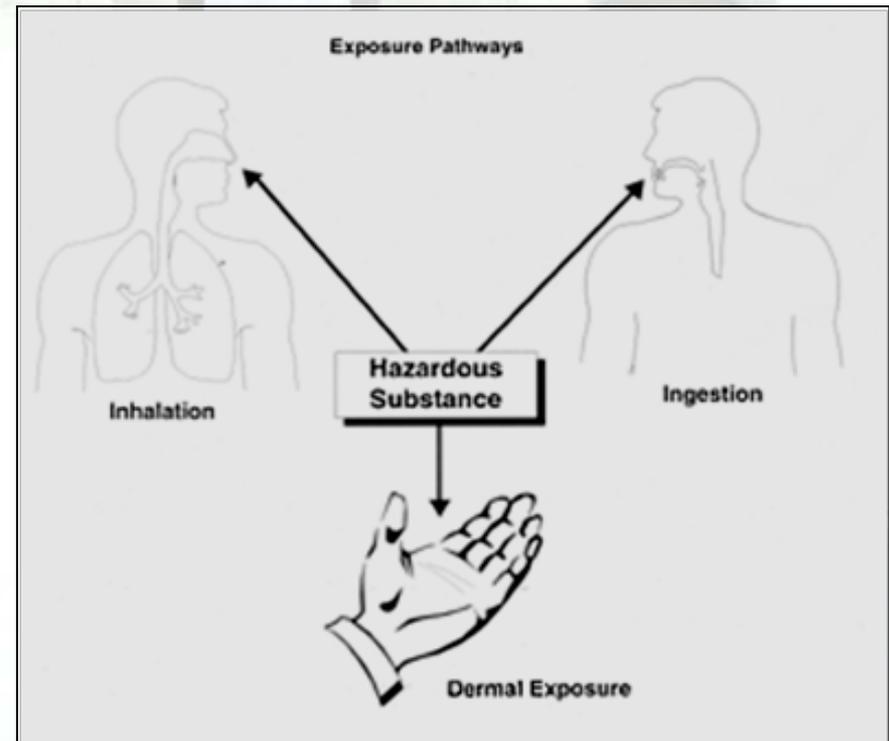
Natural Attenuation



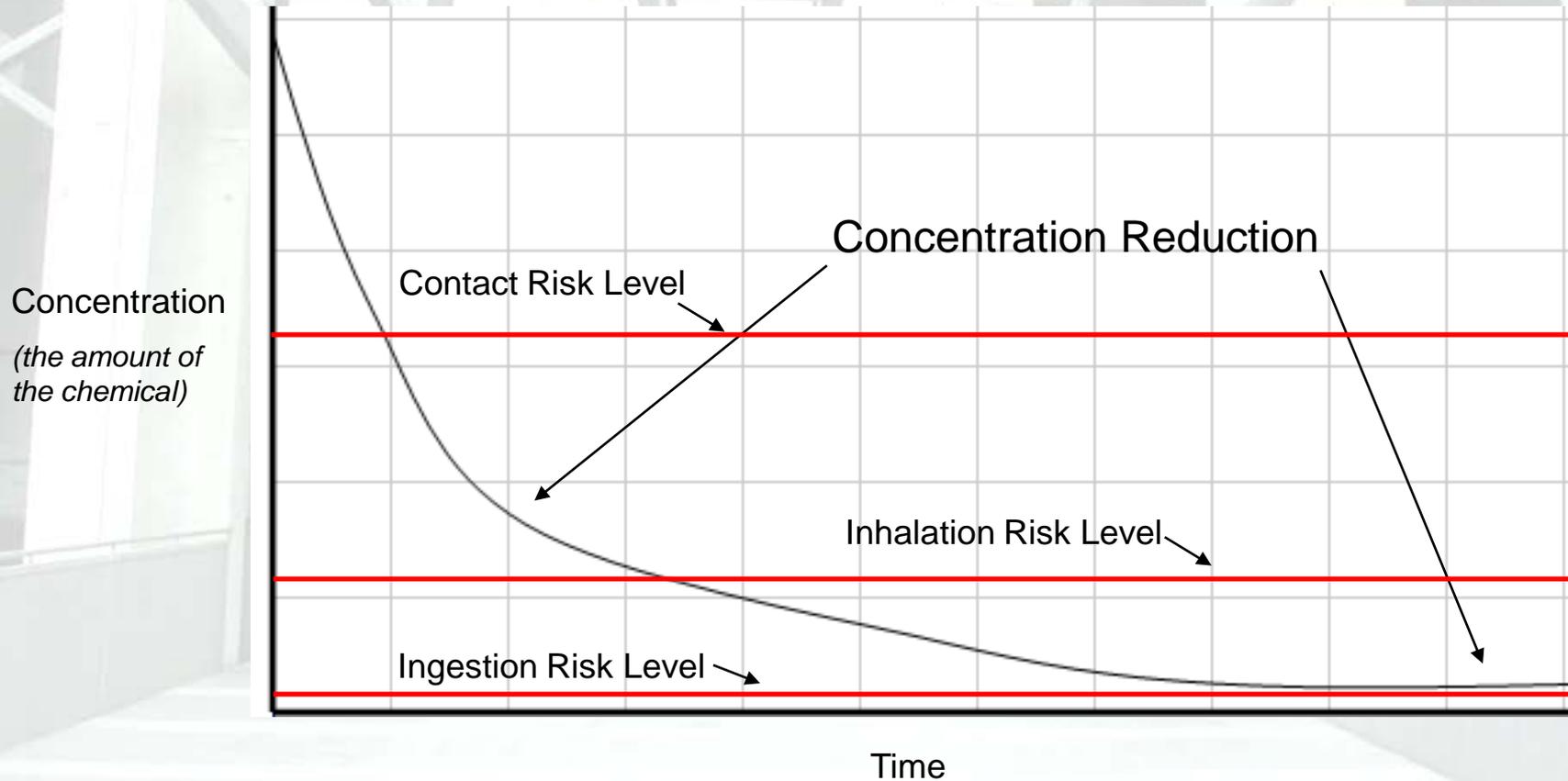
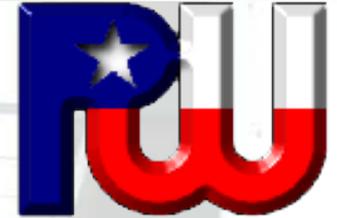


