

Municipal Setting Designations



MSDs: Another tool for Houston

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Municipal Setting Designations (MSDs)



Agenda

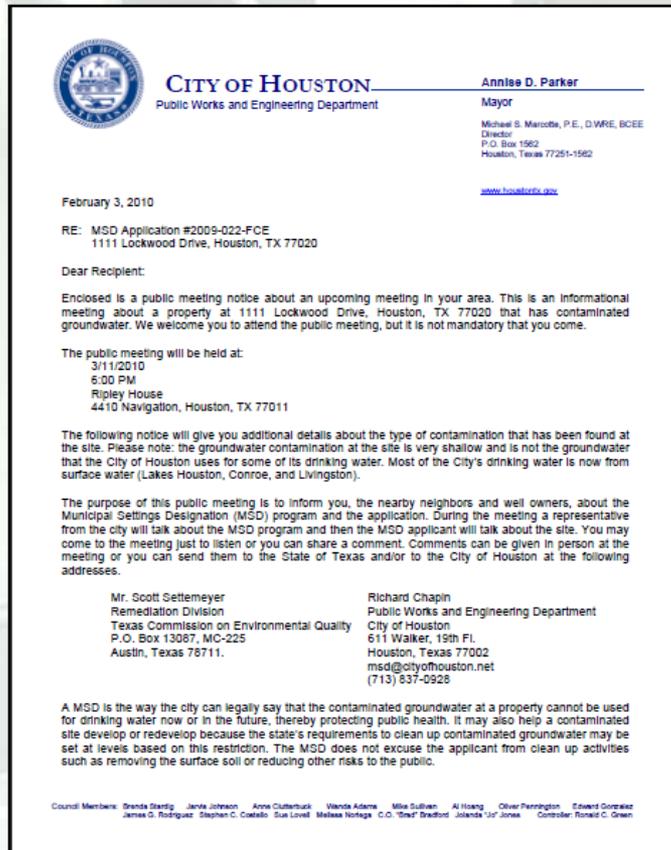
- City of Houston
 - Why we are here
 - Who the MSD impacts
 - What an MSD is
 - Why support an MSD
 - Steps in the MSD process
- MSD Applicant
 - Specific information on the site
9800 Clinton Drive
- Public comment and questions

Why Are We Here



- Inform you about an MSD application amendment
 - Union Pacific Railroad
 - MSD #2010-031-FEL
- Explain what an MSD is and what it does for the applicant, the local community, and the City
- Receive public comments

MSD Notice Letters



- Public Notices:
 - Property owners
First Class Mail
1/2-Mile
(City Requirement)
 - Water well owners
Certified Mail
5-Miles
(State Requirement)

Who the MSD Impacts



- 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

What an MSD is



- Voluntary deed restriction to prevent the use of contaminated groundwater
 - State program created in 2003
 - Texas Commission on Environment Quality (TCEQ)
 - City process created in November 2007
 - Public Works & Engineering
- TCEQ cannot approve an MSD without the City Council's support

What an MSD is



- Another tool to address groundwater contamination
- 
- Please note: Houston has shallow groundwater contamination scattered across the city
 - Program considers 200 feet below the surface

