



CTDEP

METCALF & EDDY | AECOM

Raymark OU2 Sub-Slab Depressurization Systems

Raymark Superfund Team
September 2, 2008

Ron Curran

Remediation Section, Water Protection and Land Reuse
Connecticut Department of Environmental Protection



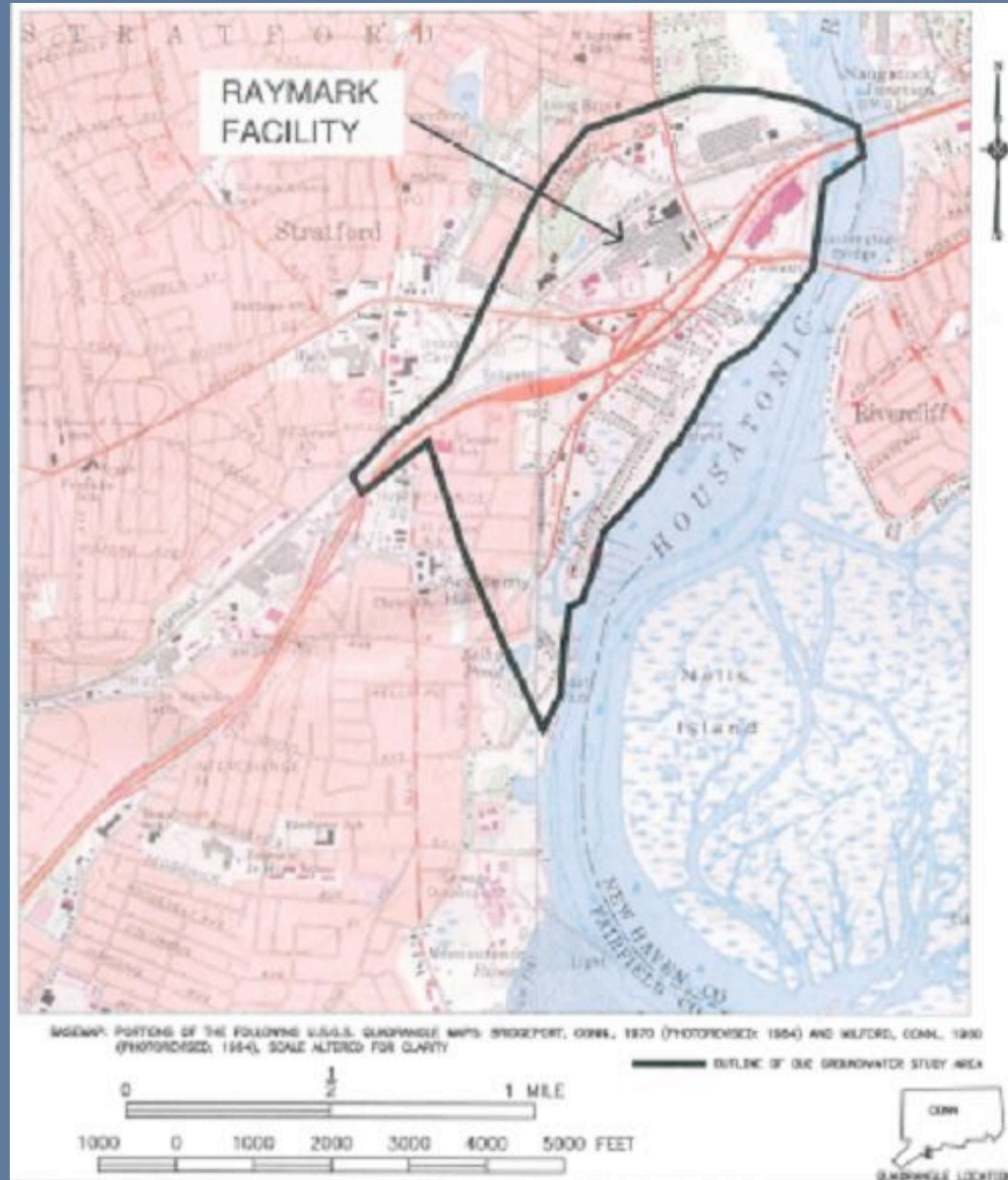
Introduction

- Time Critical Removal Action for Vapor Mitigation
 - This work was part of a CT DEP and EPA response action to prevent soil gas potentially contaminated with low levels of volatile organic compounds (VOCs) from entering homes in a neighborhood down gradient of the Raymark NPL Site.
 - The VOCs are attributed to a groundwater plume from historic discharges of chlorinated volatile organic compounds (CVOC) and other substances at the nearby Raymark factory site.



