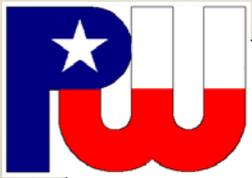


Municipal Setting Designations: Another Tool for Houston

Jennifer Clancey
Program Manager

Municipal Setting Designations (MSDs)



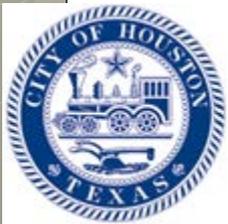
Agenda

- City of Houston - Programmatic

- What the MSD is
- Who the MSD impacts
- Steps in the MSD process

- MSD Applicant - Technical

- Specific information on the site
1302 Montrose Boulevard
- Questions / Comments





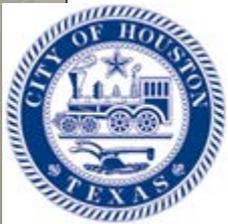
Environmental Protection in Texas

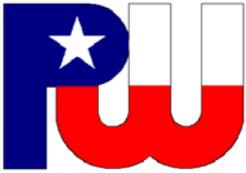
- ❑ The State of Texas has jurisdiction for environmental protection
 - ❑ Texas Commission on Environmental Quality (TCEQ)

❑ Environmental Complaints



- ❑ By Phone: 1-888-777-3186
- ❑ Online: <http://www5.tceq.texas.gov/oce/complaints/>
- ❑ By Phone: 311
- ❑ Online: http://webintake.houstontx.gov/web_intake/Controller





MSD Notice Letters



CITY OF HOUSTON
Public Works and Engineering Department

Annlise D. Parker
Mayor

Michael S. Maroof, P.E., D.WRE, BCEE
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
6:30 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 13067, MC-225
Austin, Texas 78711.

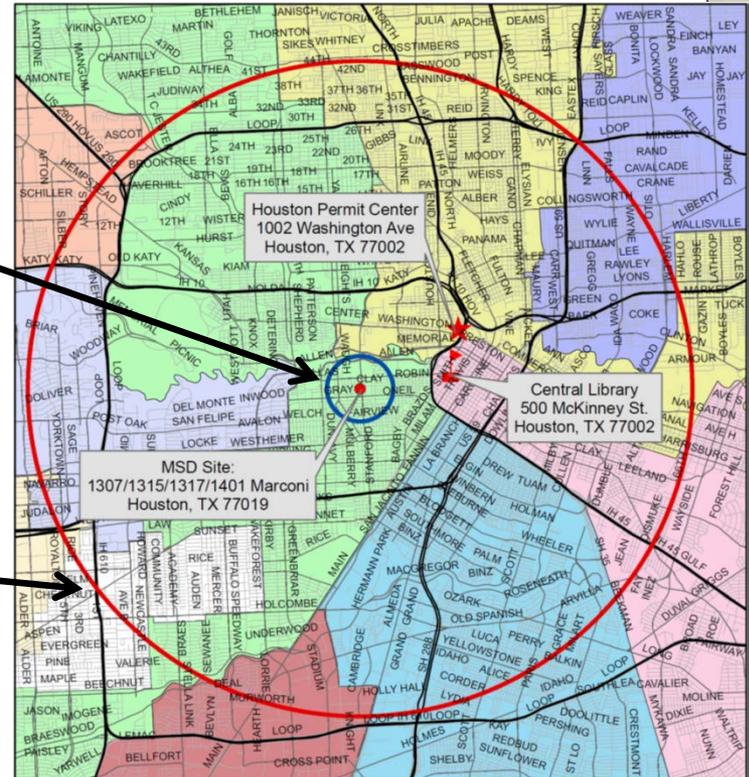
Richard Chapin
Public Works and Engineering Department
City of Houston
611 Walker, 19th Fl.
Houston, Texas 77002
msd@cityofhouston.net
(713) 837-0928

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 Stang, Janis Johnson, Anne Claitorback, Vanda Adams, Mike Sullivan, Al Hwang, Oliver Pennington, Edward Gonzalez, James O. Rodriguez, Stephen C. Costello, Sue Lovell, Melissa Notzke, C.O. "Stef" Bradford, Yolanda "Y" Jones, Controller: Ronald C. Green

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

Water Well Owners
Certified Mail
5-Mile Radius
State Requirement

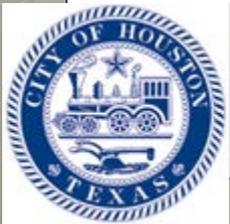


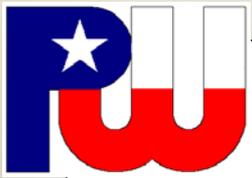
If you received a notice through certified mail that means you have a water well according to the State's records



