

Background

1990 NYSDOH Small Community Water Supply
Sampling Initiative -- Modock Road Springs

1,1,1-Trichloroethane (TCA)

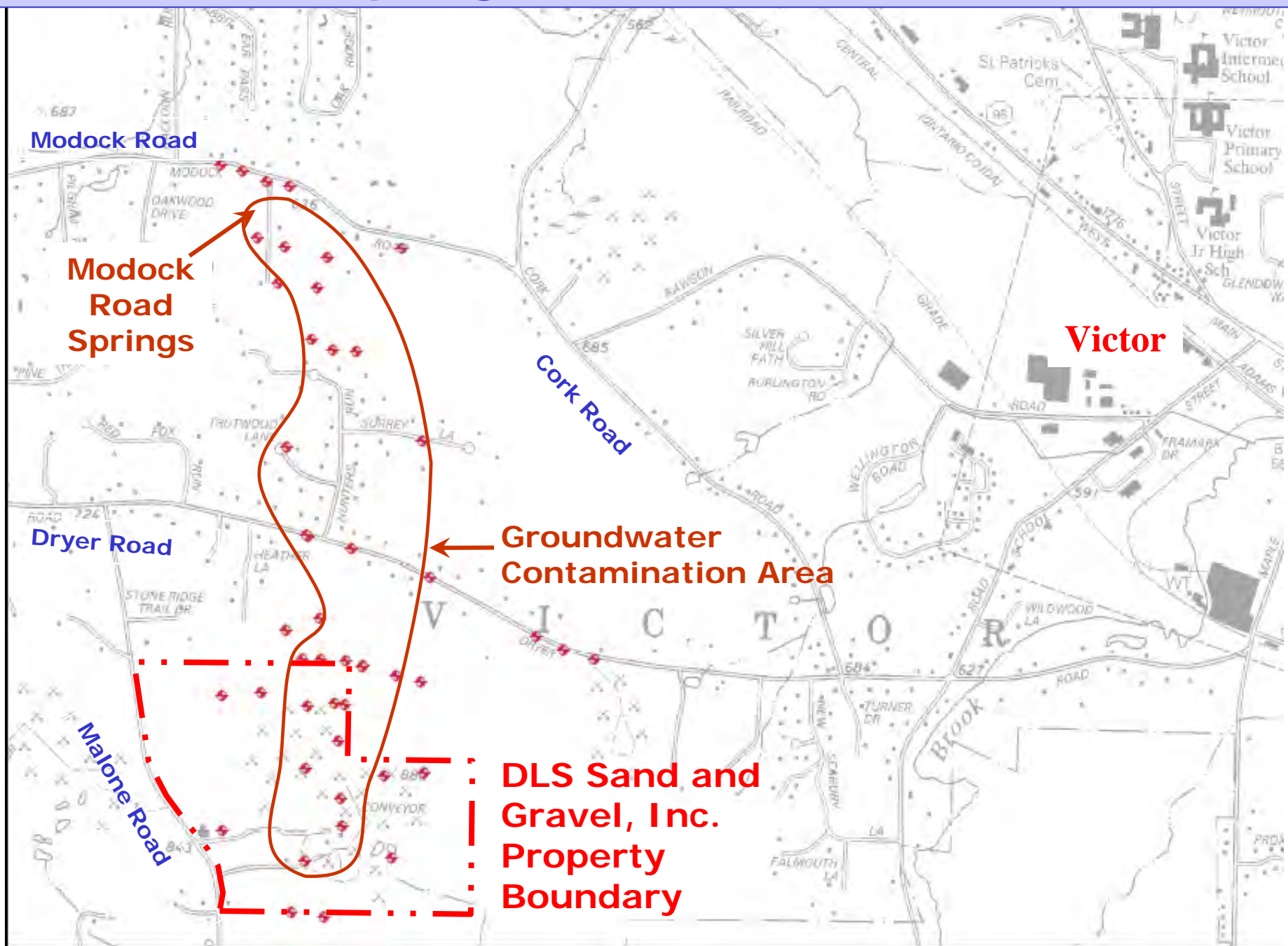
Trichloroethene (TCE)