Exposure Pathways

- An MSD does **NOT** excuse the applicant from reducing other risks to the public
- Owner must address other exposure pathways
 - Non-Ingestion / Contact
 - Soil
 - Runoff and other flows
 - Inhalation / Vapors



Groundwater Remediation



Municipal Setting Designations (MSDs)

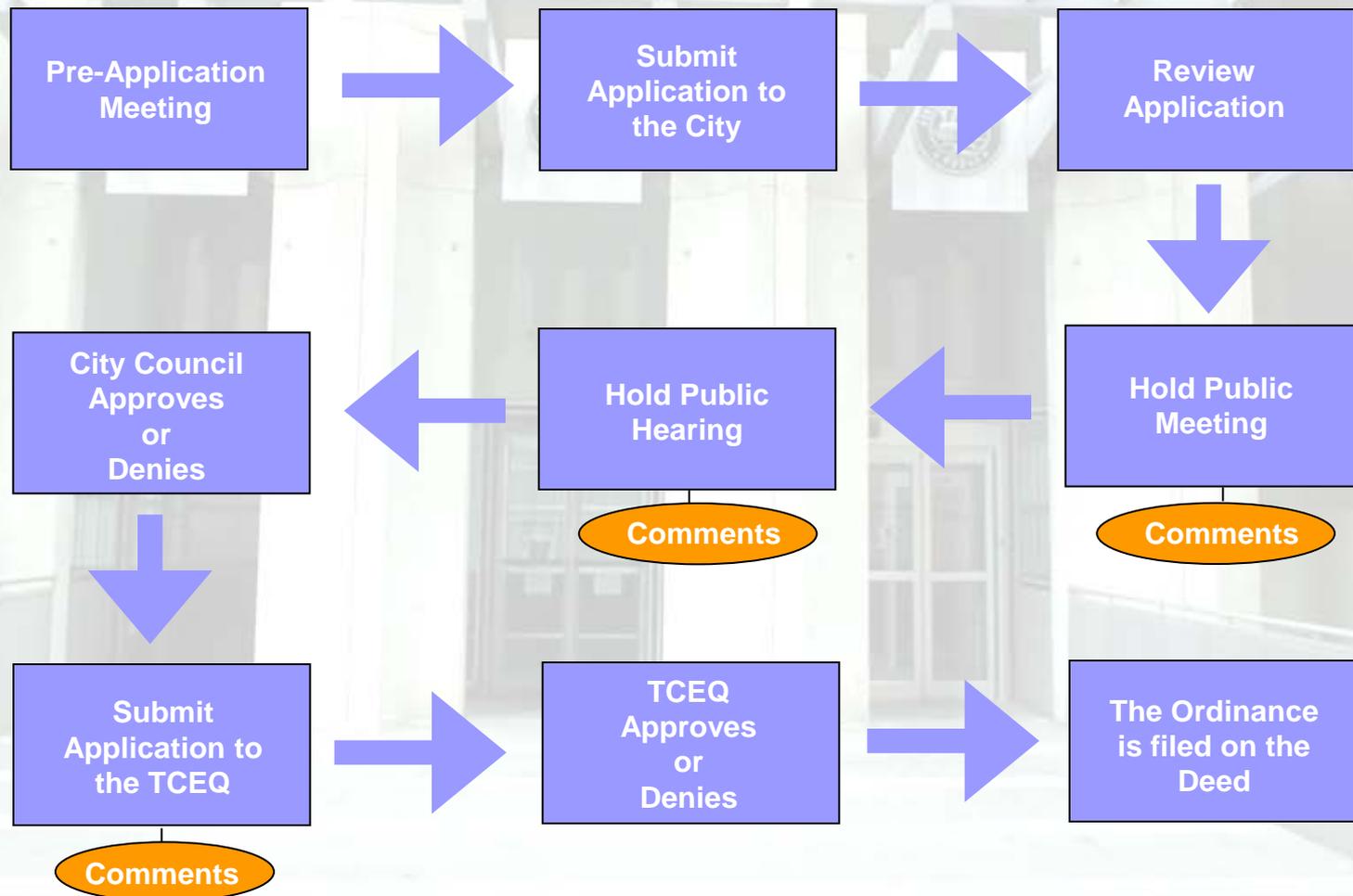
Problems of Traditional Remediation Methods