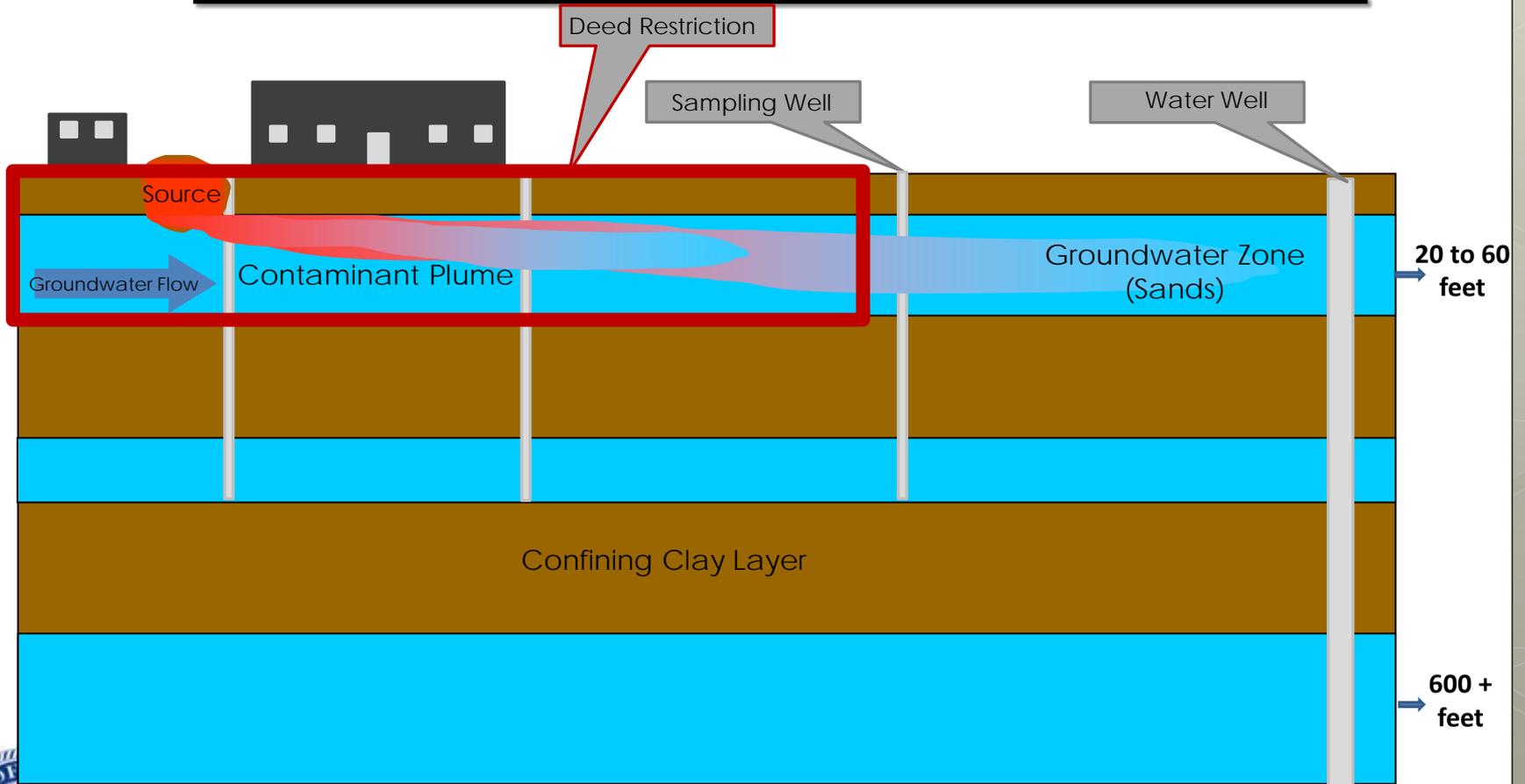
What is an MSD?

- A voluntary deed restriction to prevent the use of contaminated groundwater
 - No water wells on the subject property for drinking water purposes
 - A legally binding way to ensure the public is not exposed to contaminants