1,1-Dichloroethene (DCE)

1990 Switch to Monroe County Water Authority

2006 Comprehensive Environmental Investigation

Modock Road Springs / DLS Sand & Gravel, Inc. Site



Modock Road

Modock Road Springs

Dryer Road

Malone Road

Cork Road

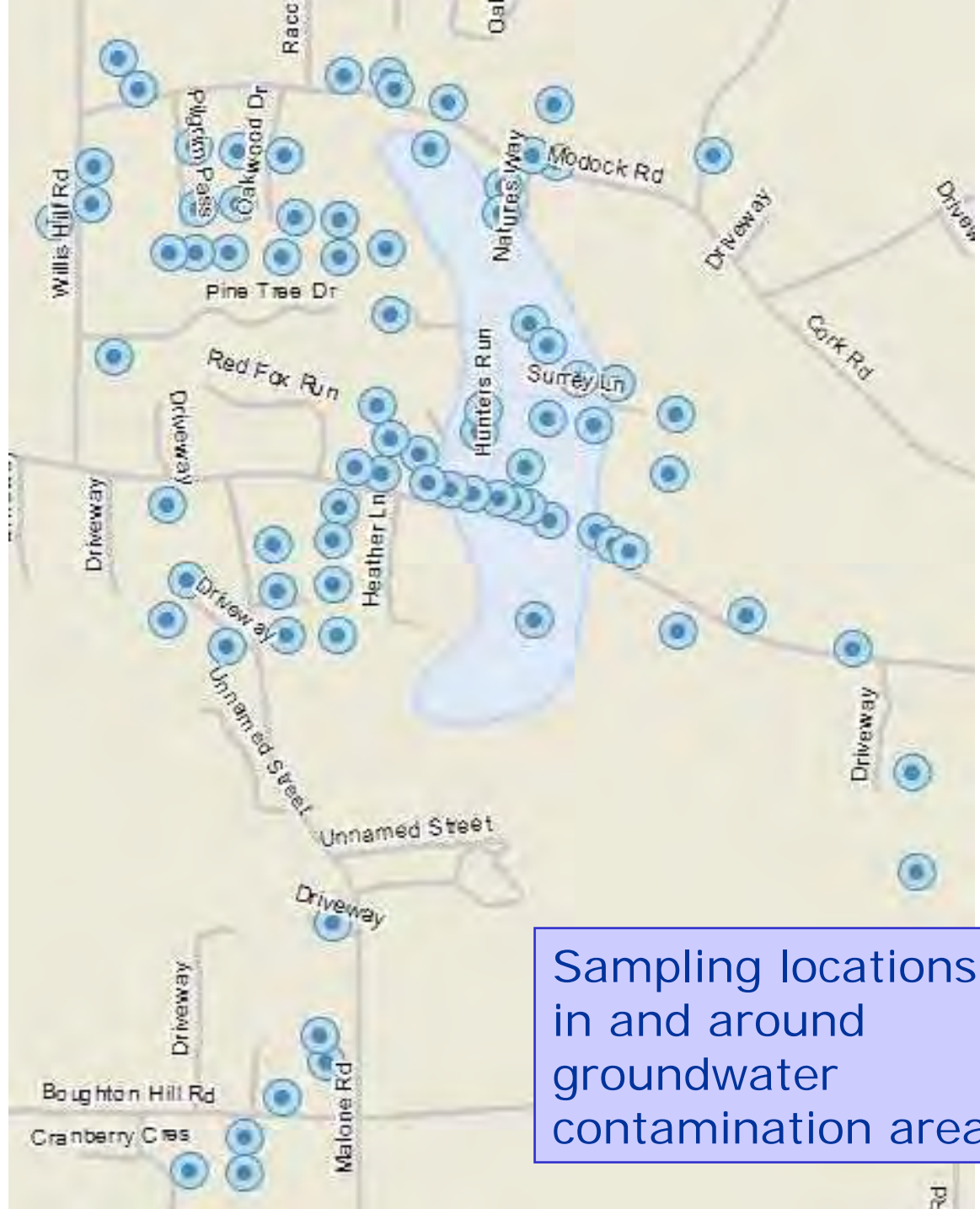
Groundwater Contamination Area

DLS Sand and Gravel, Inc. Property Boundary

Victor

Private Well Sampling

- Since 1990...
over 190 water samples collected from over 90 wells
- Tested for...
volatile organic compounds --
including the three site-related compounds



