

Municipal Setting Designations



MSDs: 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
600-720 W. 6th Street, Houston
 - **Questions / Comments**



Environmental Protection in Texas

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

❑ Environmental Complaints



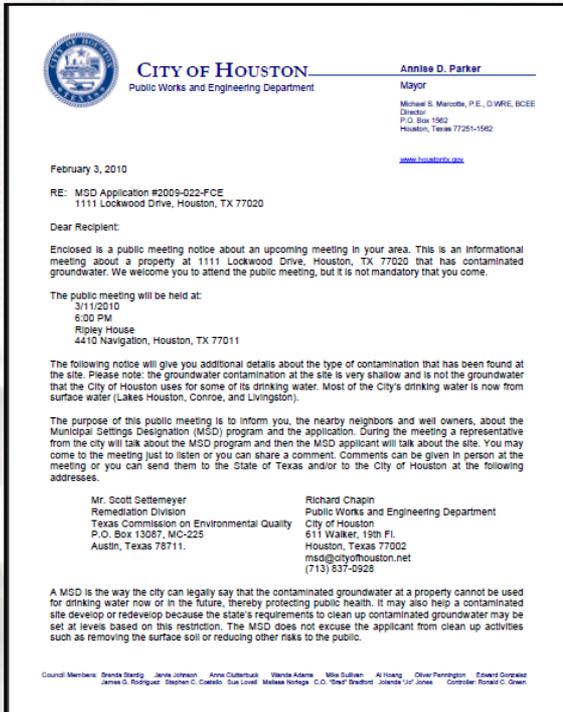
- ❑ By Phone: 1-888-777-3186
- ❑ Online: <http://www5.tceq.texas.gov/oce/complaints/>



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

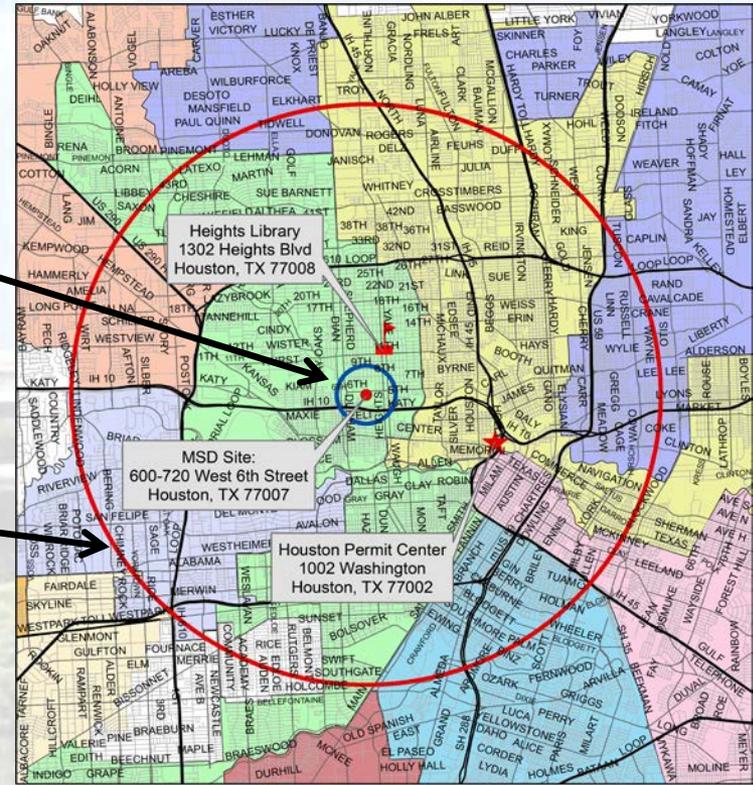


MSD Notice Letters



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



Municipal Setting Designations (MSDs)