Groundwater Contamination

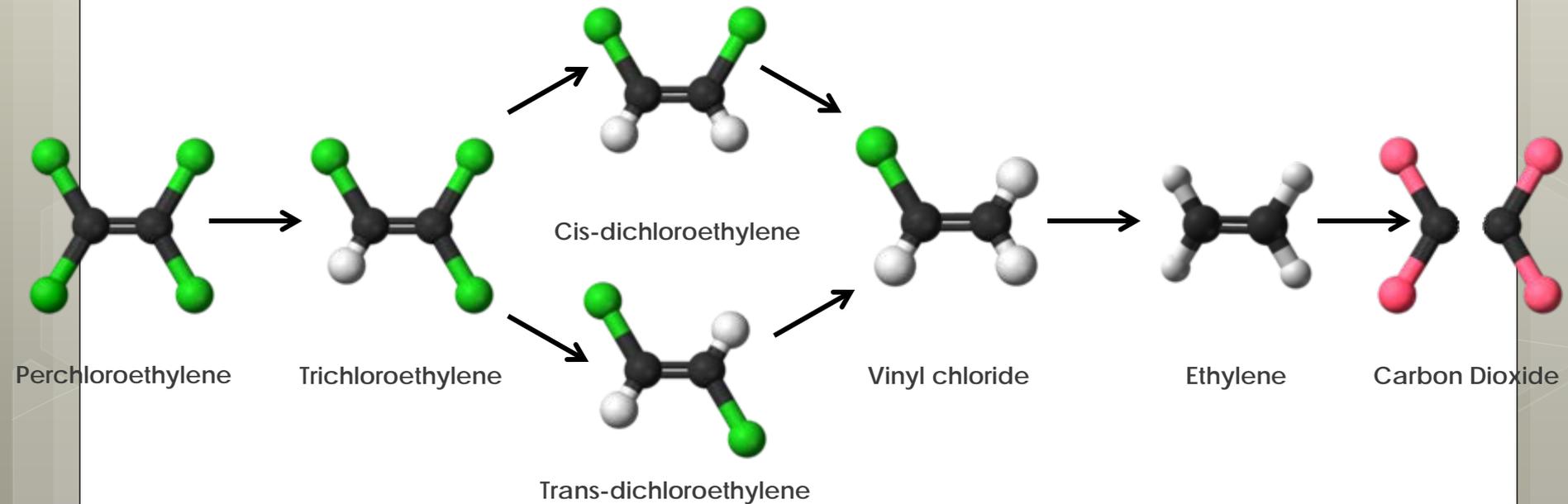


Please Note: Houston has shallow contaminated groundwater scattered across the City



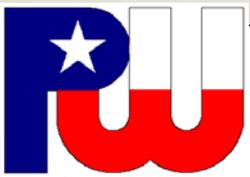


Chemical Degradation



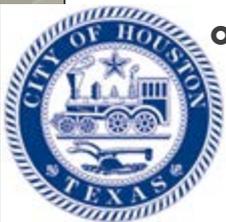
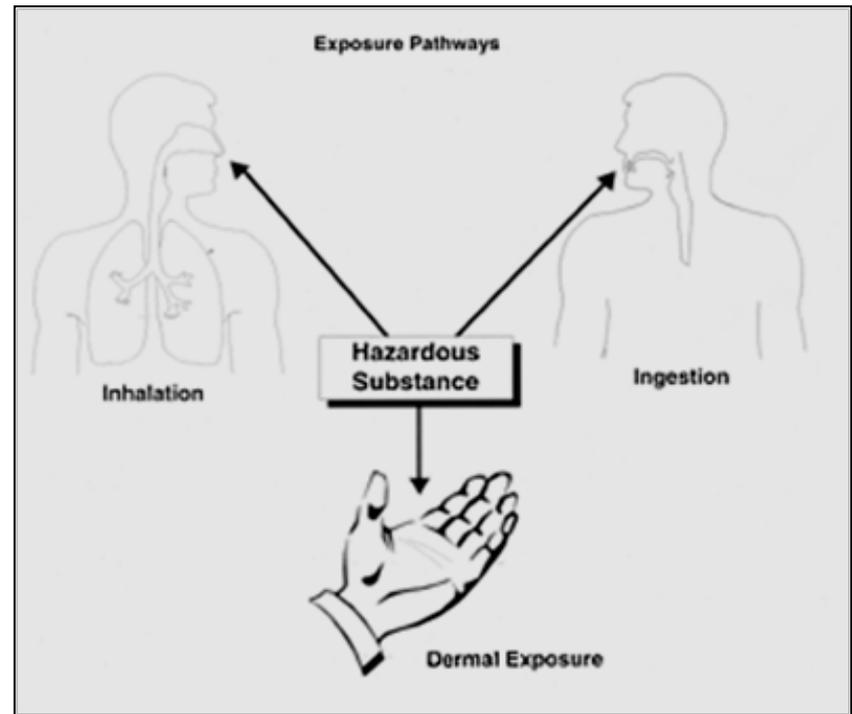
This process takes decades, but is found to be the most efficient strategy.





Exposure Pathways

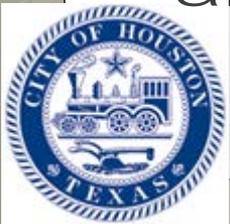
- Cleanup Programs are based on public exposure to contaminants and reducing public health risks
- Exposure Pathways
 - ~~Ingestion~~
 - Inhalation
 - Contact (dermal)
 - Soil
 - Groundwater to surface water
 - Ecological

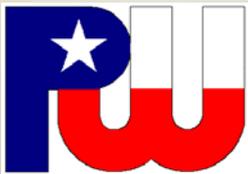




Environmental Cleanup

- The MSD is only one step in the cleanup process
- An MSD does NOT excuse the applicant from reducing risks to the public
- Responsible Parties are always responsible