- 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



Steps in the Process



City's Requirements of the Applicant



- Enrollment in a State or Federal cleanup program
- Thorough investigation
 - Data must show that the groundwater plume is stable or decreasing, and delineated.
- A **third party** Engineer (P.E.) or Geologist (P.G.) must certify application



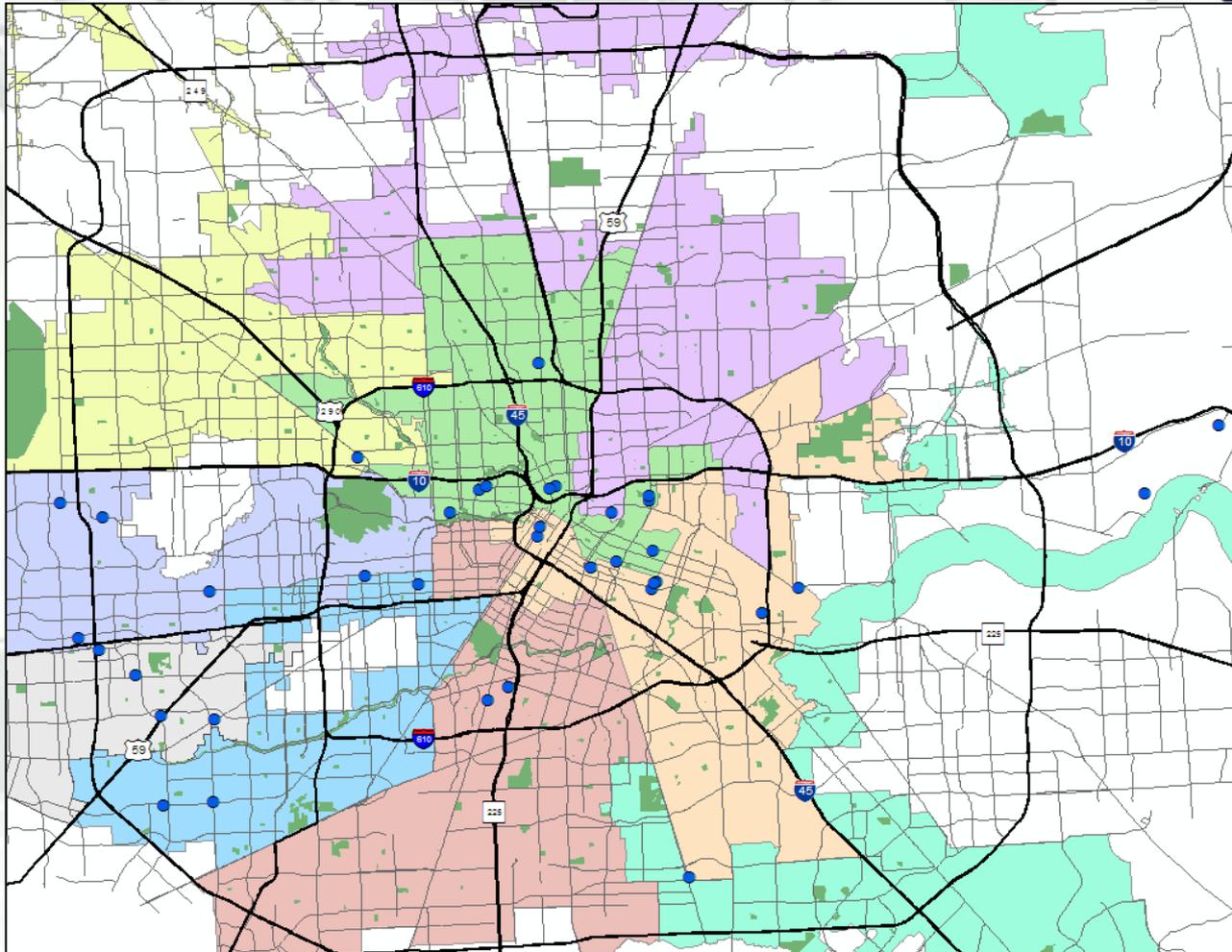
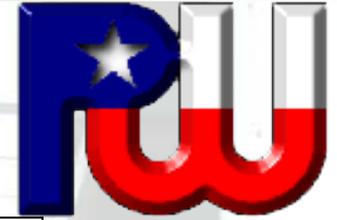
Why Support An MSD?