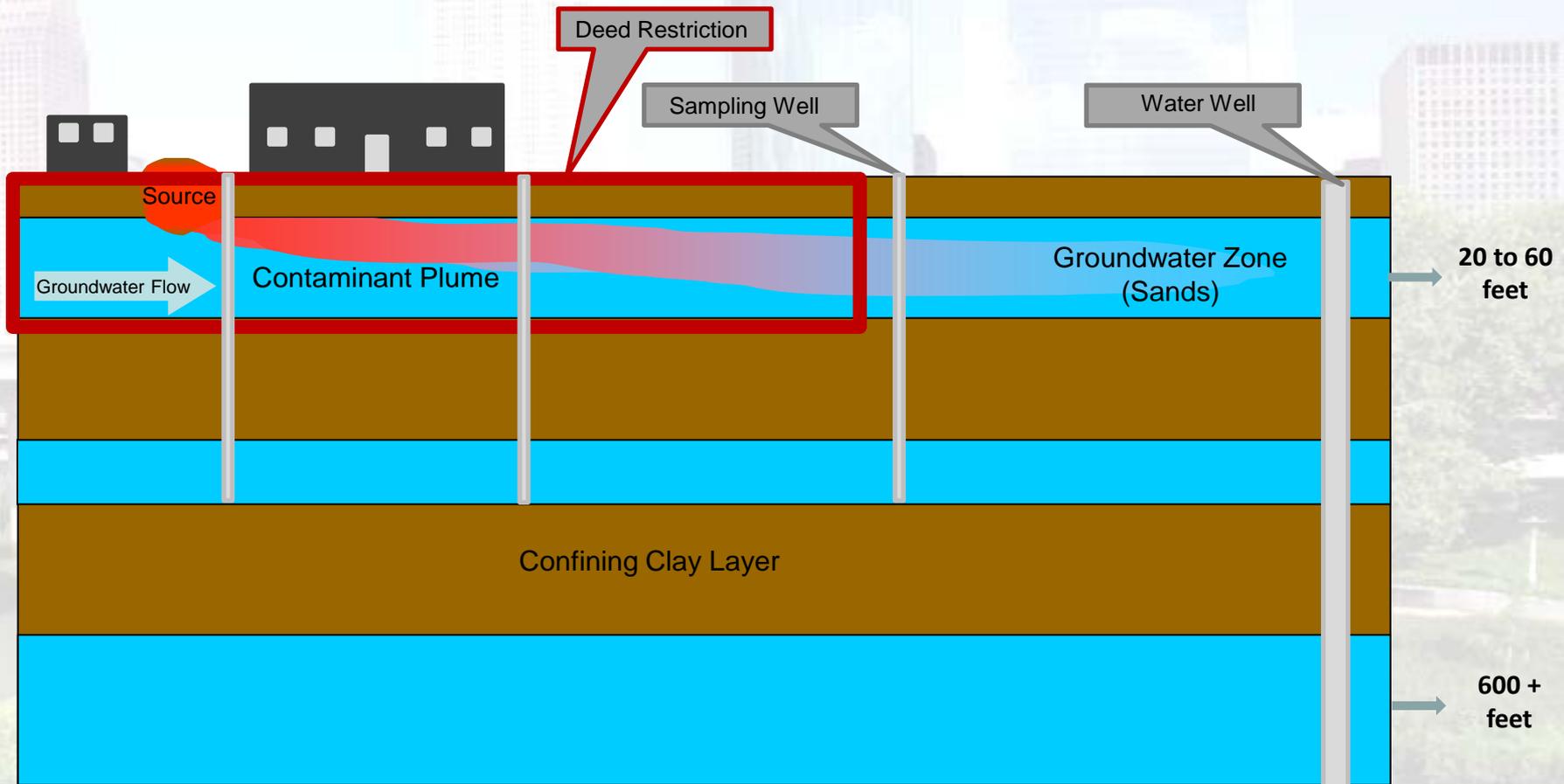


What an MSD is

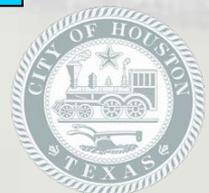
- **Voluntary** deed restriction to prevent the use of contaminated groundwater
 - No water wells on the subject property for drinking water purposes
 - A legally binding way to ensure the public is not exposed to contaminants



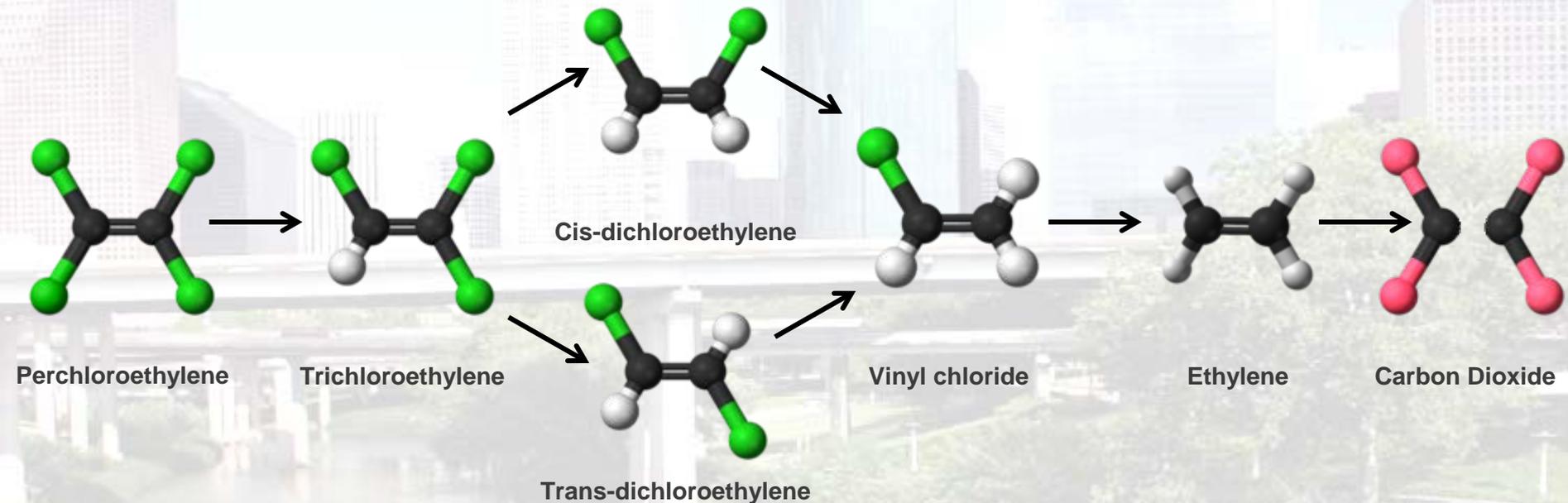
Groundwater Contamination



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.