Who the MSD Impacts

- An MSD does not affect you!
 - 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

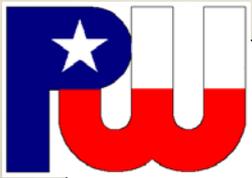




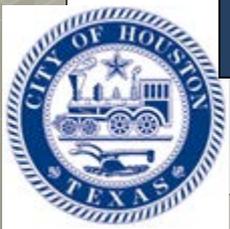
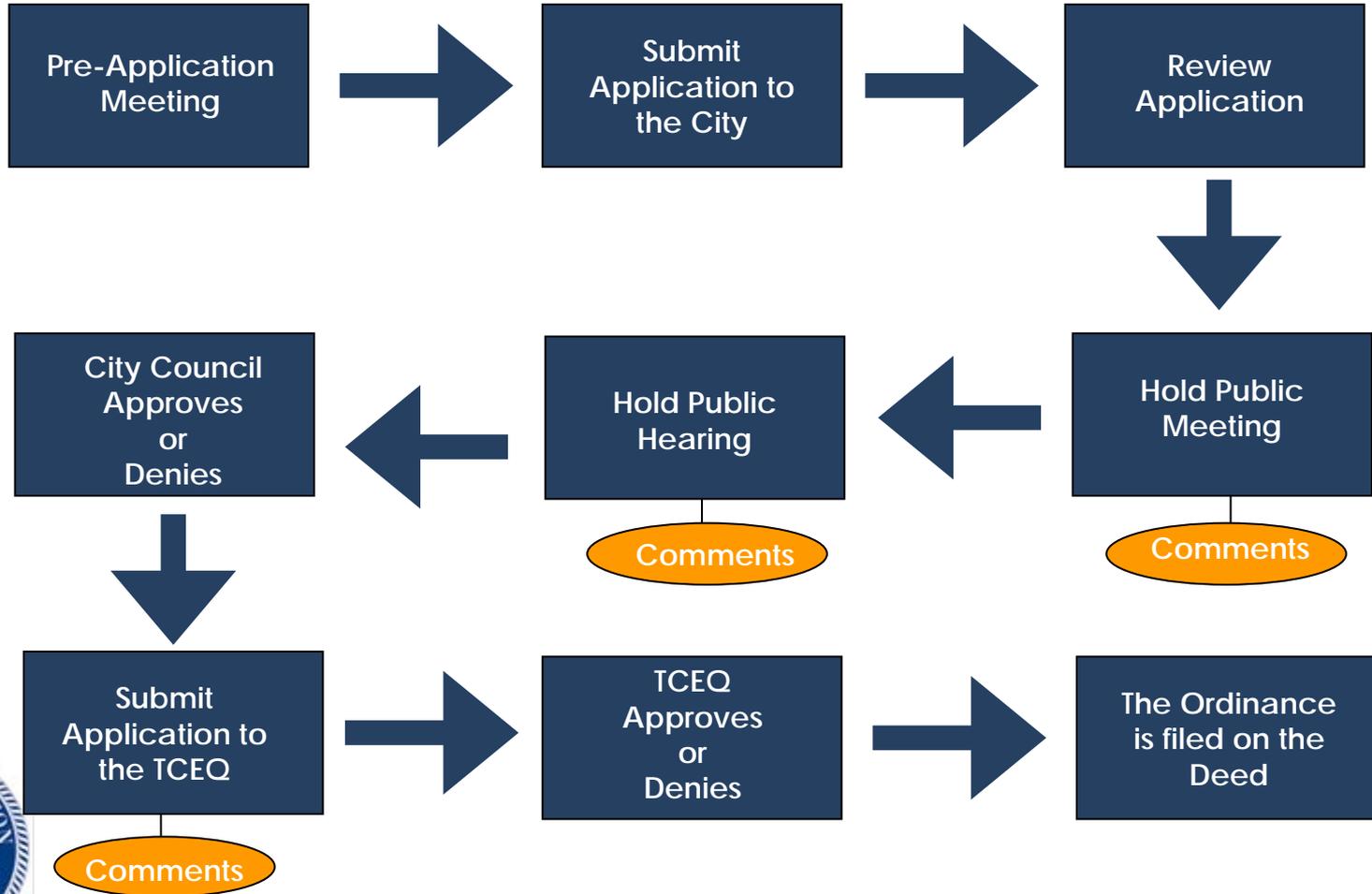
City's Requirements of the Applicant