- Protects the public from consumption of contaminated groundwater
- Encourages clean-up of contaminated sites
- Promotes redevelopment of under-utilized properties



MSD Sites in Houston



Municipal Setting Designations (MSDs)

MSD Application



- Heights Library
reference desk
- 1302 Heights Blvd.
Houston, TX 7708

The MSD Website



www.houstonmsd.org

The screenshot shows the City of Houston website interface. At the top, there is a navigation bar with links for Home, I Want To..., Government, Residents, Business, Departments, Visitors, and En Español. Below this is a search bar. The main content area is titled 'Public Works and Engineering' and 'Municipal Settings Designation'. It features a 'Departmental Links' sidebar on the left and a main content area on the right. The main content area includes a 'History' section, a 'General Information' section with a bulleted list of details, and a 'Forms and Information' section with links to application forms and FAQs. At the bottom, there is a footer with copyright information and a 'Home | City Hall | En Español | Contact Us | FAQs | Privacy Policy' navigation bar.

For more information concerning the application or process of an MSD in Houston, call:

Carol Ellinger Haddock
Senior Assistant Director, PE
PW&E/Planning & Development Services Division
PH 713.837.0928
FX 713.837.0658

- o [MSD Calendar](#)
- o [MSD Completed](#)
- o [MSD in Review](#)

Municipal Setting Designations (MSDs)

The MSD Website



MSD in Review

Carol Ellinger Haddock , Assistant Director, P.E.

MSD in Review

Differential Development – 1994, Ltd. #2008-012-DD (Lantern Lane Shopping Center Site)	
Executive Summary	
Full Application	
Hoerbiger Corp. of America Inc. and Morgan Advanced Materials and Tech. Inc. # 2009-016-Milby (Milby Street Site)	
Executive Summary	
Full Application	
Estate of Isadore and Esther Robinson # 2009-020-GMI (Former Gulf Metals Industries Landfill Site)	
Executive Summary	
Full Application	
Public Meeting Notice	
Public Meeting Presentation	
Silver Bishop Holdings, LP #2010-025-NOR (Navigation-Norwood Site)	
Executive Summary	
Full Application	
Public Meeting Notice	
Public Meeting Presentation	

MSD Calendar

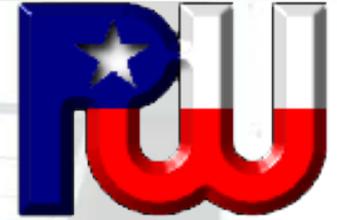
Carol Ellinger Haddock , Assistant Director, P.E.

Municipal Settings Designations Calendar

Information on the latest meetings, conferences, and events.

Date	Time	Event
07/14/2010	9:00 AM	Public Hearing: FPA/PinPoint Mykawa, LLC. (MSD # 2009-020-GMI) City Hall Council Chambers, 2nd Floor, 901 Bagby, Houston, TX 77002
07/20/2010	6:00 PM	Public Meeting: Schlumberger Technology Corporation (MSD #2010-027-STC) Judson Robinson Jr. Community Center, 2020 Hermann Dr., Houston, TX 77004
08/03/2010	6:00 PM	Public Meeting: Differential Development - 1994, Ltd. (MSD #2008-012-DD) Tracey Gee Community Center, 3599 Westchase Dr., Houston, TX 77042
08/04/2010	9:00 AM	Public Hearing: BAE Systems Resolutions Corporation, Inc. (MSD #2010-026-FSS) City Hall Council Chambers, 2nd Floor, 901 Bagby, Houston, TX 77002
08/24/2010	6:00 PM	Public Meeting: Board of Regents of the University of Texas System (MSD #2010-028-ACD) Judson Robinson Jr. Community Center, 2020 Hermann Dr., Houston, TX 77004

Public Hearing



- Date: To Be Determined
- Time: To Be Determined
- Place: City Council Chamber (Committee Meeting)
- Address: 901 Bagby, Second Floor
Houston, Texas 77002

Any person wishing to speak on this issue must arrive at least 15 min early and sign the speakers list located on the front desk.