Private Wells

General locations with concentrations detected above public drinking water standards



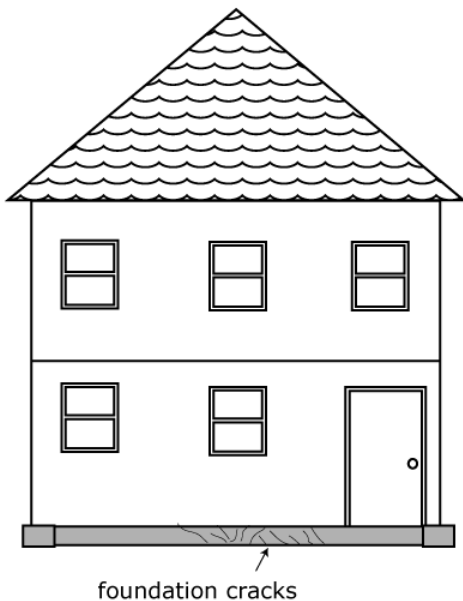
Modock Road Springs

Suspected Source Area

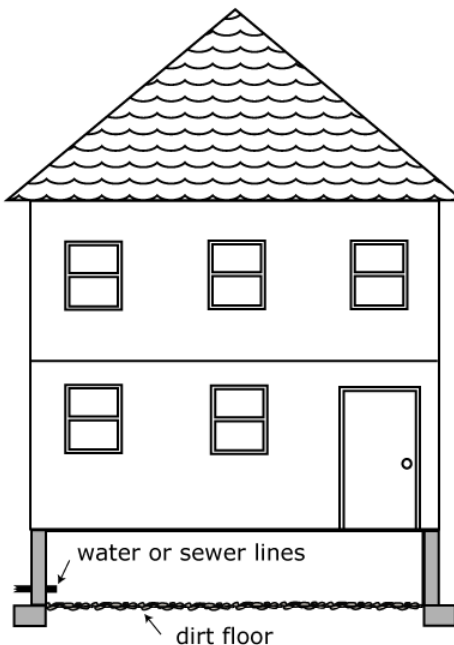
Identified May 1990 / Mitigated Aug. 1990
Identified Nov. 1999 / Mitigated Dec. 2000
Identified Aug. 1996 / Mitigated 2001