CTDEP

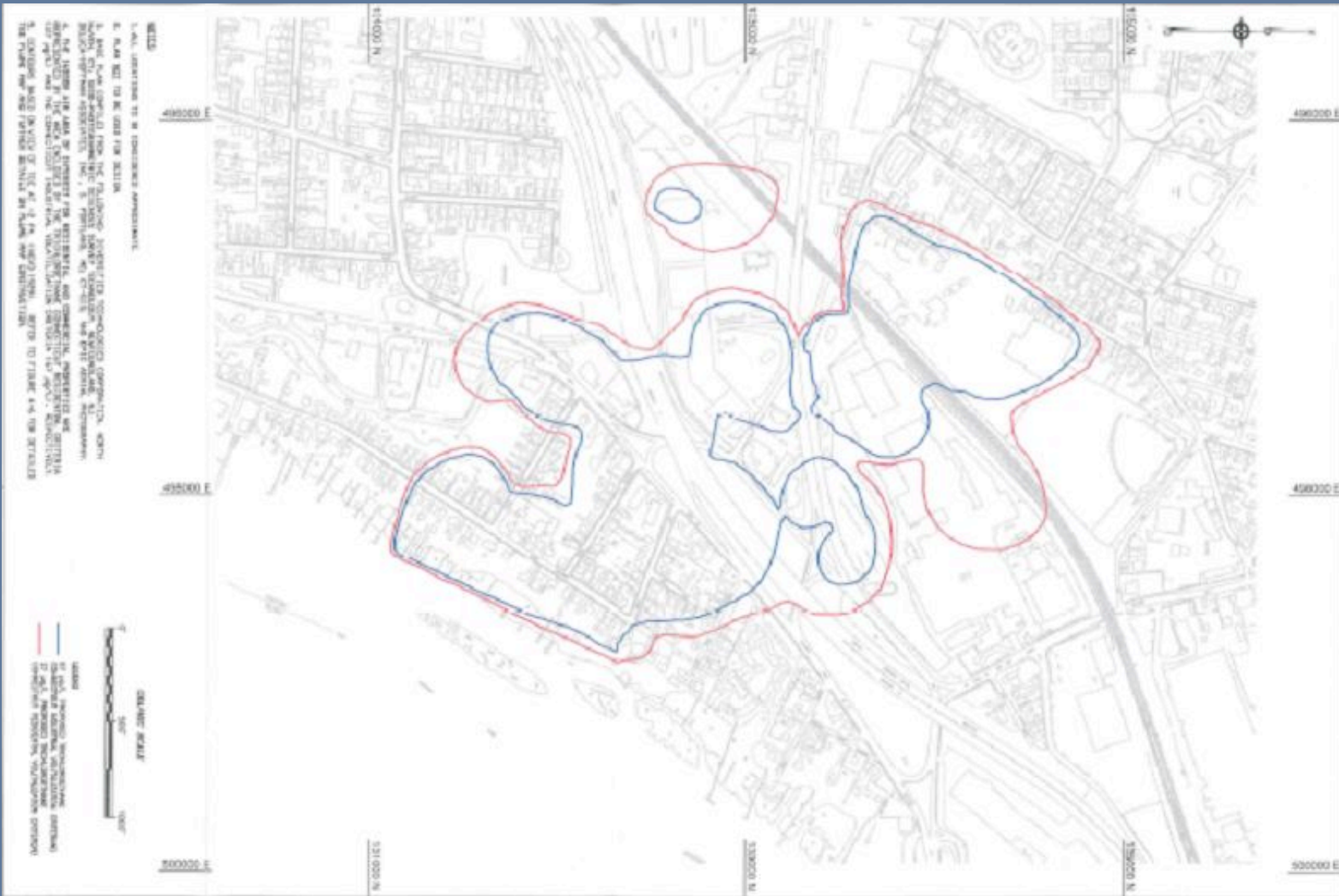
Study Area





CTDEP

Areas of Concern





CTDEP

METCALF & EDDY | AECOM

ATSDR Health Risk Determination

- (Appendix A)
- Report Highlights
 - Exposure is occurring
 - Significant cancer and non-cancer risk
 - Large contamination source for long term
 - No current means to prevent exposure
 - Difficult to predict effected homes

HEALTH CONSULTATION

Evaluation of Indoor Air, Soil Gas and Groundwater Data
Sampling Phases 2, 3 and 4 (2001, 2002, 2003)

RAYMARK INDUSTRIES, STRATFORD, FAIRFIELD COUNTY, CONNECTICUT

EPA Facility Id. CTD001186618

August 15, 2003

Prepared by
The Connecticut Department of Public Health
under cooperative agreement with
The Agency for Toxic Substances and Disease Registry