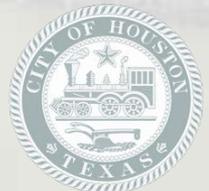
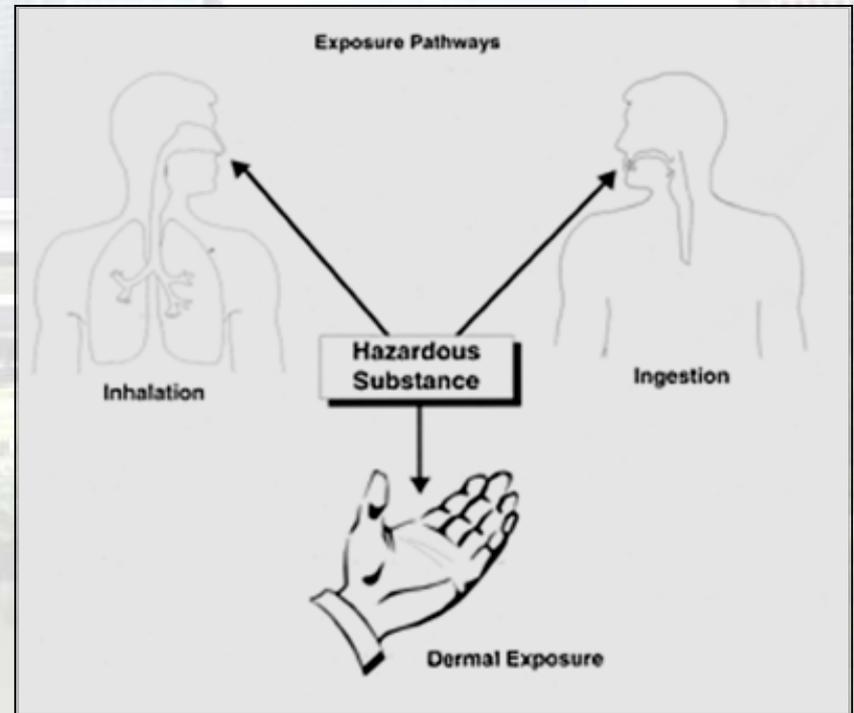


Municipal Setting Designations (MSDs)