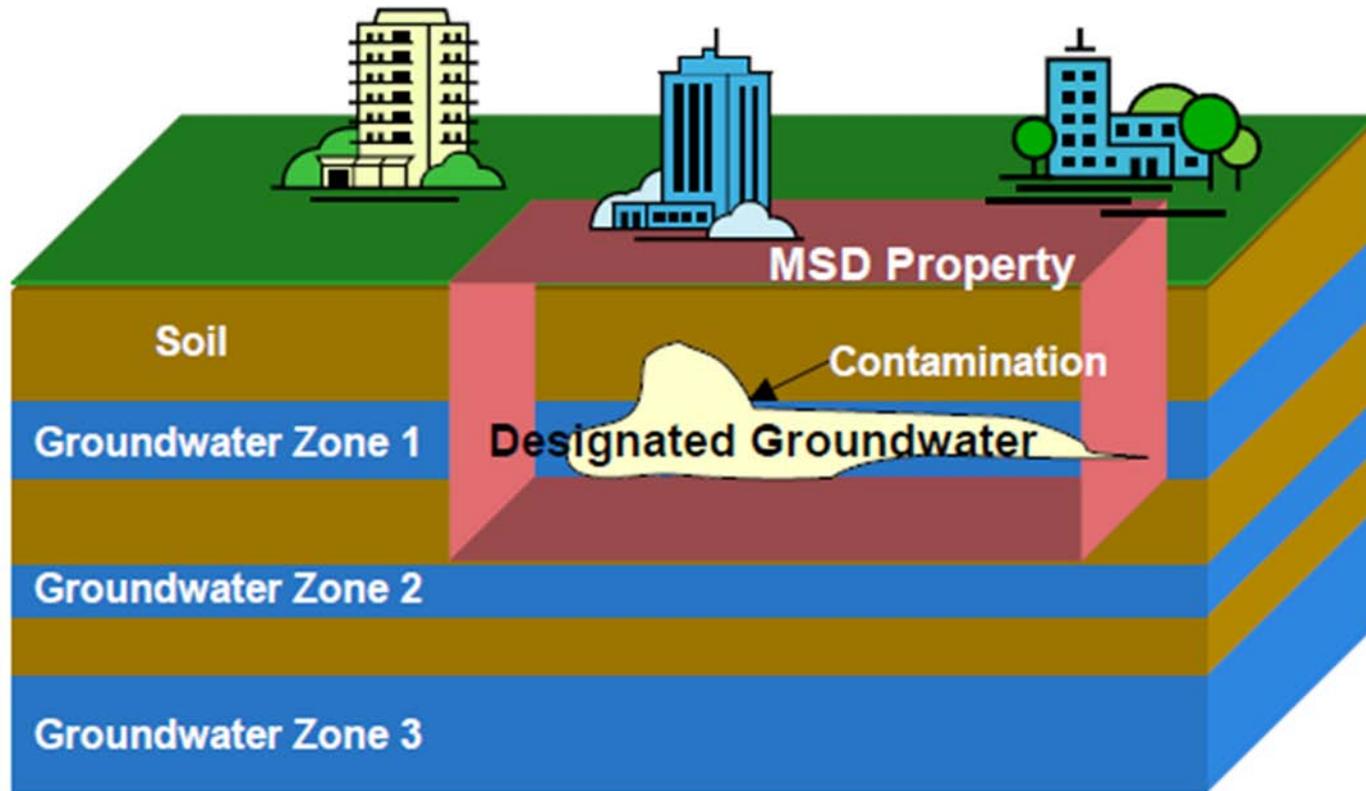
City Water Supply



- Houston's drinking water comes from either deep aquifers (20%) or surface water (80%)
 - No active public supply water wells within 5 miles
 - Surface water supply
 - Lake Houston
 - Lake Conroe
 - Lake Livingston
 - Trinity River



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.

Problems of Traditional Remediation Methods



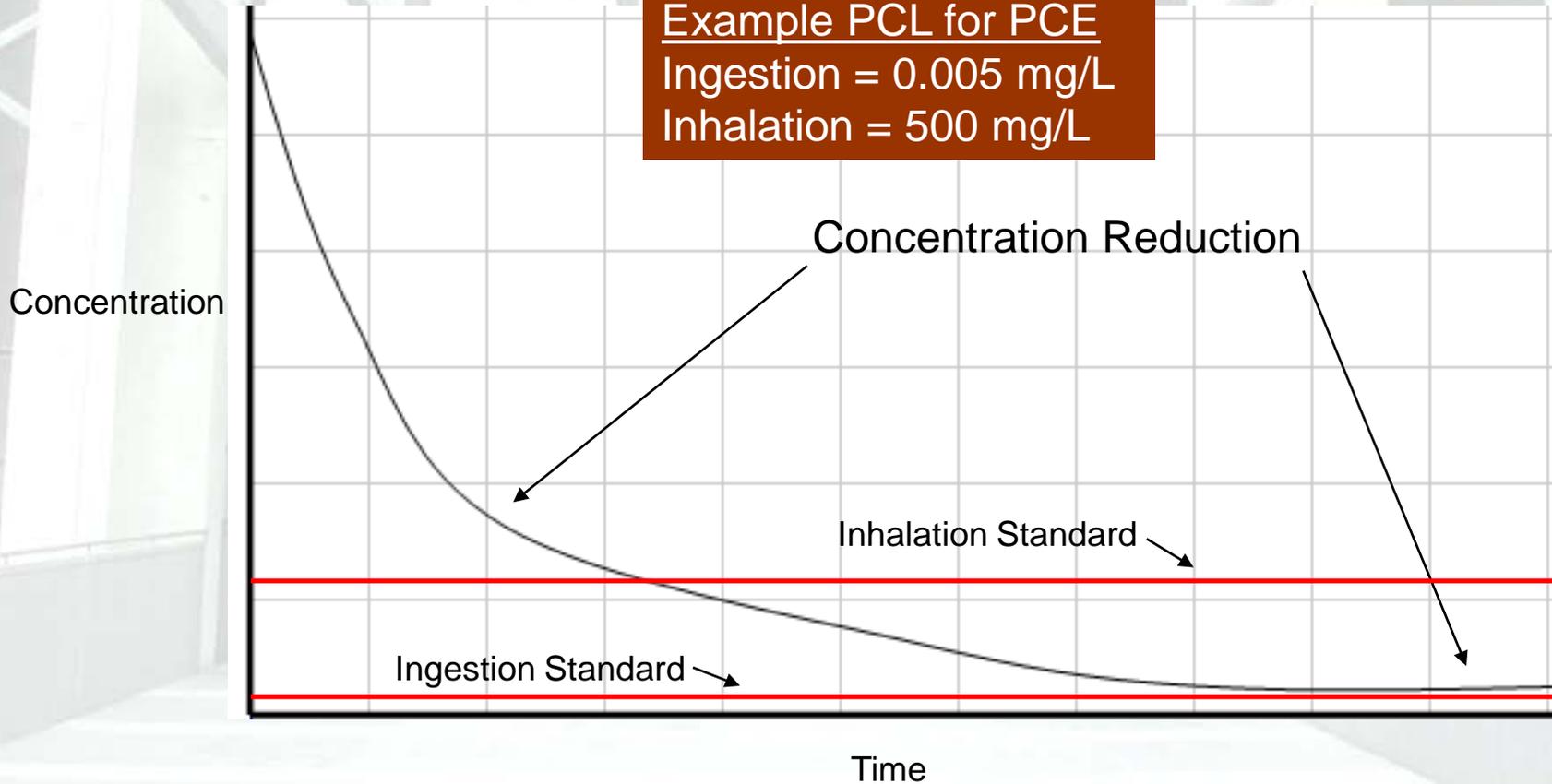
- Groundwater must be cleaned to drinking water standards even if:
 - There is no need or desire to use it, or
 - Water bearing zone is too silty, too salty, or low
 - producing
- Groundwater remediation to drinking water standards is inefficient, costly, and can take decades