Contact Information



Jedediah Greenfield
Program Manager

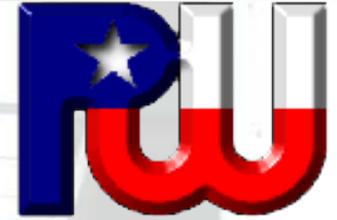
Public Works & Engineering
City of Houston,
1002 Washington, 2nd Floor
Houston, Texas 77002



msd@houstontx.gov
(832) 394-9005

Municipal Setting Designations (MSDs)

Contact Information



Richard “Stu” Goldsmith
Texas Commission on Environmental Quality

Remediation Division
P.O. Box 13087, MC-221
Austin, Texas 78711

512-239-5100

rgoldsmi@tceq.texas.gov





SITE LOCATED AT 3777 WEST 12 TH STREET

**3777 WEST 12 TH STREET
HOUSTON, TEXAS**



Applicant/Owner:

Wackman Properties, LLC.



Site Vicinity

MSD Site



Site Characteristics

- Currently vacant
- Approximately 9.17 acres
- Improvements: five buildings totaling 162,748 square feet
- Historically used as a drum and pail manufacturing facility since the late 1950s
- Shallow groundwater contamination discovered in late 2008 and the site was enrolled in the TCEQ's Voluntary Cleanup Program in early 2009

Site



Source of Aerial Photograph: Bing Map, (c) 2010 Microsoft Corporation and its data suppliers

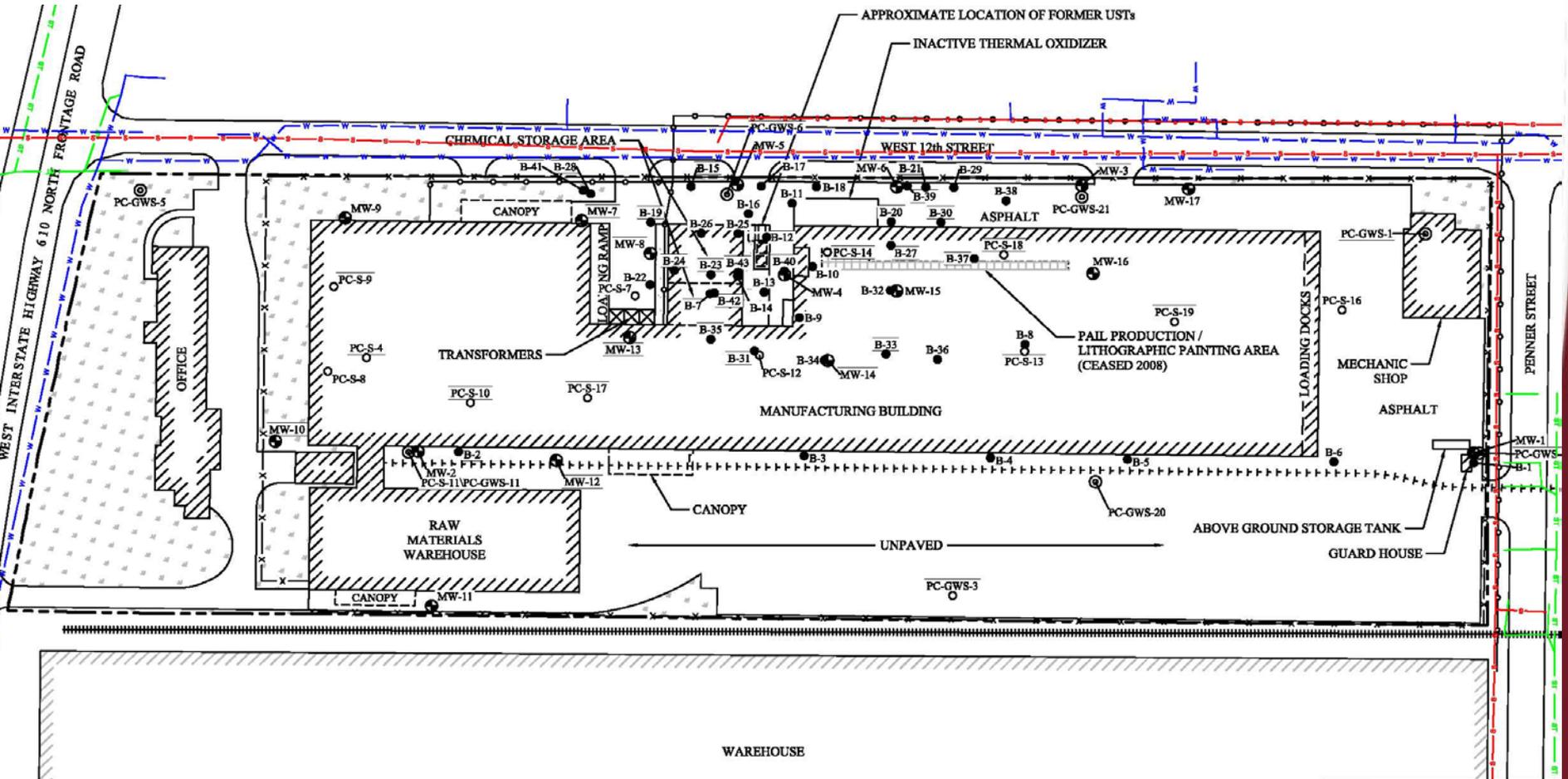
Historic sources of contamination

- Two 1,000-gallon underground storage tanks (containing MEK and petroleum hydrocarbons) installed in 1978
 - **Removed from ground in 1992**
- Operational areas that included drum production, lithographic printing, and storage and mixing of paints for drum coating
 - **Plant no longer in operation, site is vacant**
- **No sources of groundwater contamination remain**