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





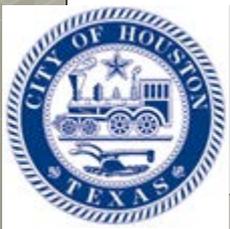
Steps in the Process





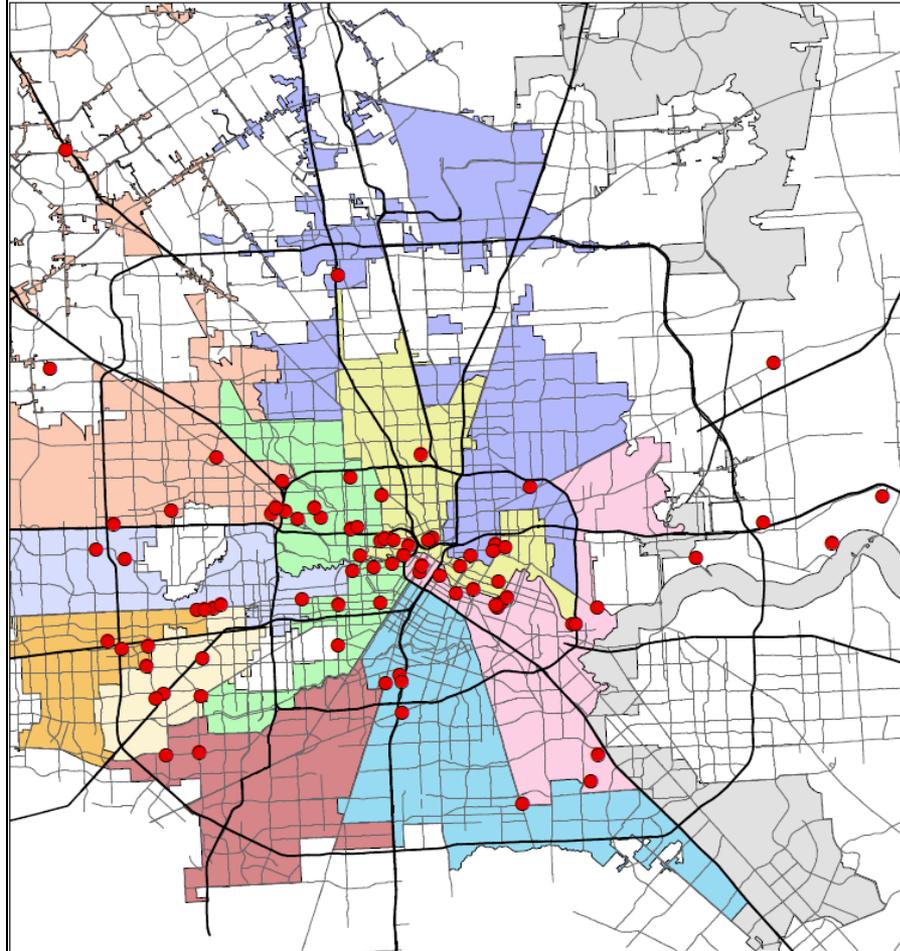
Why Support An MSD?

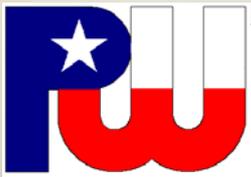
- Protects the public from consumption of contaminated groundwater
- Encourages clean-up of contaminated sites
- Promotes redevelopment of under-utilized properties





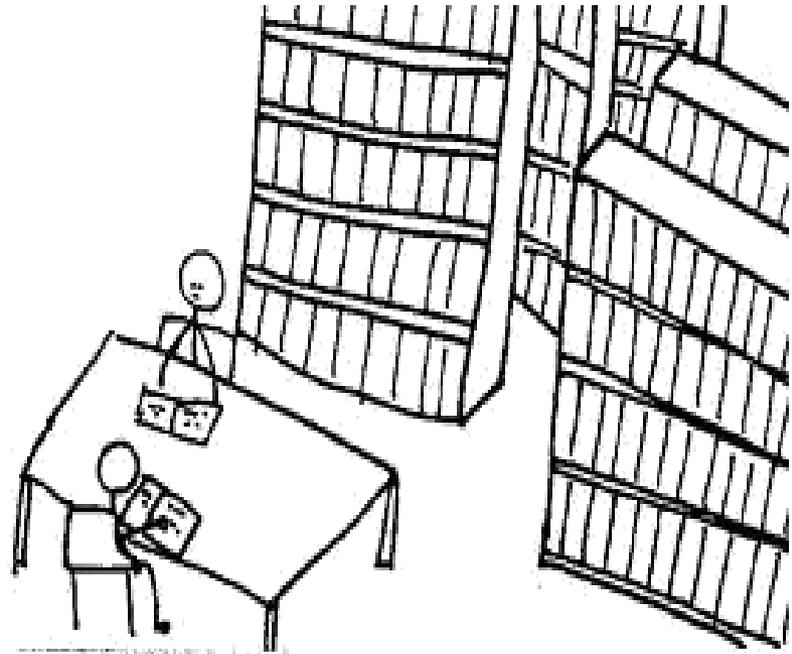
MSD Sites in Houston





MSD Application Availability

- Central Library
 - 500 McKinney Street
 - Reference Desk
- Also available online at:
www.houstonmsd.org
 - MSD in Review Page