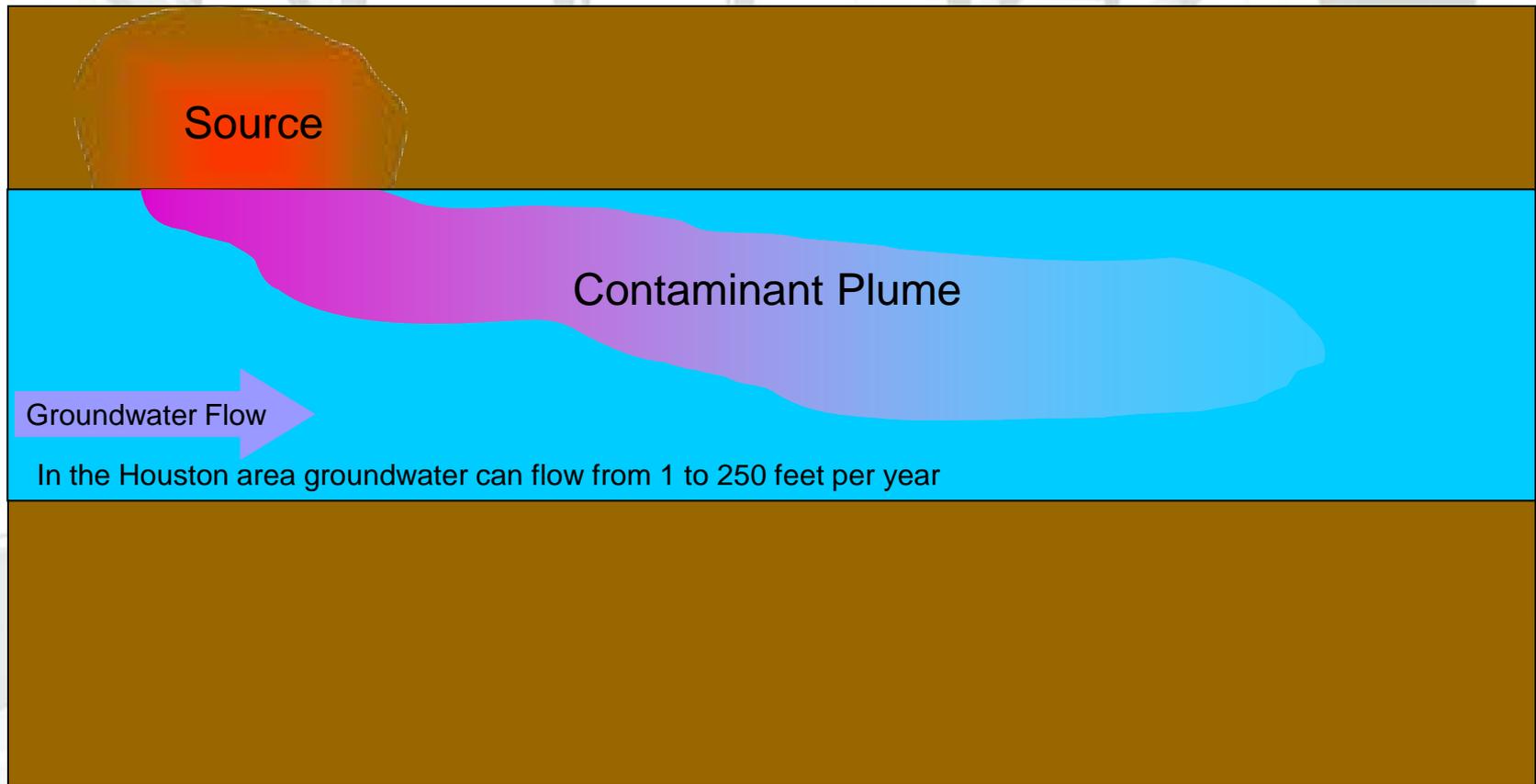
Groundwater Remediation



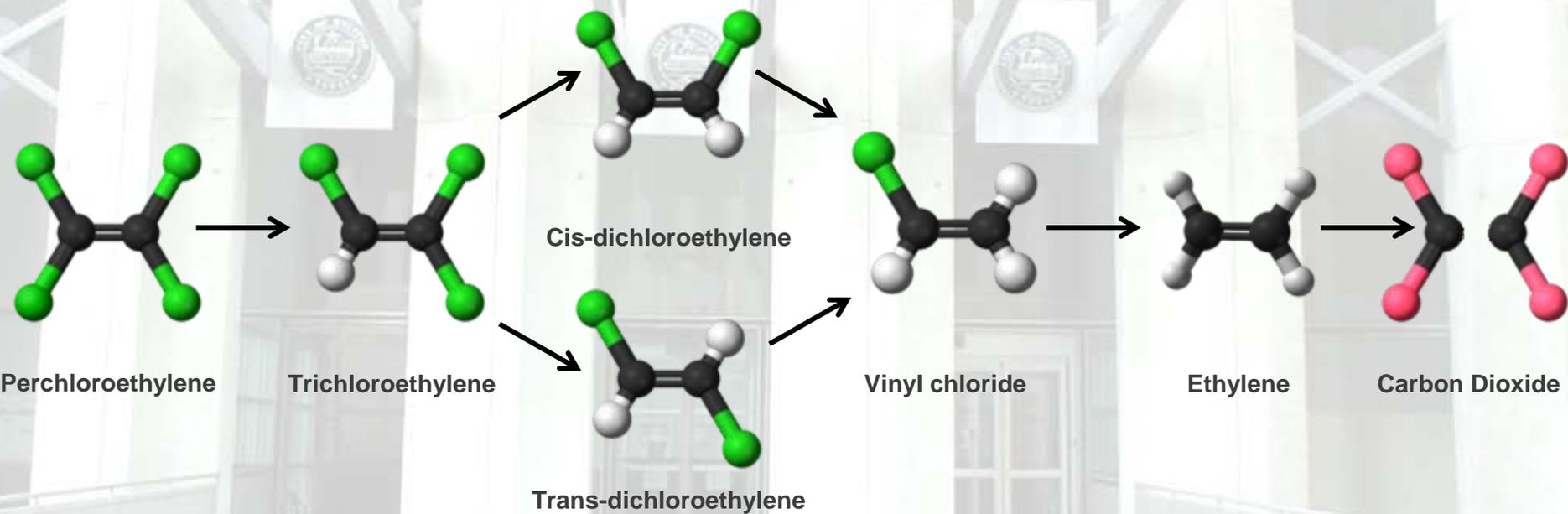
Example PCL for PCE
Ingestion = 0.005 mg/L
Inhalation = 500 mg/L



Contaminant Flow



Natural Attenuation

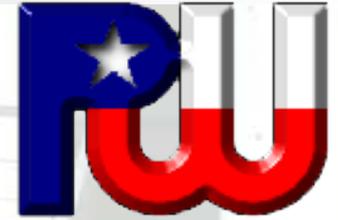


Applicant's Responsibility



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