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

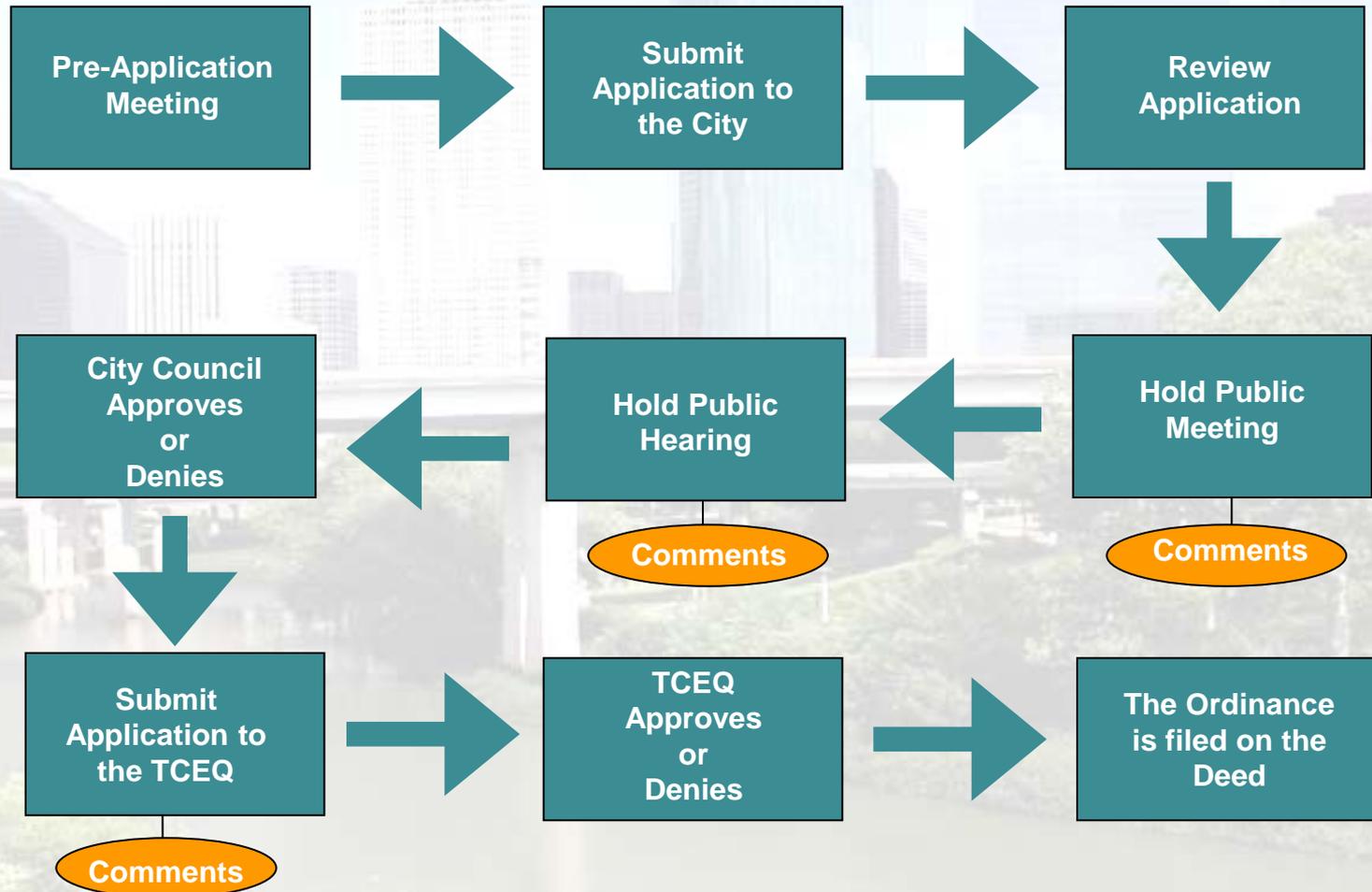


City's Requirements of the Applicant

- 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 addressed
- A **third party** Engineer (P.E.) or Geologist (P.G.) must certify application