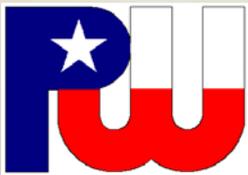


Public Hearing

- Date: December 14, 2015
- Time: 2:00 PM
- Place: City Council Chamber (Committee Meeting)
Transportation, Technology, & Infrastructure
- 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

Jennifer Clancey

Program Manager

Public Works & Engineering

City of Houston,

1002 Washington, 3rd Floor

Houston, Texas 77002

msd@houstontx.gov

(832) 394-9005



Municipal Settings Designation (MSD)

1302 Montrose Boulevard Property

Public Meeting

December 10, 2015

Consultant:

Terracon Consultants, Inc.

MSD Site Information

MSD Area:	1.050 Acres
MSD Location:	1302 Montrose Boulevard Houston, TX
MSD Applicant:	Sunrise Montrose Apartments, LLC
Groundwater Contamination:	Chlorinated hydrocarbons including, Tetrachloroethylene (PCE), Trichloroethylene (TCE), cis-1,2-Dichloroethene (cis-1,2-DCE), and Vinyl chloride (VC)
Soil Contamination:	Trichloroethene and Tetrachloroethene detected at depths greater than 18 feet below ground surface (bgs)

Site Location Map



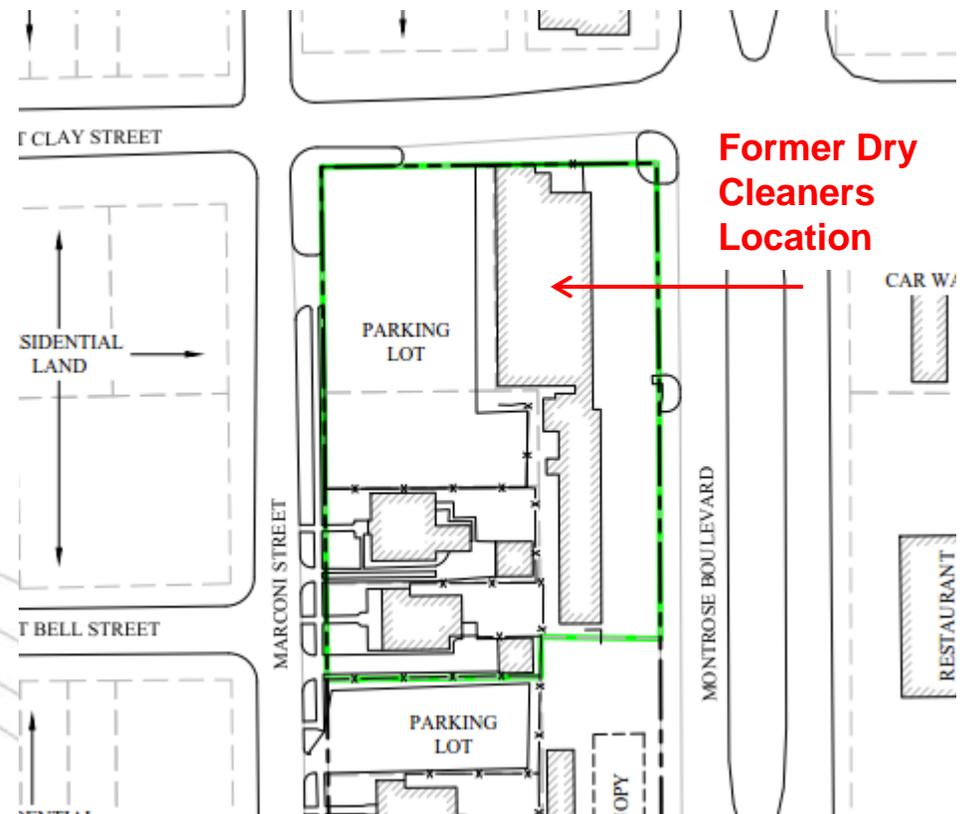
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Site Vicinity Map



Historical Site Use

- Dry cleaning facilities existed on the northeastern portion of the site in the 1970s.
- The dry cleaners were located in the present-day El Tiempo Cantina Restaurant Building
- Suspected sources of contamination:
 - 1) Dry cleaning solvents from former operations
- No active sources remain for contamination detected in groundwater.