City's Requirements of the Applicant:



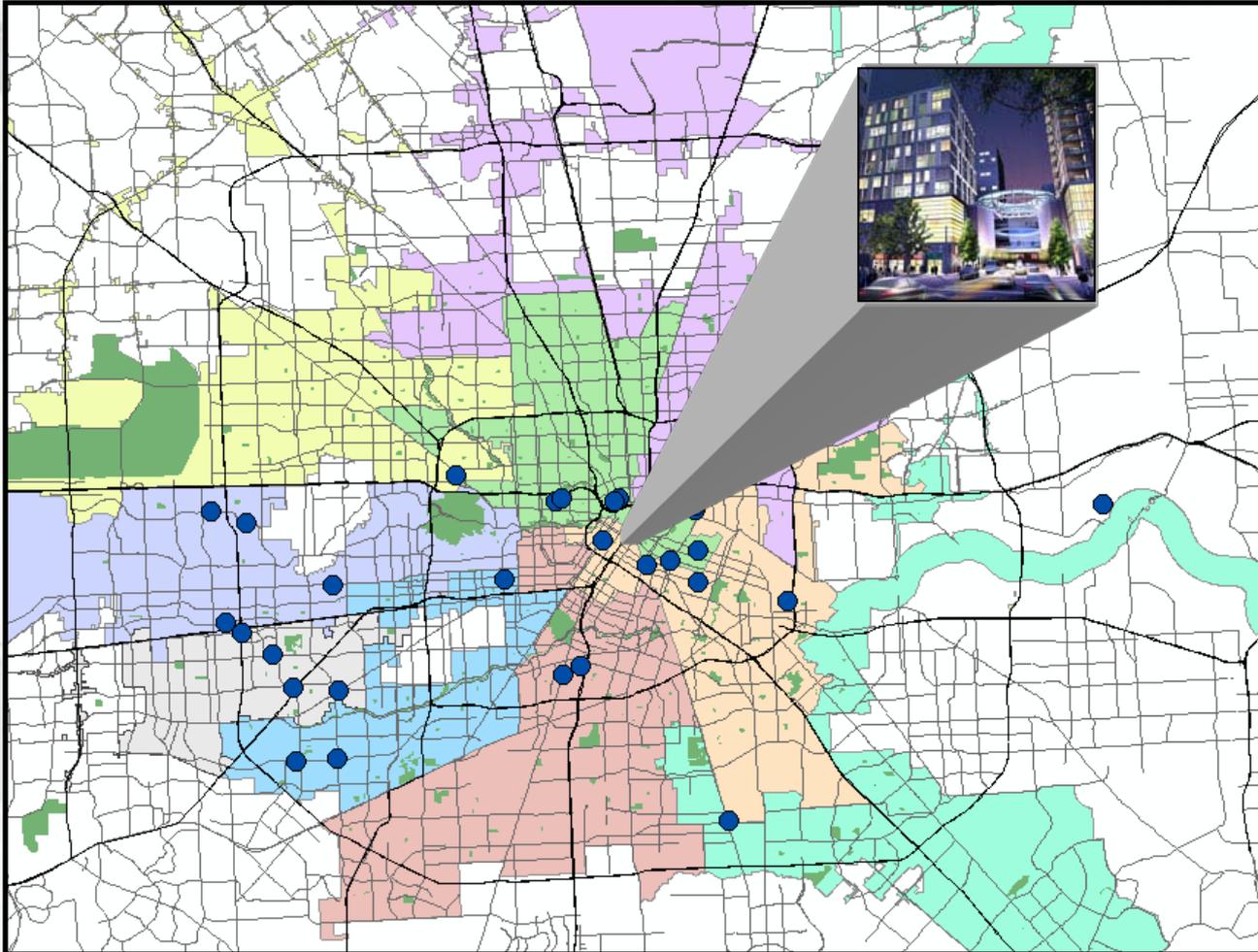
- Enrollment in a State or Federal clean-up program
- Thorough investigation
 - Data must show that the groundwater plume is stable or decreasing.
- A **third party** Professional Engineer (P.E.) or Professional Geologist (P.G.) must be willing to certify that the plume is stable or decreasing.

