

Highway 7 & Wooddale Avenue Vapor Intrusion Study

UPDATE

March 19, 2008

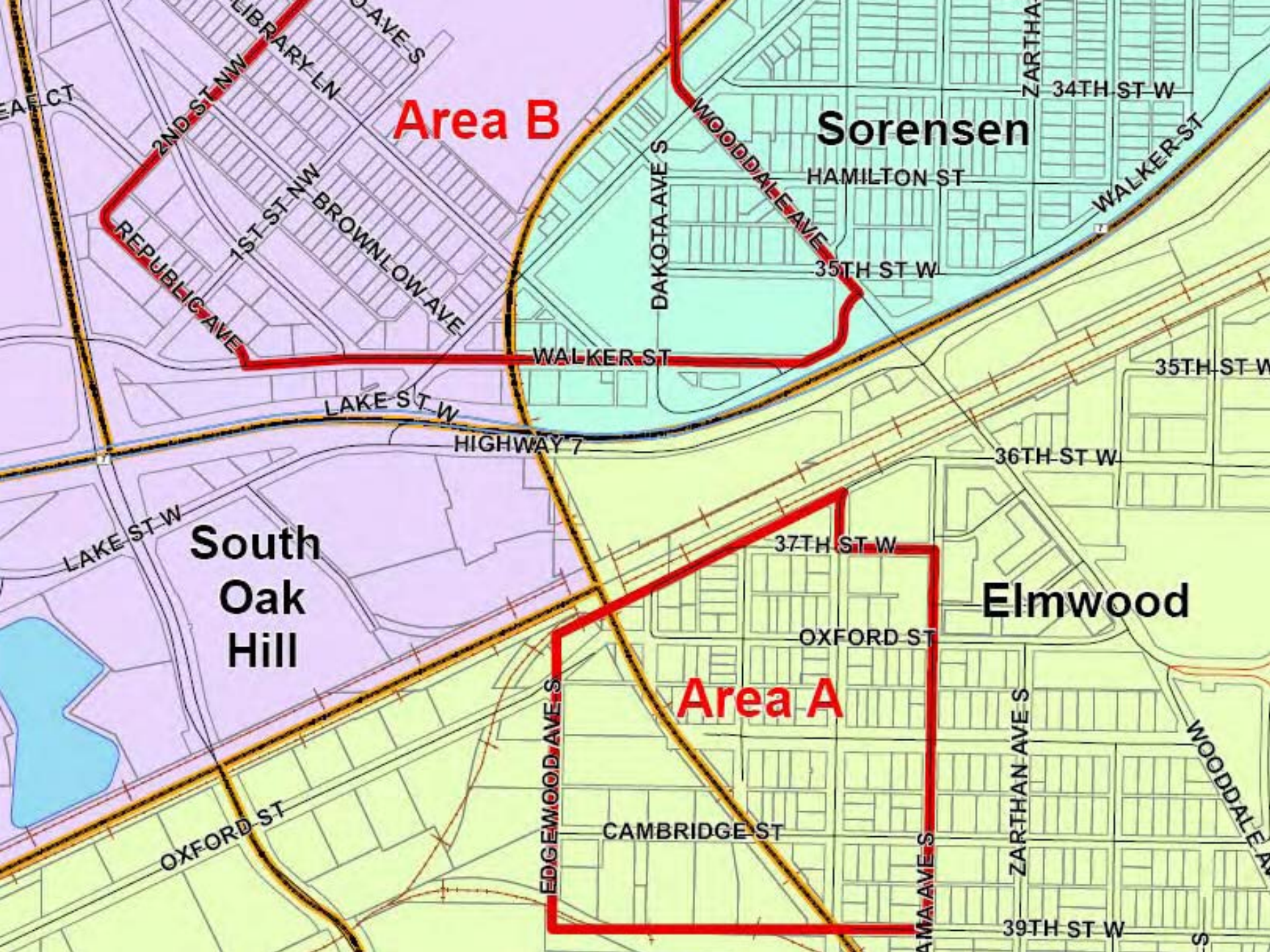


Vapor Study

- In July 2007, the MPCA requested U.S. EPA's assistance with this study.
- Since then, MPCA, U.S. EPA, the MDH, Hennepin County, and the City of Saint Louis Park began working together to develop and implement a sampling plan.

Initial Study Area

- Initially 2 target areas were identified based on ground water and soil vapor data available at the time. EPA referred to them as Area A and Area B.



Area B

Sorensen

**South
Oak
Hill**

Elmwood

Area A

Access Update

- As of March 19, 2008, EPA has received 256 access agreements for sub slab sampling.
- 212 access agreements are for residential properties.
- 44 access agreements are for commercial properties.