Soil Vapor Intrusion

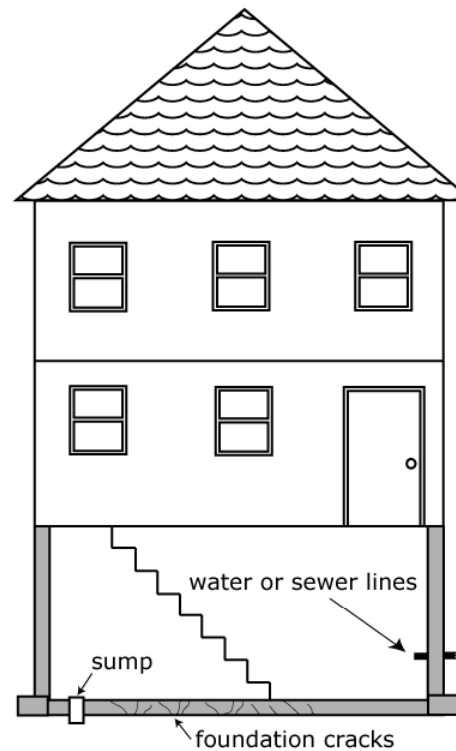
Slab-on-grade



Crawl space with dirt floor



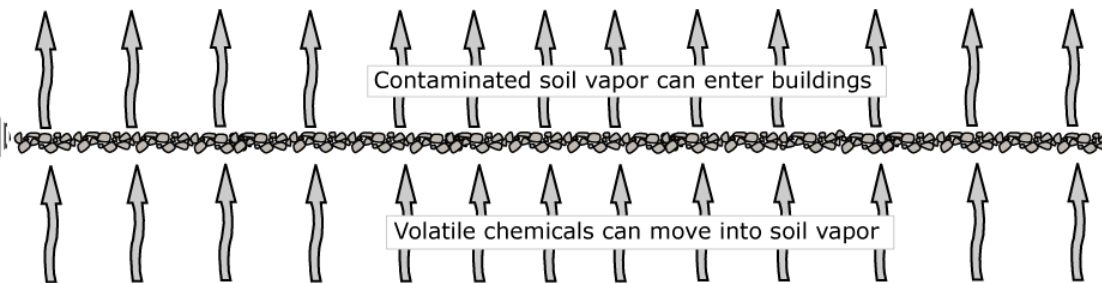
Full basement with slab



Soil particles

A diagram showing a collection of irregularly shaped soil particles. Arrows point from the text "Soil particles" to the particles. Below the particles, an arrow points to the space between them with the text "Air found between soil particles is called 'soil vapor.' Soil vapor can become contaminated by underground sources."

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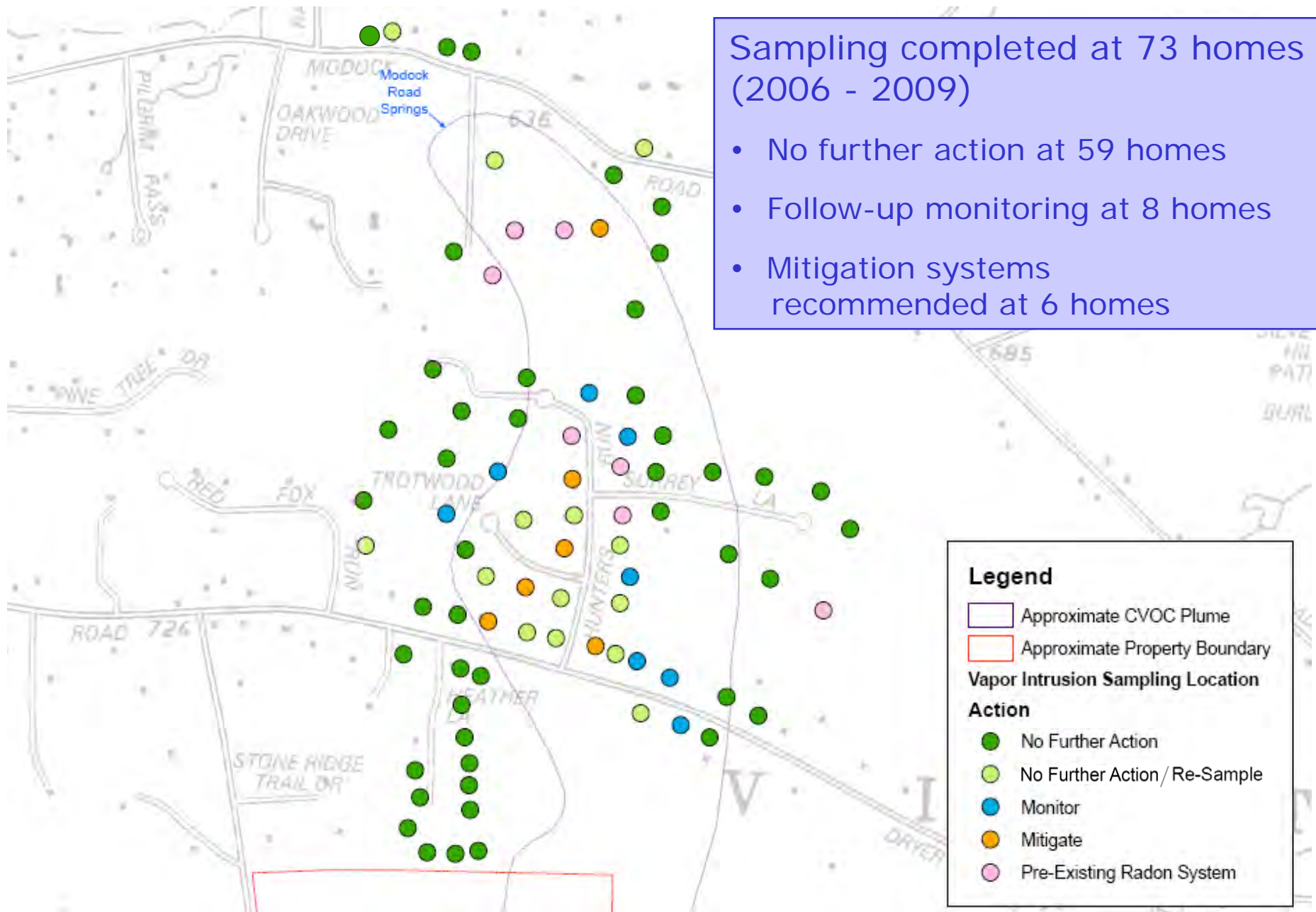