Why Support An MSD?



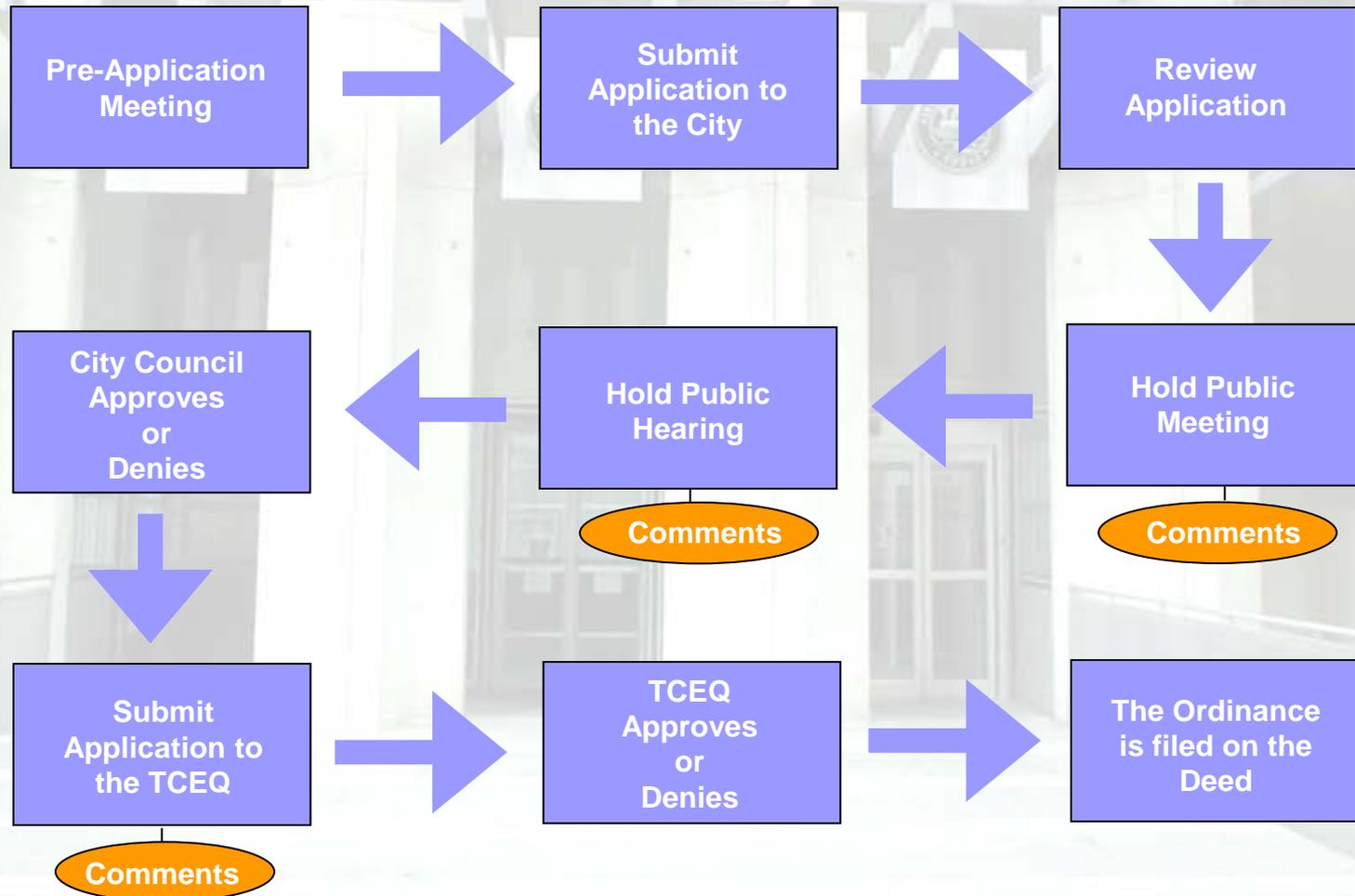
- Protects the public from consumption of shallow contaminated groundwater
- Encourages cleanup of contaminated sites through participation in a State or Federal program
- Promotes redevelopment of under-utilized properties

MSD Sites in Houston



Municipal Setting Designations (MSDs)

Steps in the Process



MSD Application



- Galena Park Library
reference desk
- 1500 Keene Street
Galena Park, TX 77547

The MSD Website



City of Houston
Home | What's New | Government | Residents | Business | Departments | Visitors | En Español

Home » Planning » Municipal Settings Designation

Public Works and Engineering

Departmental Links

- Public Home
- Engineering and Construction
- Planning and Development
- Public Utilities
- Resource Management
- Right of Way and Fleet Maintenance
- Traffic and Transportation
- Director's Office
- Special Programs
 - Green Building
 - Houston Bikeways
 - Corral de Gracia
 - Water Education

Municipal Settings Designation

Carol Ellinger Haddock, Assistant Director, PE

History:
In 2003, the Texas Legislature authorized the creation of MSDs, which would designate an area in which the use of contaminated groundwater is prohibited from use as potable water. The law is administered by TCEQ. The intent of the legislation is to encourage redevelopment of vacant or abandoned properties while protecting the public health.