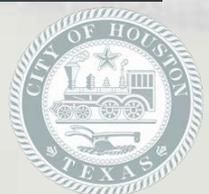


Steps in the Process

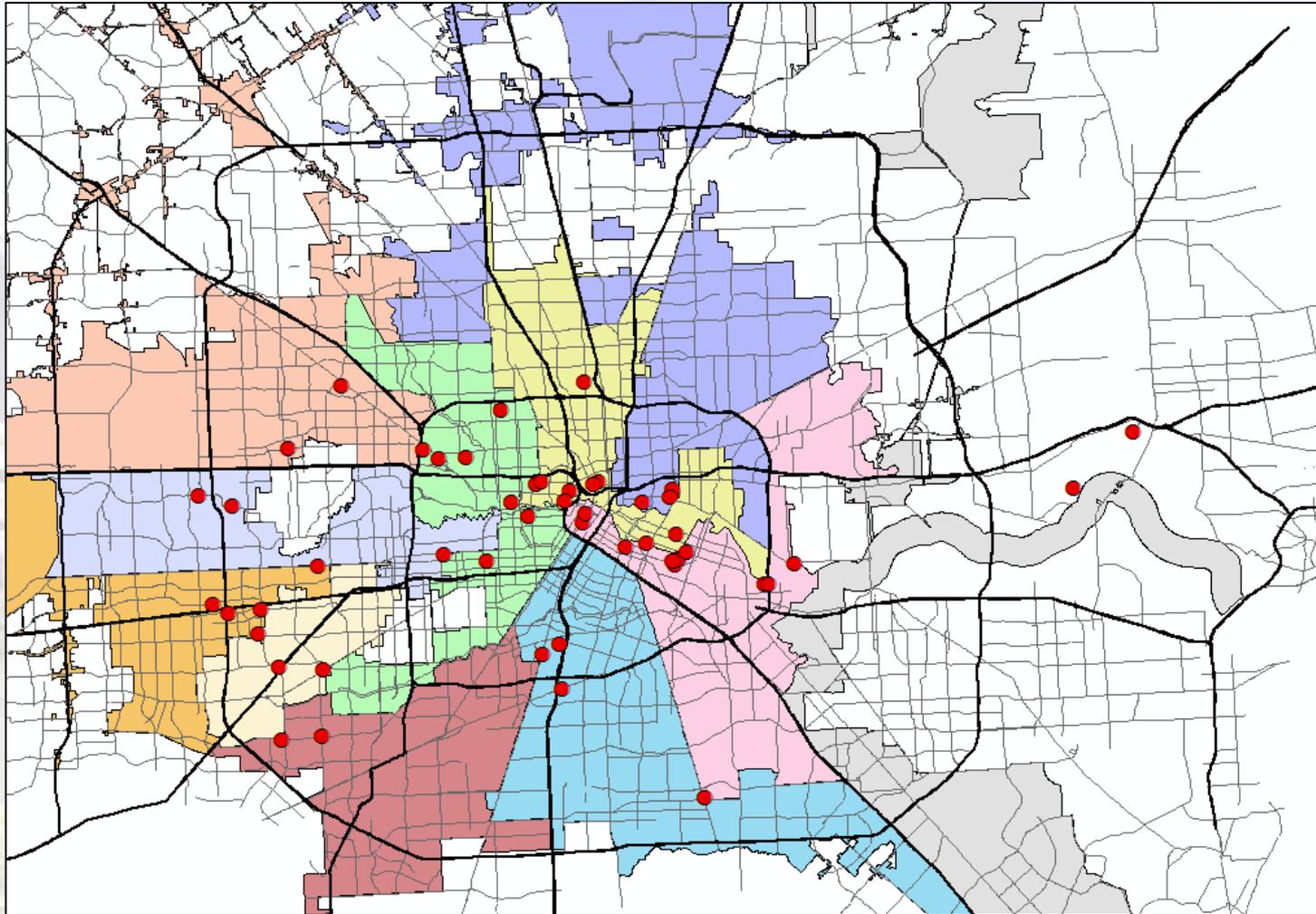


Why Support An MSD?

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



MSD Sites in Houston



Municipal Setting Designations (MSDs)



MSD Application Availability

- Heights Library
 - 1302 Heights Blvd
 - Reference Desk
- Also available online at:
www.houstonmsd.org
 - MSD in Review Page



Public Hearing

- Date: September 11, 2014
- Time: 9:00 AM
- 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.



Municipal Setting Designations (MSDs)



Contact Information

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Municipal Setting Designations (MSDs)



Municipal Settings Designation (MSD)

Central Industrial Park

Public Meeting

September 3, 2014

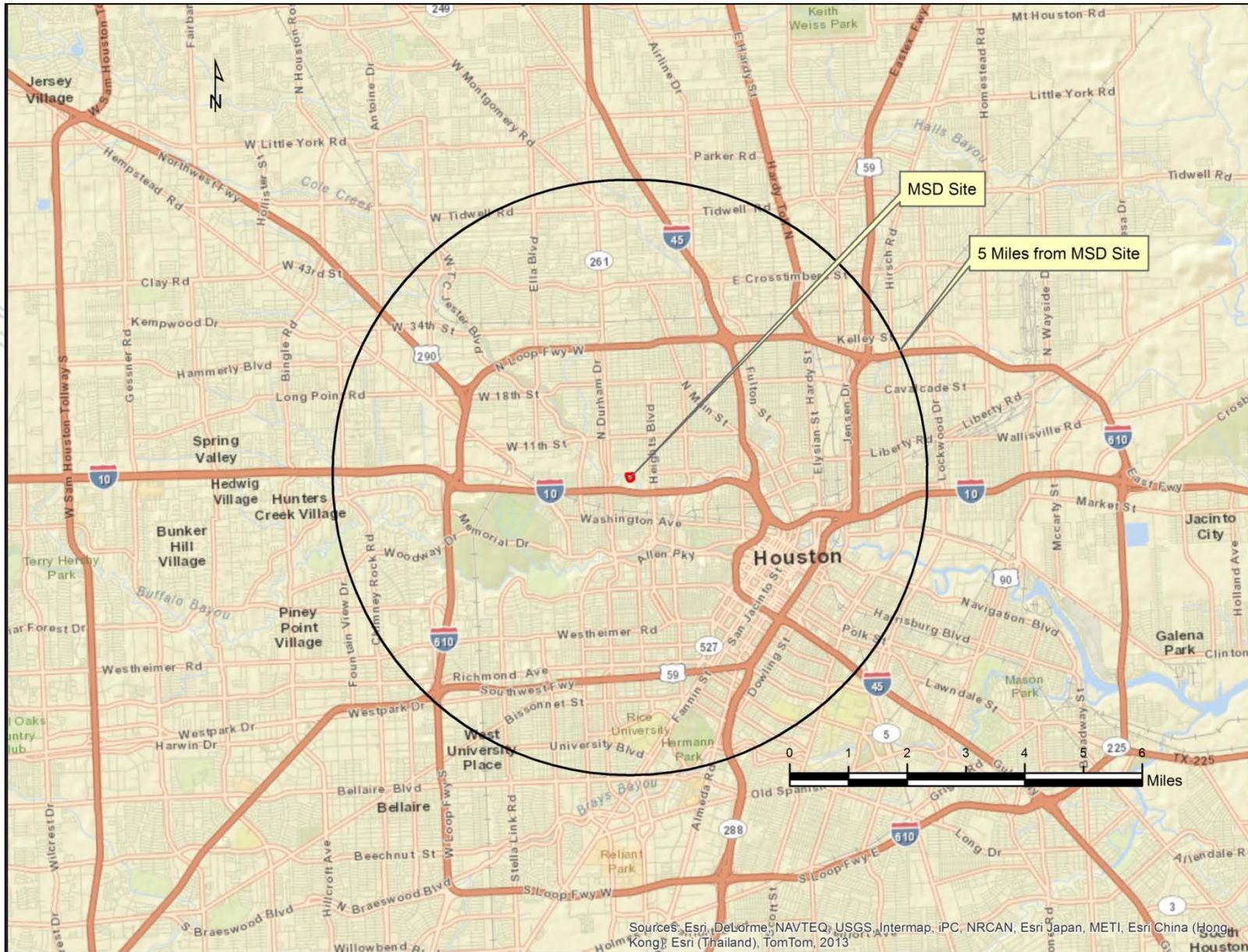
Consultant:

Terracon Consultants, Inc.