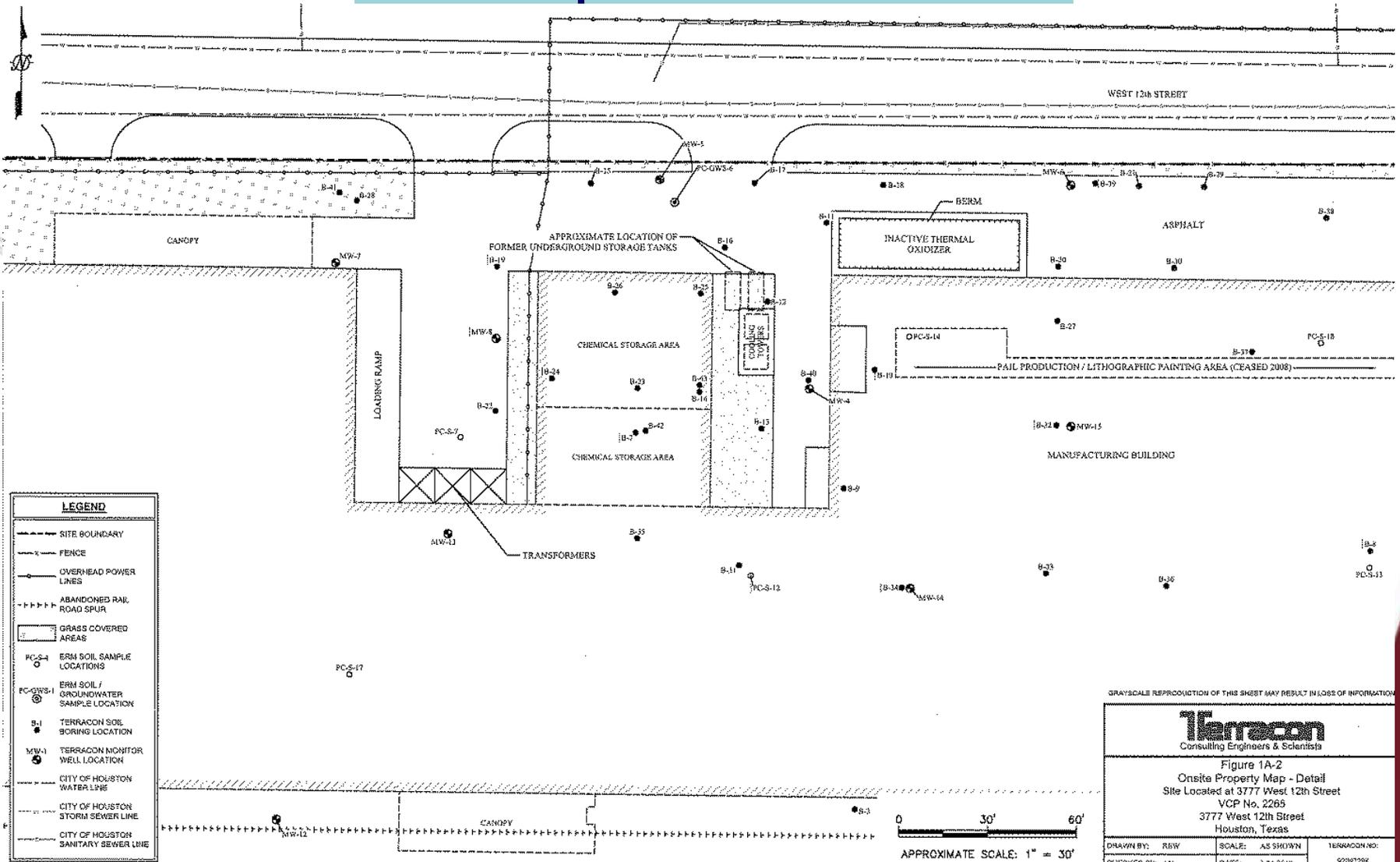
Investigation and Monitoring Activities

- 56 soil borings
 - 24 groundwater monitor wells (17 permanent wells)
 - 125 groundwater samples
 - 93 soil samples
-
- **The TCEQ has approved the assessment report documenting the completion of delineation**
 - **Groundwater plume is stable or decreasing**