On August 22, 2007, City Council approved an Ordinance amending Chapter 47 of the Code of Ordinances by adding Article 033 relating to groundwater, which will provide a process for applying for and receiving a Municipal Settings Designation (MSD) application to the State. The City's program becomes effective November 1, 2007.

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 alleviates the requirement that property owners address the risk of consuming groundwater. Assessment would 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
- Establishing a MSD does not remove any liability from the property owner, nor does it shift any liability to the City.
- MSDs will not be approved within a lead lead protection area and no MSD may be approved unless the site is already served by City water or is capable of being served by City water, at the applicant's expense.
- MSDs prohibit the use of groundwater as potable water. In the City's ordinance, potable water is defined as water that is used for ingestion, production of food or drink products intended for human consumption, drinking, showering, bathing or cooking purposes.

Fees and Information

- Application Form
- Certified Mail Spreadsheet Template
- Regular Mail Spreadsheet Template
- 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 Cities

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

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

• MSD Calendar
• MSD Completed
• MSD in Review

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www.houstonmsd.org

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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

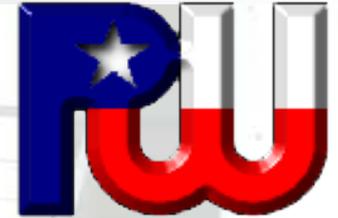
Carol Ellinger Haddock , Assistant Director, P.E.

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: March 24, 2011
- Time: 10:00 am
- Place: City Council Chamber (Committee Meeting)
Development and Regulatory Affairs
- 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



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&

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Public Works & Engineering
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Houston, Texas 77002



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Municipal Setting Designations (MSDs)

Contact Information



Scott Settemeyer

Remediation Division

Texas Commission on Environmental Quality

P.O. Box 13087, MC-225

Austin, Texas 78711

ssetteme@tceq.state.tx.us



Municipal Setting Designation Application Encoat Lease Site, Houston, Texas



Geoffrey Reeder, Union Pacific Railroad

Mike Wisniowiecki, Conestoga-Rovers & Associates, Inc.