MSD Site Information

MSD Area:	8.1842 Acres
MSD Location:	600-720 W. 6th Street Houston, TX
MSD Applicant:	Central Industrial Park, Ltd
Groundwater Contamination:	Carbon tetrachloride, methylene chloride, and nitrate
Soil Contamination: depths surface	Carbon tetrachloride detected at greater than 35 feet below ground (bgs) Nitrate detected at depths greater than 8 feet bgs

Site Location Map

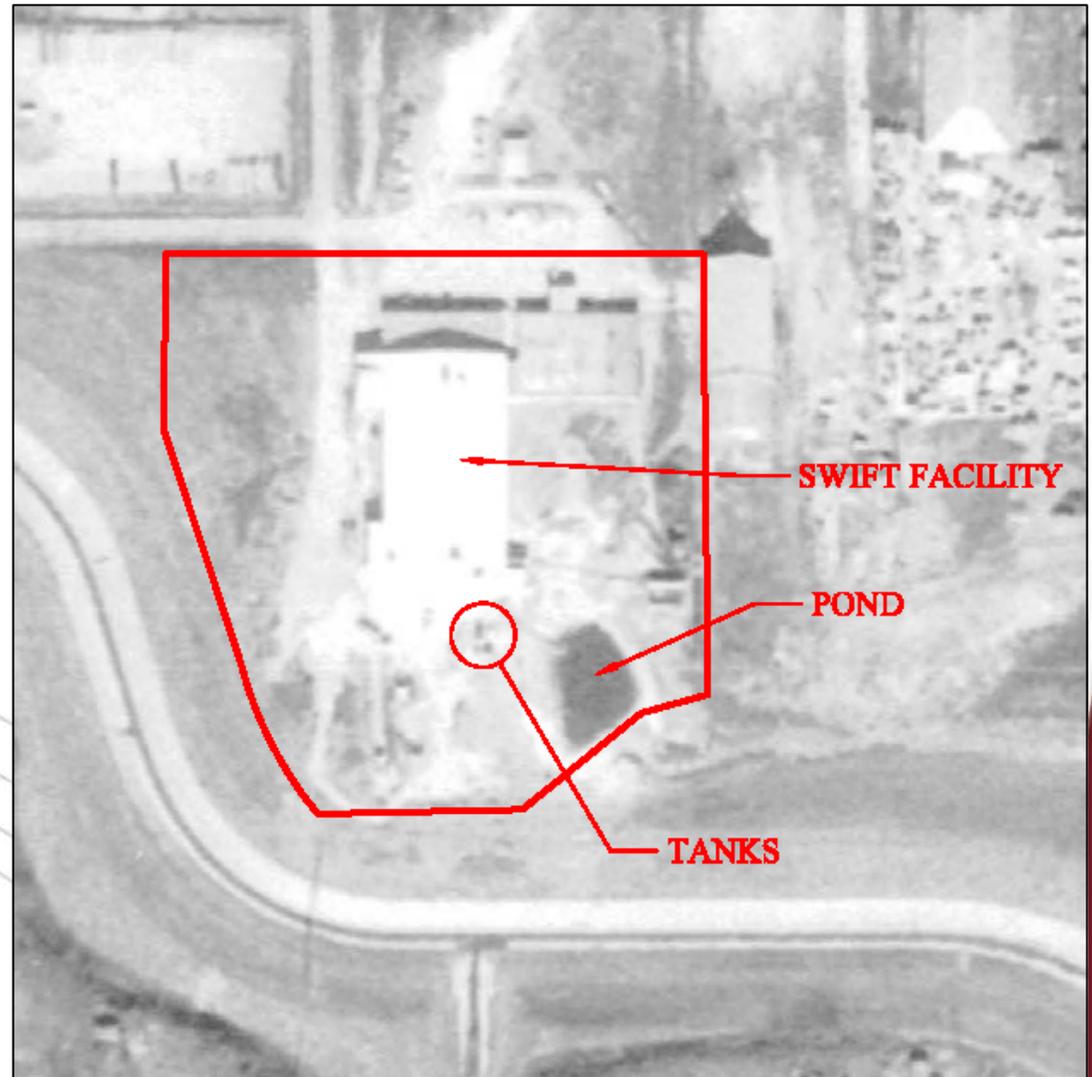


Site Vicinity Map



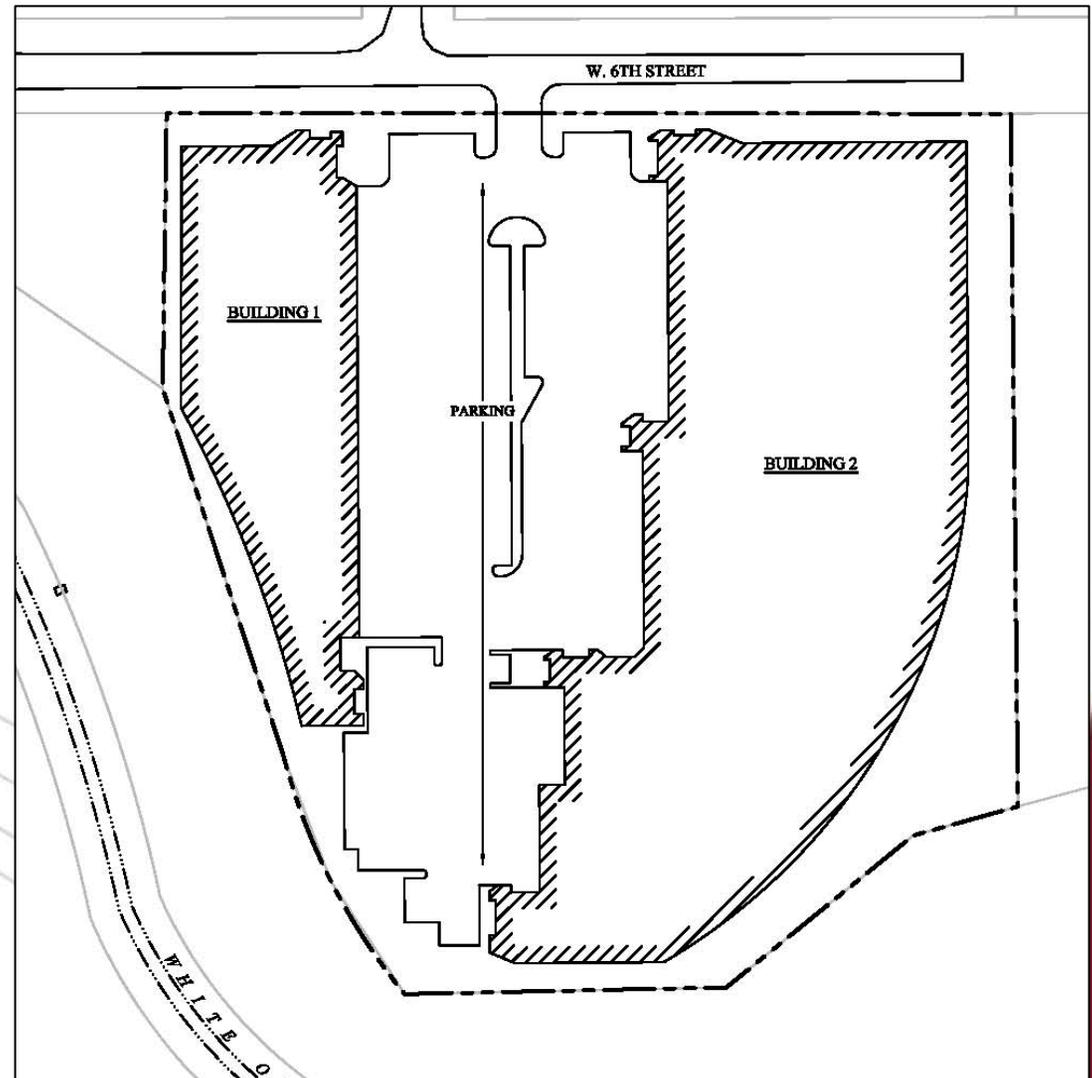
Historical Site Use

- Formerly owned by Swift Chemical Company (Swift). Manufacturer of fertilizers.
- Suspected sources of contamination:
 - 1) former aboveground storage tanks (ASTs) and,
 - 2) a pond on southeast portion of the site.
- Swift facility demolished in early 1980s, ASTs removed and former pond filled-in.
- No active sources remain for contamination detected in groundwater.



Current Site Use

- Central Industrial Park completed in 1984
- Contamination discovered in 1991
- Commercial Property
 - Building No. 1: 46,277 sf office/warehouse
 - Building No. 2: 139,886 sf office/warehouse
 - Parking areas between the two buildings.