CTDEP

METCALF & EDDY | AECOM

Public Announcement

- DEP, EPA, DPH & Stratford DOH delivered information packages to 112 homes
 - Fact sheet
 - Door to door visits
- Informational sessions
 - Four public informational meetings were held to inform the affected homeowners of the proposed plans and to allow them to ask questions and discuss concerns
- Press Release



Access Agreement

- Each homeowner was asked to sign an access agreement granting permission for a site visit.
 - Homeowners were given the option to refuse access at any time, up to the installation.
- In case of homeowner refusal, homeowners were asked to sign the lower portion of the access agreement noting that they refused the offer.
 - Part of a one time offer, installation at a future date would be at the owner's expense.
- Four homeowners were sent registered letters with a closing date to reach DEP for inclusion, after refusing to sign the access agreement granting or forbidding access.



CTDEP

METCALF & EDDY | AECOM

Existing Radon Systems vs Engineered SSD Systems

- Range of Coverage Area: Approximately 25% – 50%
 - Crawlspace, additional slabs, etc. typically not addressed
- Coverage Area: Goal of 100% Coverage
 - Addresses crawlspace, additional slabs, etc.



View of a home with a traditional Radon System

View of the home with the Engineered SSD System





CTDEP

METCALF & EDDY | AECOM

Installed SSD Components



Views of exterior SSD system components; covered GP501 fans, on/off switches, downspouts, and exhaust vent caps



View of exterior SSD system components; a GP501 fan, on/off switch, downspout, and exhaust vent cap



View of two SSD monitoring systems



Close-up view of exterior SSD system components



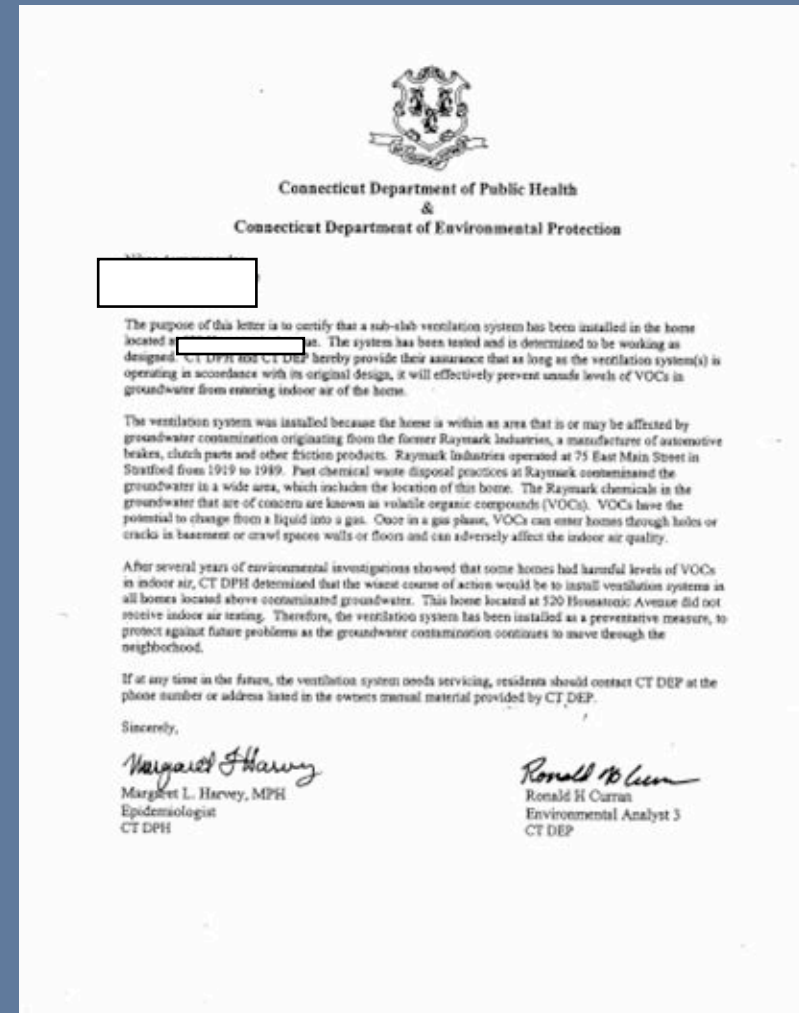
CTDEP

METCALF & EDDY | AECOM

CTDEP “Comfort Letter”

- System installed to address potential problem
- System will effectively eliminate vapor from soil gas entering indoor air when system is operated

**Example of a CTDEP
Comfort Letter**





CTDEP

METCALF & EDDY | AECOM

THANK YOU



ANY QUESTIONS?