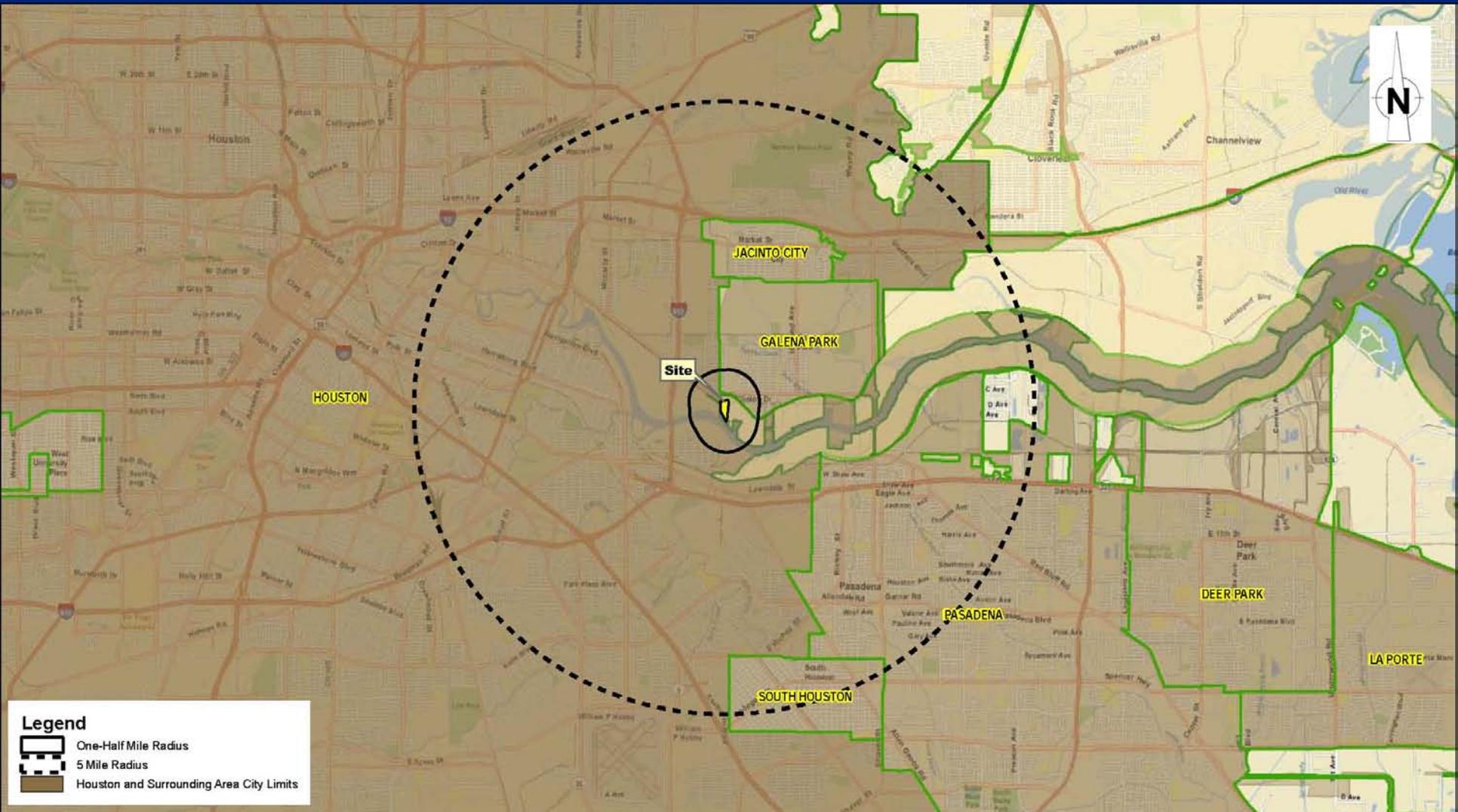
BUILDING AMERICA®

History

- **Property leased out by Southern Pacific to multiple tenants**
- **Tenants used property as pipe storage yard, tank car cleaning and repair facility in 1950s and 1960s**
- **Pipe coating operations in 1963 through 1988 (Encoat)**
- **Southern Pacific acquired by Union Pacific in 1997**
- **A portion of the property was sold to All Trans Port Services in 2003**



Municipalities affected by MSD

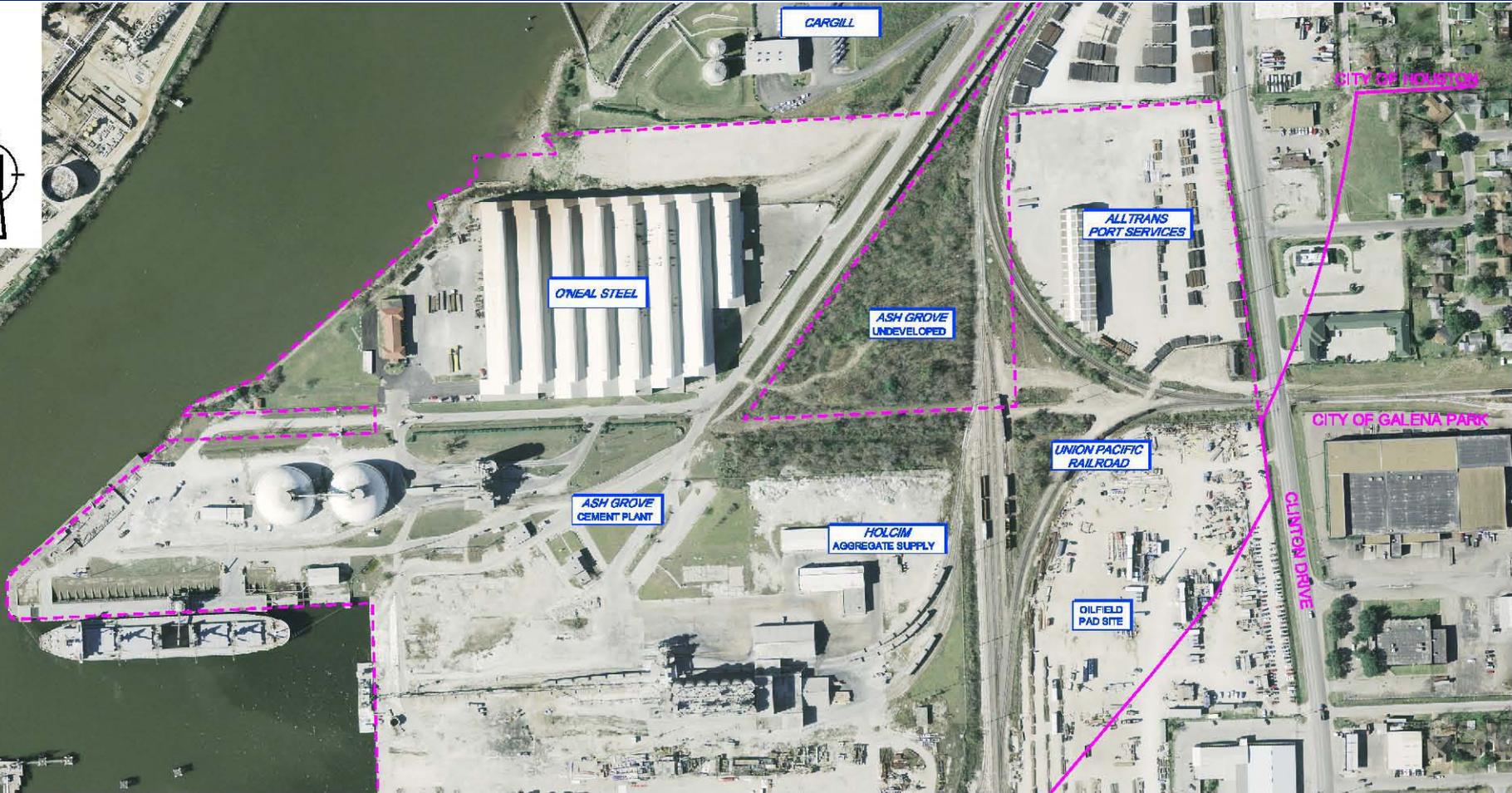
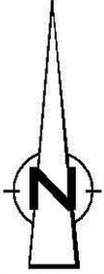


Today

- **The land owned by UPRR consists of main tracks and spur tracks**
 - **The main track runs from several Ship Channel facilities into Houston and beyond**
 - **The tracks are used to transport raw materials and finished products**
- **Site is 15.6 acres, includes adjacent properties of All Trans Port Services, O'Neal Steel, Houston Cement Company, and City of Houston**