Underground sources: contaminated soil, groundwater, or buried wastes

Soil Vapor Intrusion Sampling

Sampling completed at 73 homes (2006 - 2009)

- No further action at 59 homes
- Follow-up monitoring at 8 homes
- Mitigation systems recommended at 6 homes



Legend

- Approximate CVOC Plume
- Approximate Property Boundary

Vapor Intrusion Sampling Location

Action

- No Further Action
- No Further Action/ Re-Sample
- Monitor
- Mitigate
- Pre-Existing Radon System

Address-Specific Review of Cancer Incidence in the Town of Victor, Modock Road Springs Study Area

Cancer Surveillance Program
New York State Department of Health

October 28, 2009

NEW YORK STATE CANCER REGISTRY

- Reporting mandated by law since 1940 (1973 in NYC)
- Population based, variety of information sources
- Meets quality standards

REGISTRY-BASED ADDRESS-SPECIFIC REVIEW

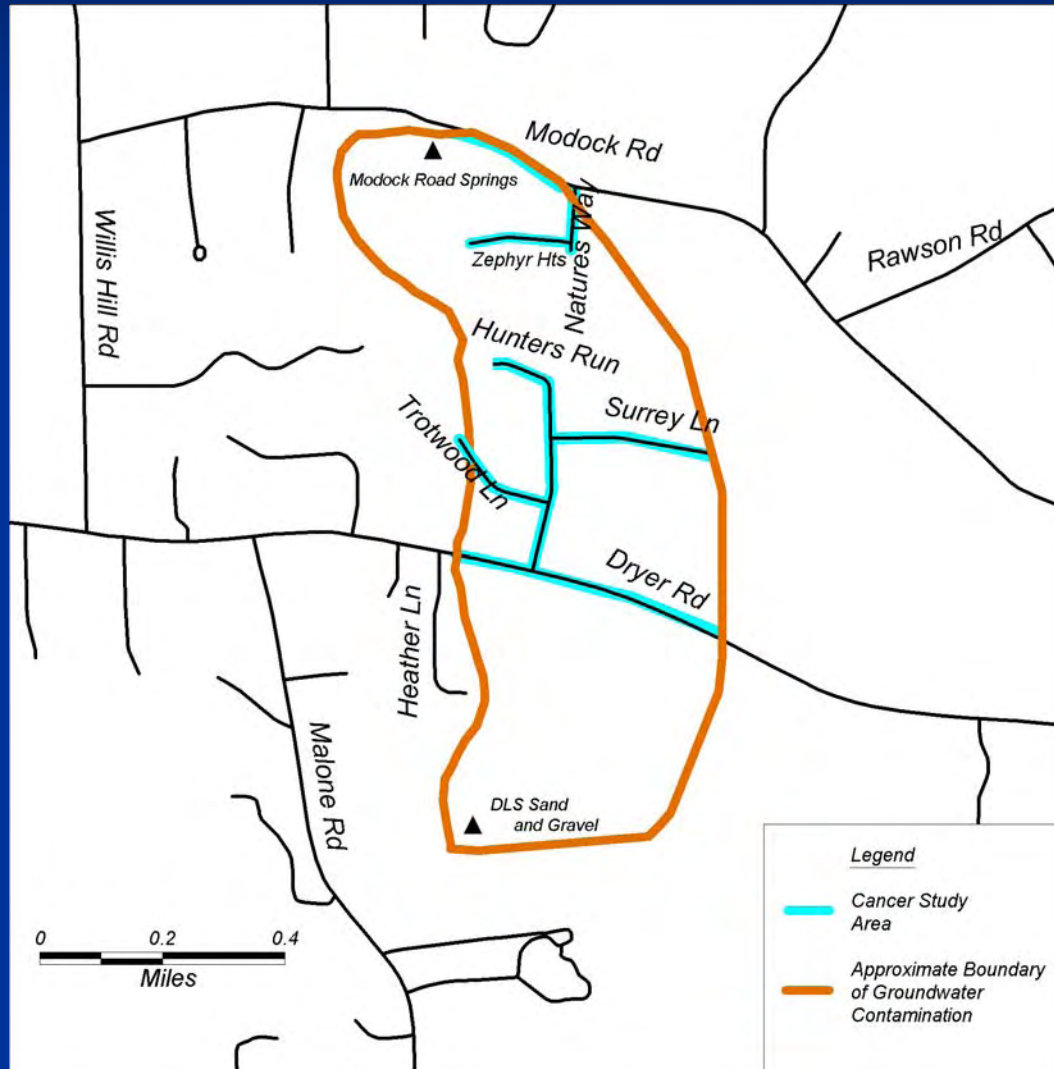
METHODS

- Specify streets/address ranges of concern
- Search Cancer Registry
- Examine characteristics of identified cases for any unusual patterns

UNUSUAL CANCER PATTERNS

- Unusually large number of cases of the same cancer
- Two or more cases of the same particularly rare cancer
- Several cases in young people
- Grouping by year of diagnosis
- Adequate latency

MODOCK ROAD SPRINGS STUDY AREA



MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

- **Cancer cases diagnosed since 1990**
 - **Official through 2004**
- **Also considered community reports on former residents**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

FINDINGS - General

- **20 tumors identified in 17 people, 70 homes**
- **Tumors diagnosed 1990-2004**
- **Ages from late teens to over 80**
 - **Most over 50**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

FINDINGS – Types of cancer

- **13 different types**
- **Breast cancer, brain tumors most frequent**