Current Site Use

- Property is currently developed with two residential properties and El Teimpo Cantina Restaurant
- Contamination discovered in 2014
- Commercial Property
 - One ~7,800 sf restaurant
- Residential Property
 - Two ~1,200 sf residences



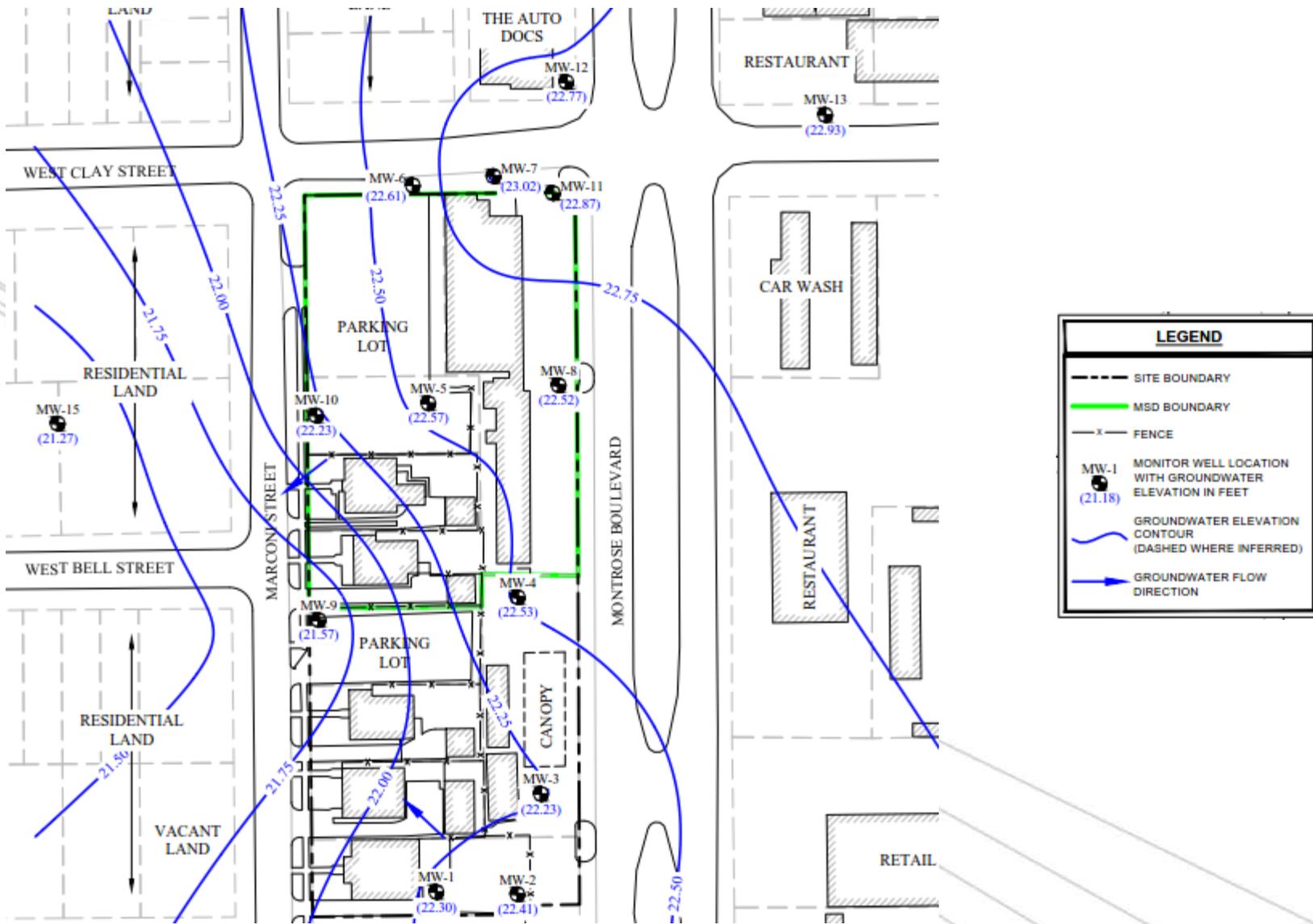
Site Investigation

- **Environmental Investigations began in 2014**
- **22 soil borings – 32 soil samples associated with the MSD site**
- **50 groundwater samples associated with the MSD site**
- **17 existing monitor wells on- and off-site**
- **Groundwater Monitoring conducted from 2014- 2015**
- **Groundwater plume has been delineated on- and off-site**
- **Groundwater flow direction is toward the west-southwest**