Site Map



BUILDING AMERICA®

Environmental Investigation

- **The site is enrolled in the Texas Commission on Environmental Quality's (TCEQ's) Voluntary Cleanup Program (VCP)**
 - Both the UPRR property and the adjacent All Trans property are part of the same VCP project, 15.6 acres
 - Investigation of the site was conducted by UPRR
 - Investigation has been completed for affected soils and groundwater
 - The State oversees the cleanup and closure of the affected soils and ground water

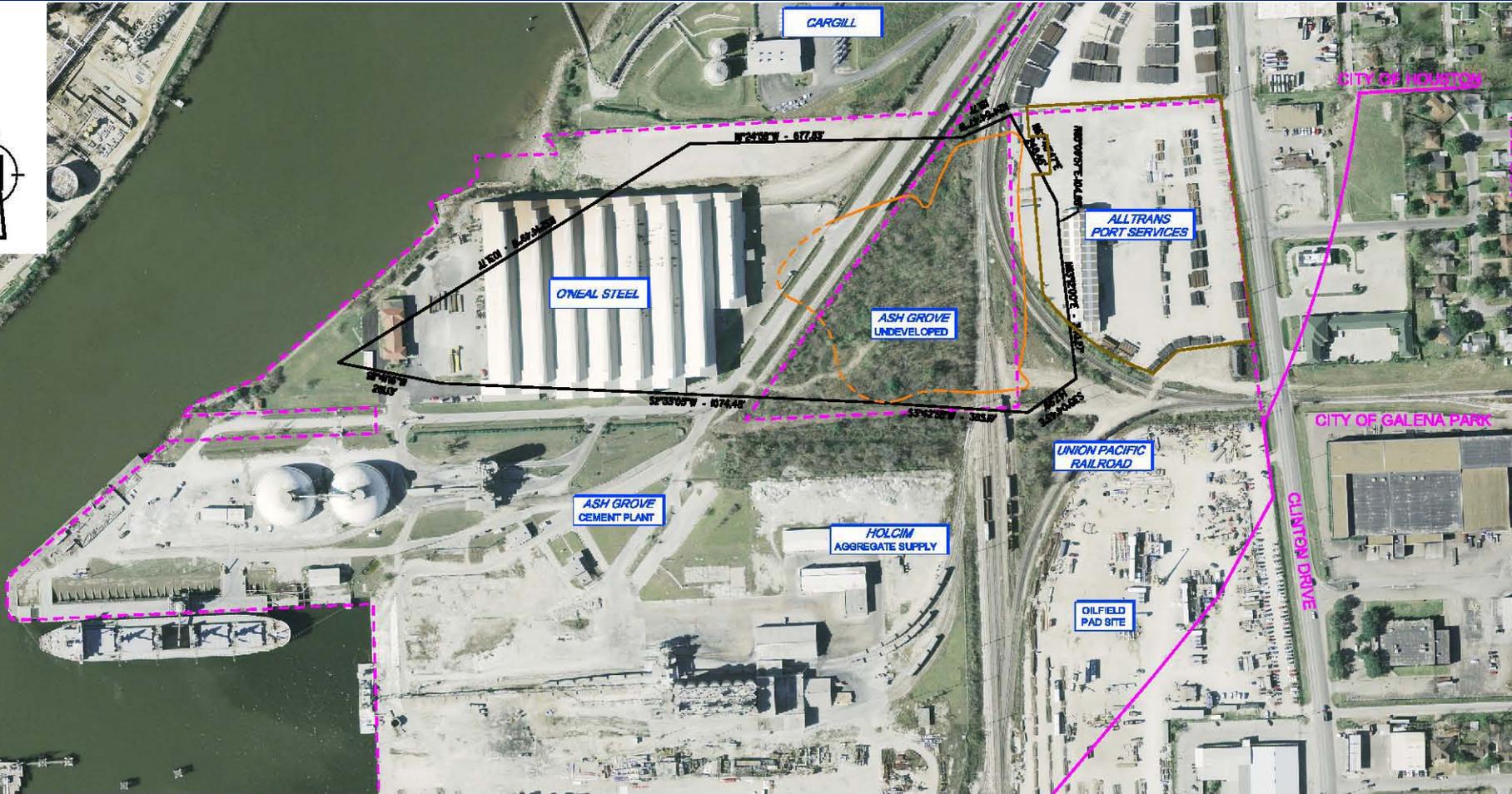
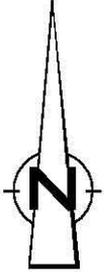


Site Remediation

- Cleanup begun in 1998, included six former earthen impoundments, tank car washing area, and former Specialty Products building, 6,500 cubic yards of affected materials removed
- State issued Certificate of Completion for the Partial Response Action Area (7 acres) in June 2007
- Affected ground water fully delineated, stable to declining in size and concentration
- Small amounts of coal tar/creosote shown to be immobile



Ground Water Plume and MSD Zone



Ground Water Plume

- The source of the ground water plume was tenant's six former earthen impoundments and affected soils, which have been removed
- Ground water contains dissolved phase chlorinated hydrocarbons, benzene, naphthalene, other semivolatile organic compounds, and arsenic
- The horizontal and vertical extent of the plume have been delineated, plume shown to be stable, and decreasing in size and concentration



Summary

- **Site investigation and cleanup has been ongoing for 17 years (since 1994)**
- **Ground water conditions are stable and the concentrations are declining**
- **A Municipal Setting Designation (MSD) will restrict the use of ground water**
- **Site will remain under TCEQ regulatory oversight**