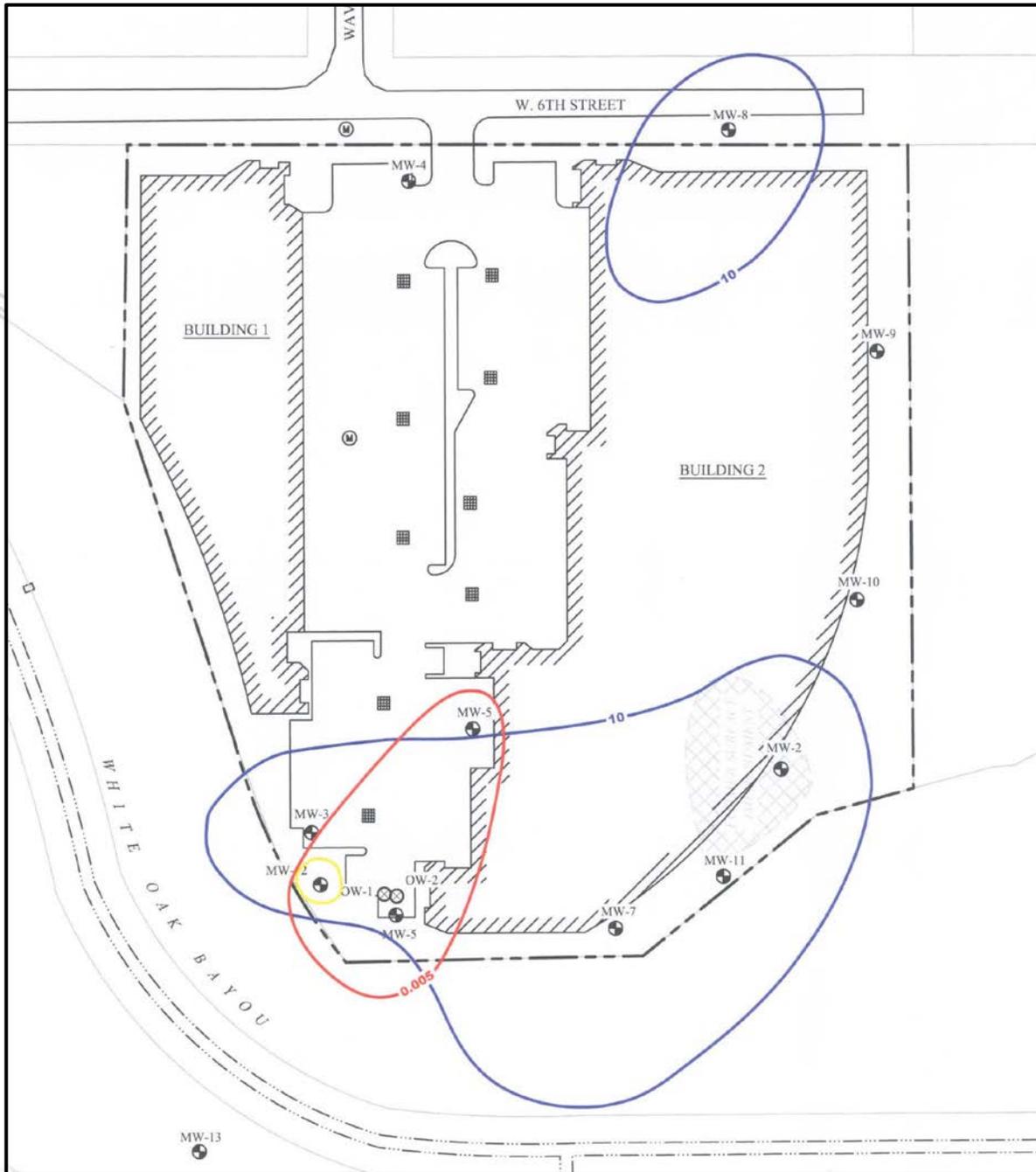
Site Investigation

- Groundwater sampling conducted with 15 monitor wells since 1991 for 23 years and 13 sampling events to assess groundwater. Groundwater plume delineated. Concentrations of contaminants decreasing or stable with time.
- Soil sampling conducted with 55 soil borings to assess surface and subsurface soil. Concentrations of contaminants above TCEQ Action Levels detected at depths of 8 feet or greater bgs.
- Surface water sampling along White Oak Bayou. No interaction between groundwater and surface water were found.
- 116 groundwater samples, 64 soil samples, and 4 surface water samples collected and analyzed during site investigation.

Concentration vs. Time

- Concentrations of **Nitrates in 9 wells, Carbon Tetrachloride in 4 wells, and Methylene Chloride in 1 well** exceed ingestion PCLs
- The concentrations are decreasing or stable

Contaminant Plumes



LEGEND			
	SITE BOUNDARY		MONITOR WELL LOCATION
	STORM WATER INLET		NITRATES PCLE
	STORM WATER ACCESS MANWAY		CARBON TETRACHLORIDE PCLE
	OBSERVATION WELL LOCATION		METHYLENE CHLORIDE PCLE

Summary

- Affected soil and groundwater are fully delineated (TCEQ approved delineation).
- Concentrations of contaminants in groundwater are **decreasing** or **stable**; sources of these contaminants not active (Swift facility demolished in early 1980s).
- Concentrations of remaining contaminants are below levels of concern (non-Ingestion PCLs).
- MSD will prohibit the use of on-site groundwater for ingestion

Questions?