Sub Slab Sampling

- The first round of sub slab sampling began on January 28, 2008. At that time we had access agreements with 218 property owners. Of the 218, we sampled 214 properties:
 - 185 residential properties
 - 29 commercial properties

Sub Slab Sampling...

- 33 of the 185 residential properties sampled exceeded the sub slab screening value established by MDH for TCE and/or PCE.
- 8 of the 29 commercial properties sampled exceeded the sub slab commercial screening value established by MDH for TCE and/or PCE.
- 6 residential properties sampled exceeded the sub slab MDH's combined hazard index, and were recommended for indoor air sampling as well.

- Sub Slab Vapor Exceedances Area A



Aerial photo source: Dept. of Administration / Office of Geographic and Demographic Analysis / Land Management Information Center
 Point locations are approximated.

- Property with testing result exceeding residential sub-slab screening level
- Property with testing result exceeding commercial sub-slab screening level
- Area A Boundary Area B Boundary



service disabled veteran owned small business

Saint Louis Park, Minnesota
 U.S. Environmental Protection Agency Region V

AREA A
HIGHWAY 7 & WOODDALE AVENUE
SOIL VAPOR STUDY AREA -
SUB-SLAB EXCEEDANCES



Prepared for U.S. EPA REGION V
 Superfund Technical Assessment &
 Response Team (START III)

- Sub Slab Vapor Exceedances Area B



Aerial photo source: Dept. of Administration / Office of Geographic and Demographic Analysis / Land Management Information Center
 Point locations are approximated.

- Property with testing result exceeding residential sub-slab screening level
- Property with testing result exceeding commercial sub-slab screening level
- Area A Boundary Area B Boundary

Prepared for U.S. EPA REGION V
 Superfund Technical Assessment &
 Response Team (START III)
 Contract Number: EP-S5-06-03



Saint Louis Park, Minnesota
 U.S. Environmental Protection Agency Region V

AREA B
HIGHWAY 7 & WOODDALE AVENUE
SOIL VAPOR STUDY AREA -
SUB-SLAB EXCEEDANCES

Updated as of 3/13/2008

Indoor Air Sampling

- So, 47 residential properties were identified for indoor air sampling.
- 1 of the 47 residential properties denied access for the indoor air sampling, 1 we were unable to reach the resident, and the other 45 were sampled.

Indoor Air Sampling

- At each of these 45 properties we collected 3 samples: a sub slab sample, a basement or lower level sample, and a first floor sample.
- Samples were collected using SUMMA canisters, and were 24 hour samples.