- **Unusual number of brain tumors further confirmed**
 - **No new brain tumors**
- **Cancers associated with TCE**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

FINDINGS – Former residents

- **Small number of cancers confirmed**
- **Would not change conclusions**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

Further information on brain tumors

- **Some patients with family history**
- **No associated occupations**
- **All diagnoses 10 or more years after first residence: minimum latency satisfied**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

Environmental findings

- **Findings in homes of all people with cancer similar to findings in all homes**
- **Findings in homes of people with brain tumors showed range of levels**
- **No detections of TCE in homes of people with TCE-related cancers**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

Some considerations

- **Measurements at one point in time**
- **Actual exposures unknown**
- **Studies have not shown TCE to be linked with brain tumors**
- **All other possible risk factors not known**

MODOCK ROAD SPRINGS ADDRESS-SPECIFIC REVIEW

CONCLUSIONS

- **No unusual patterns in cancers other than brain**
- **Unusual number of brain tumors further confirmed, no additional brain tumors**
- **Cannot confirm or rule out link for some**

MODOCK ROAD SPRINGS

STUDIES IN PROGRESS

- **Birth outcomes in Modock Road Springs study area**
- **Cancer and birth outcomes in areas served by Village of Victor public water supply**
- **Brain tumors in Modock Road Springs study area to be reexamined**

Contact information

Aura Weinstein

Director, Cancer Surveillance Program

NYSDOH

(518) 474-2354

E-mail alw02@health.state.ny.us

Krista Anders

NYSDOH Project Manager

(800) 458-1158 ext. 27860

E-mail bee1@health.state.ny.us