NATIONAL WESTERN CENTER

LOCAL IMPACT ★ GLOBAL REACH
February 25, 2016

National Western Center
Environmental Investigations
Presentation to the
Citizens Advisory Committee
Why Conduct Environmental Investigations?

- Past industrial land uses may have contaminated soils and groundwater
- Information needed to:
  - Protect health during construction and long-term use
  - Improve redevelopment planning and cost estimating
Why Conduct Environmental Investigations?

- Entire NWC Master Plan Area
  - Records review (Sanborn maps, aerial photos, historical phone books, etc.)
- NWSS- and City-owned properties
  - Interviews and site visits
  - Field Investigations
- Follow-up investigations on areas of concern
  - Groundwater
  - Vapor
Where and How We Investigated?

Primary Study Area (NWSS and City-owned properties)

• Interviews and site visits
• Field Investigations
  • Monitoring wells
  • Soil Borings
  • Soil Vapor Sampling
  • Test Pits
What We Found:

Surface soils

• Lead in soils:
  • generally low concentrations
  • a few locations above residential cleanup levels
  • one above industrial cleanup standards
What We Found:

Surface soils

• Arsenic in soils:
  • Sampled 0-6”, 6-24”
  • All samples below residential cleanup levels
What We Found:

Buried Debris:

- Evidence of numerous old buildings (no longer standing)
- Extensive buried debris on western side
- No buried asbestos waste found
- Generally construction concern rather than environmental
- Monitoring wells on eastern side show little evidence of buried debris
What We Found:

Groundwater:

- Perchloroethylene (PCE, or perc) plume entering site from southeast
- Source appears to be off-site
- No known groundwater exposures
- Further investigations conducted
What We Found:

Groundwater:

• Low levels nitrates
• Exceeds drinking water standard, below agricultural standard
• No known groundwater exposures
• Further investigations conducted
What We Found:

Vapors:

• Soil Vapor (PCE):
  • Detected in some borings over groundwater plume
  • Levels below concern for indoor air exposure
  • Confirmed through further investigation

• Methane:
  • Levels of concern found near DPS bus barn
  • Several old landfills in area
  • Further investigation conducted
What We Found:

Methane – Bus Barn:

- Further investigations
  - Confirmed presence of methane at levels of concern
- Mitigation installed
  - DPS installed venting system
  - Follow-up sampling confirmed system is working properly
- Methane concentrations at boundary decreased below levels of concern
Conclusions and Next Steps

- Surface soils – low levels of metals to be addressed during planning/construction
- Buried debris – address during planning/construction
- Further investigate groundwater in southeast area
- Ensure effective methane venting continues
- Further characterization of existing buildings during construction planning
- Investigation of other buildings/land during acquisition process
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