Sample Locations



Sample Locations



Affected Soil at the Site

- Small area of subsurface soil affected by:
 - MEK
 - Petroleum hydrocarbons
- Concentrations in soil are below the health-based PCLs

Affected Groundwater at the Site

- Shallow water-bearing zone (~ 24 feet bgs) affected by:
 - MEK
 - Petroleum hydrocarbons
 - Chlorinated hydrocarbons (minor PCE and degradation products)
 - Arsenic
- MSD will prohibit the use of groundwater that exceeds the ingestion PCLs
- Concentrations detected in the groundwater are **well below non-ingestion PCLs**

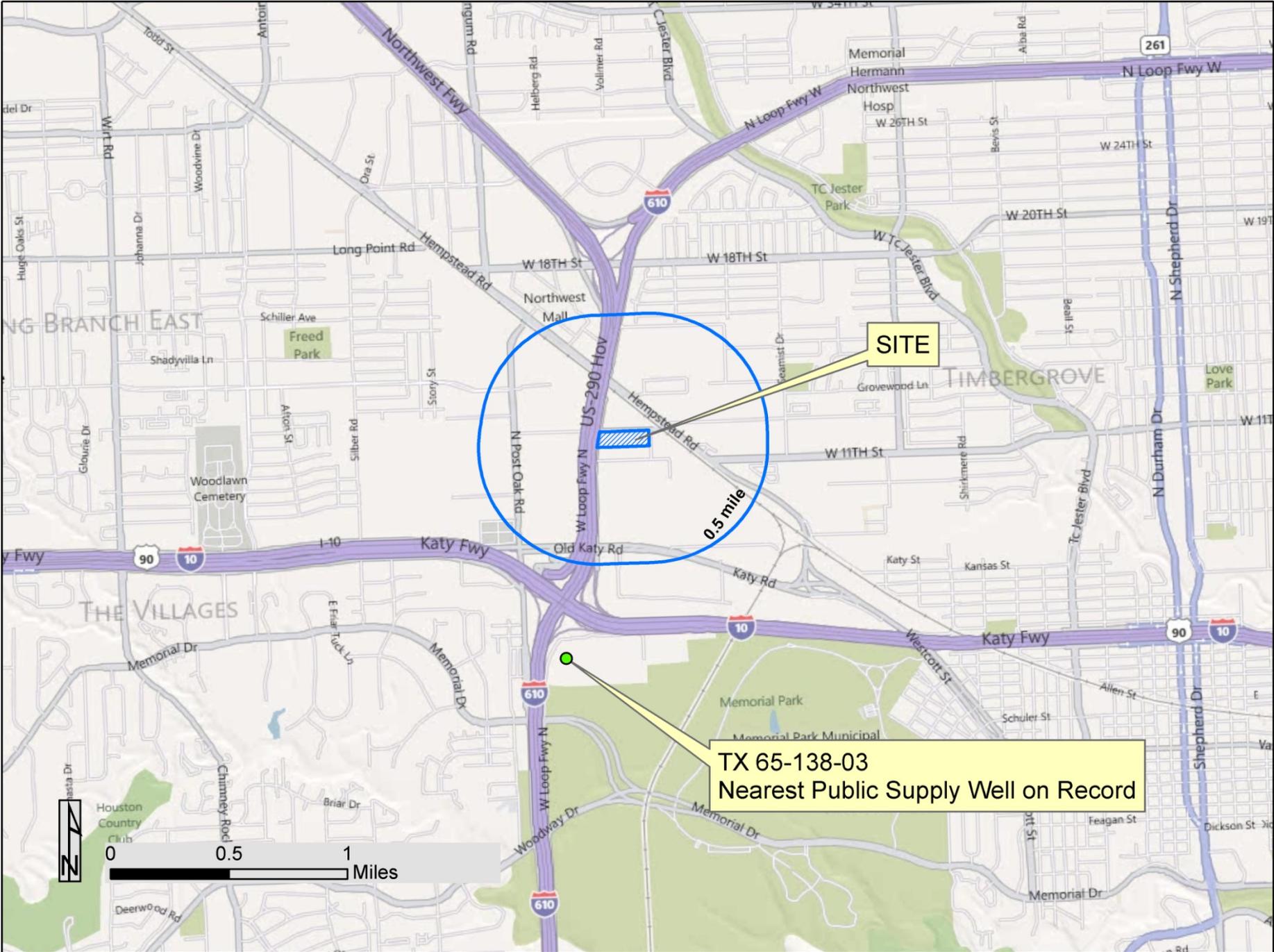
Groundwater Monitor Wells



Source of Aerial Photograph: Bing Map, (c) 2010 Microsoft Corporation and its data suppliers