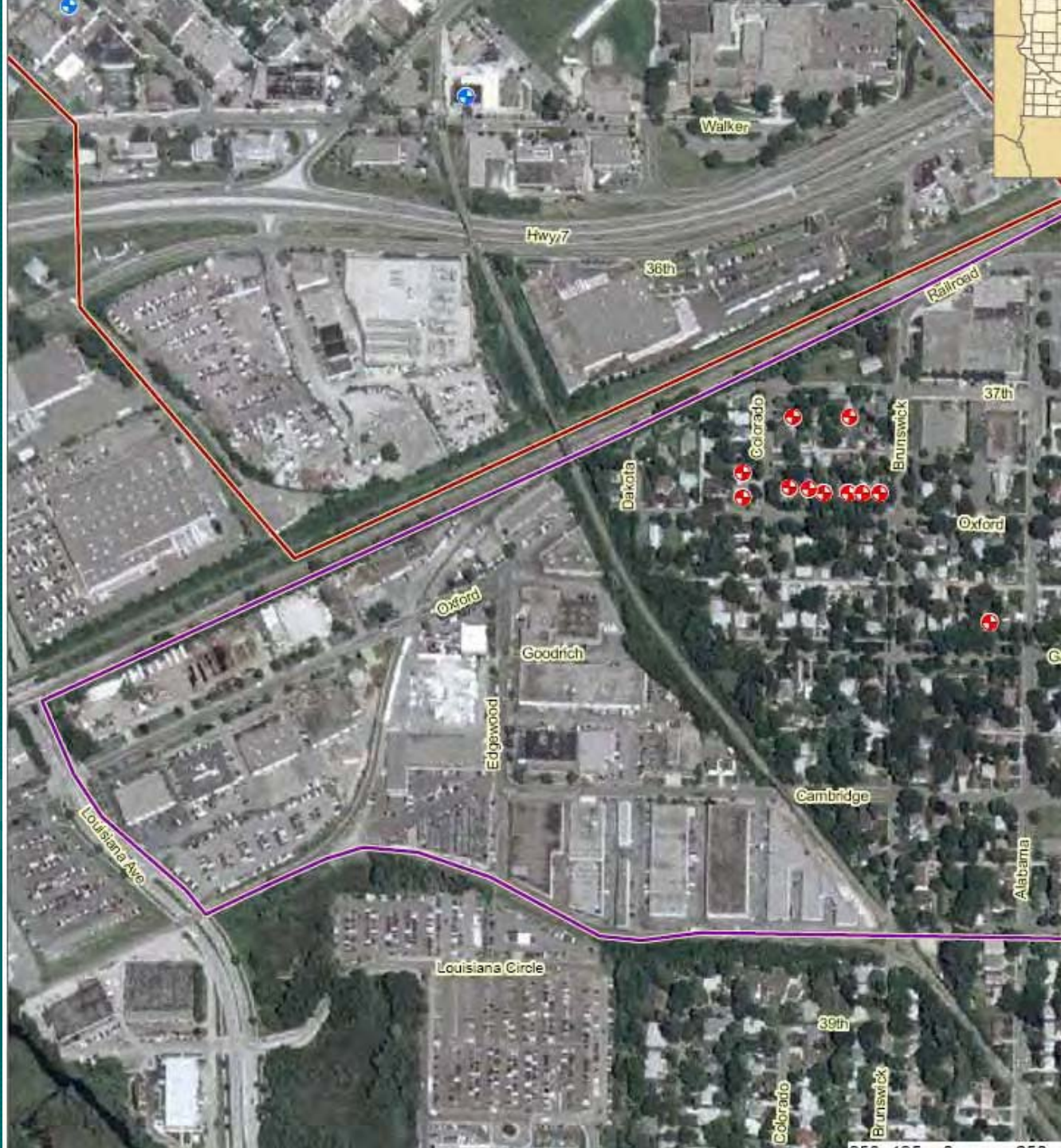
Indoor Air Sampling Results

- 8 residential properties of the 45 properties sampled showed exceedances of MDH's indoor air screening values for TCE and/or PCE.
- 3 commercial/industrial properties also exceeded the commercial indoor air screening values established by the MDH for TCE and/or PCE.
- 3 residential properties exceeded the MDH's indoor air combined hazard index.

Indoor Air Sampling Results...

- In total, 14 of the 45 properties sampled for indoor air exceeded either the MDH's indoor air screening value for TCE and/or PCE, or exceeded the MDH's combined hazard index for indoor air.

Area A Indoor Exceedances



Area B
Indoor
Exceedances



Mitigation System Installation

- EPA offers to install vapor mitigation systems at residential properties exceeding the indoor air screening values for TCE and/or PCE, at residential properties that exceeded the MDH's combined hazard index, and at residential properties that exceeded the MDH's sub slab screening values for TCE and/or PCE, but did not exceed the indoor air screening value.

Mitigation System Installation...

- As of today, 3 mitigation systems have been installed, and 7 are scheduled for installation.
- All other residential properties will be scheduled based on home owner's availability.



CHARLOTTE PIPE

4300

CLEAR CORE PVC PIPE





System Monitor

Radon Reduction

This device monitors the vacuum pressure across the radon reduction fan. Radon levels in this house should be tested at least every 6 months and as recommended by state health officials. Do not alter or disconnect the fan.



If both columns are at the same level, call the installer.

Installer: Home Solution
Phone: 763-211-1111
License #: _____
Date Installed: 3/25/08
Initial Vacuum Pressure: 0.25
Fan Model: RP100

JM320 / JM335

F

Site Boundaries Expansion

- The study area boundaries have been expanded based on the sub slab sampling results.
- Specifically, the eastern boundary for Area A has been expanded one block to the east to include Zarthan Street from 35th to 39th Street West.
- Also, buildings on Highway 7 between Areas A and B, were given the opportunity to be part of the study.

Expanded Study Area For Sub Slab Sampling



Site Boundaries Expansion...

- Sub slab sampling in the expanded area started on Monday, March 17.
- We are collecting 24 hour sub slab samples using SUMMA canisters.
- Results for these samples are expected in about 2 weeks. Any exceedances to sub slab screening value, or combined hazard index, will trigger a mitigation system installation, if the property owner agrees.

Groundwater Investigation

- EPA, in coordination with our partner agencies, MPCA, MDH, Hennepin County and the City of St. Louis Park will be conducting a groundwater investigation. The purpose of the investigation is to try to identify potential sources of contamination, and the extent of the contamination plume.
- Weather permitting, the investigation will start mid April 2008.

Next Steps

- Complete vapor mitigation system installation at identified properties.
- Conduct confirmatory sampling at these locations, after 30 and 90 days, to corroborate system effectiveness.
- Complete groundwater investigation.

Questions