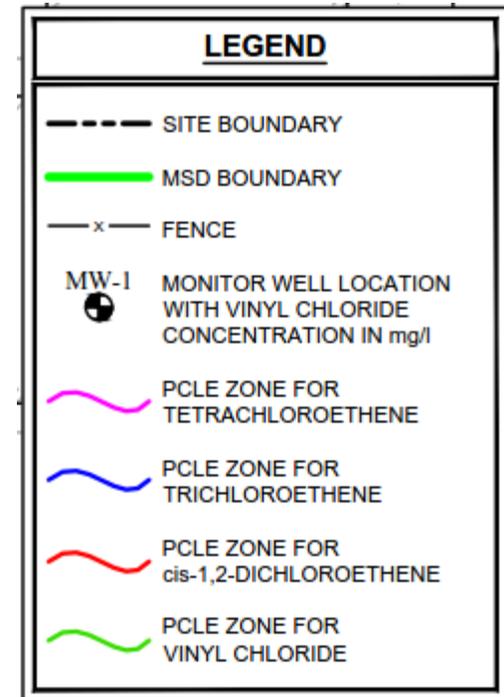
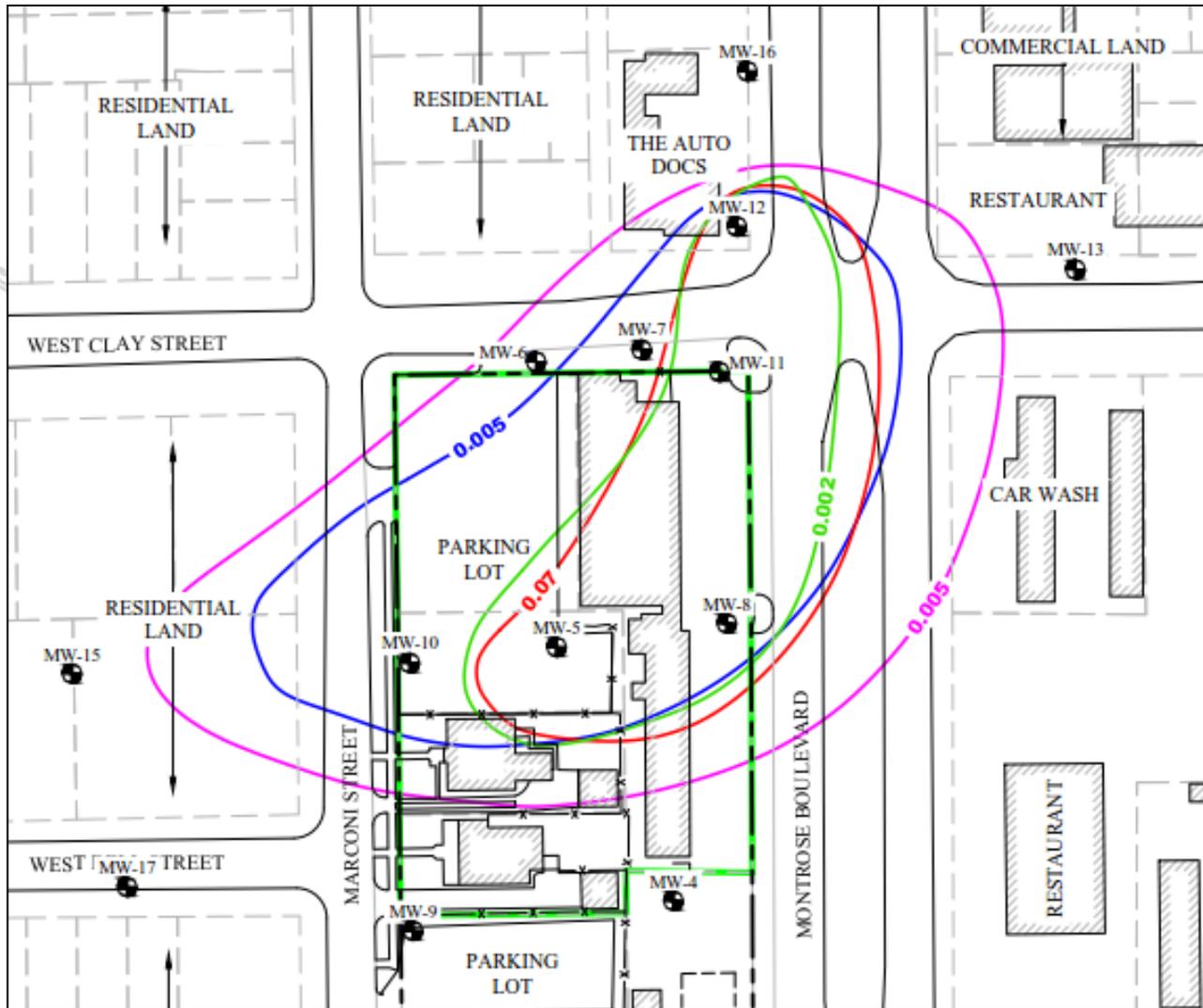
Concentration vs. Time

- Concentrations of **Tetrachloroethene** in 7 wells, **Trichloroethene** in 6 wells, **cis-1,2-Dichloroethene** in 4 wells, and **Vinyl Chloride** in 4 wells exceed ingestion PCLs
- The concentrations are decreasing or stable

Contaminant Plume



Contaminant Plume



Summary

- Affected soil and groundwater are fully delineated.
- Concentrations of contaminants in groundwater are are **decreasing** or **stable**; sources of these contaminants not active (Dry cleaning facilities no longer on-site).
- Concentrations of remaining contaminants are below levels of concern (non-Ingestion PCLs).
- MSD will prohibit the use of on-site groundwater for ingestion

Questions?