Public Water Supply

- Potable water is supplied to the site and the surrounding area by the City of Houston
- The nearest public supply well on record (TX 65-13-803)
 - 0.93 mile from the site
 - 1,037 feet deep



SITE

0.5 mile

TX 65-138-03
Nearest Public Supply Well on Record



0 0.5 1 Miles



Monitor Well at the Site

Nearest Public Supply Well on Record (0.93 mile from the site)

30 feet deep

Alluvial Deposits

Alluvial Deposits

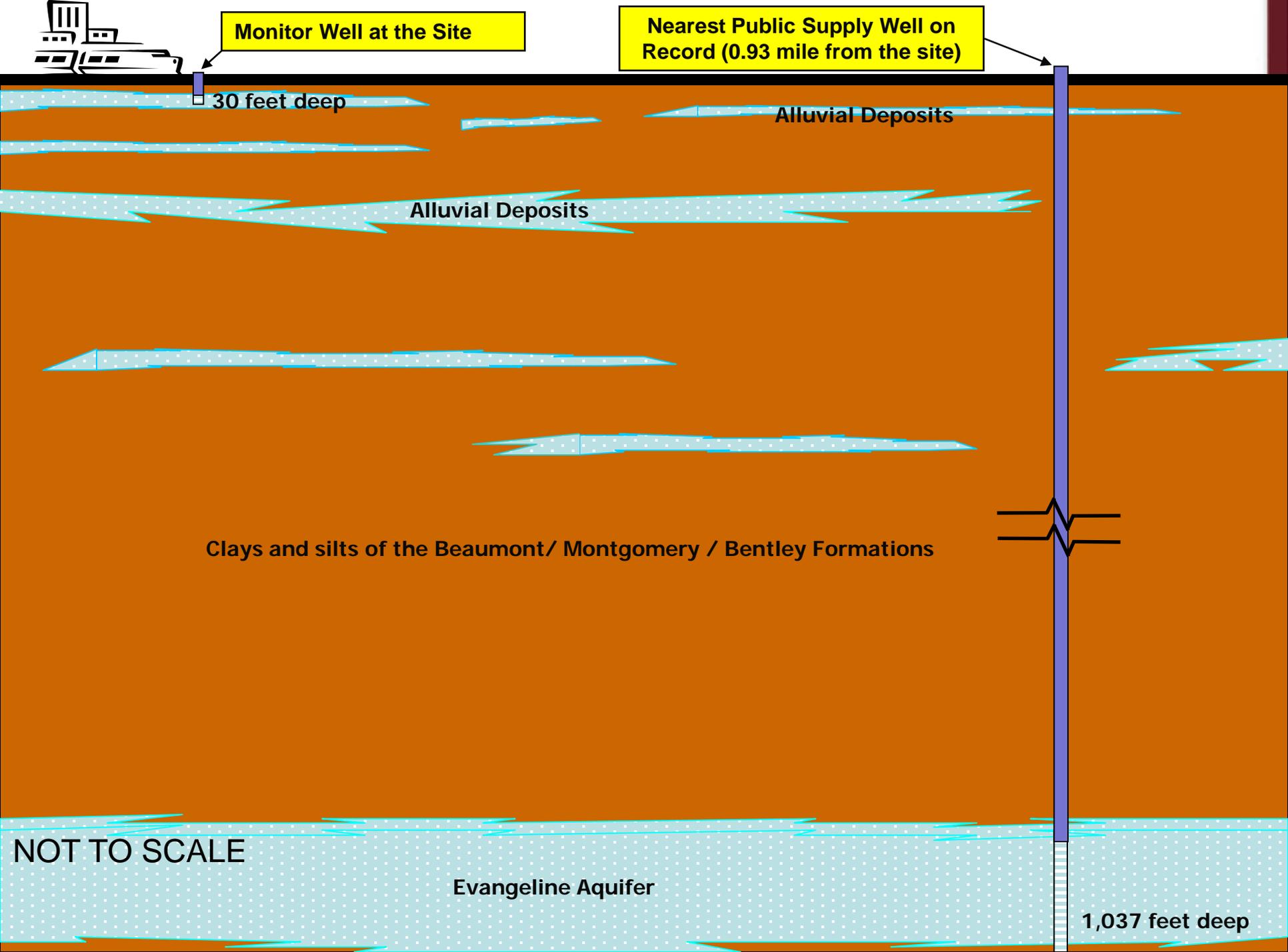
Clays and silts of the Beaumont/ Montgomery / Bentley Formations



NOT TO SCALE

Evangeline Aquifer

1,037 feet deep



Summary

- **Groundwater delineation is complete and TCEQ has approved the assessment report**
- **Groundwater COC concentrations are stable and/or decreasing**
- **Groundwater COC concentrations do not exceed non-ingestion PCLs**
- **The site is currently vacant and ready for sale or redevelopment**
- **An MSD will facilitate completion of cleanup activities at the site**