

Toxic Hazards in East Greenpoint

(aka... it's a huge friggin' mess?)

Mike Schade
April 29, 2014

Better living through chemistry?

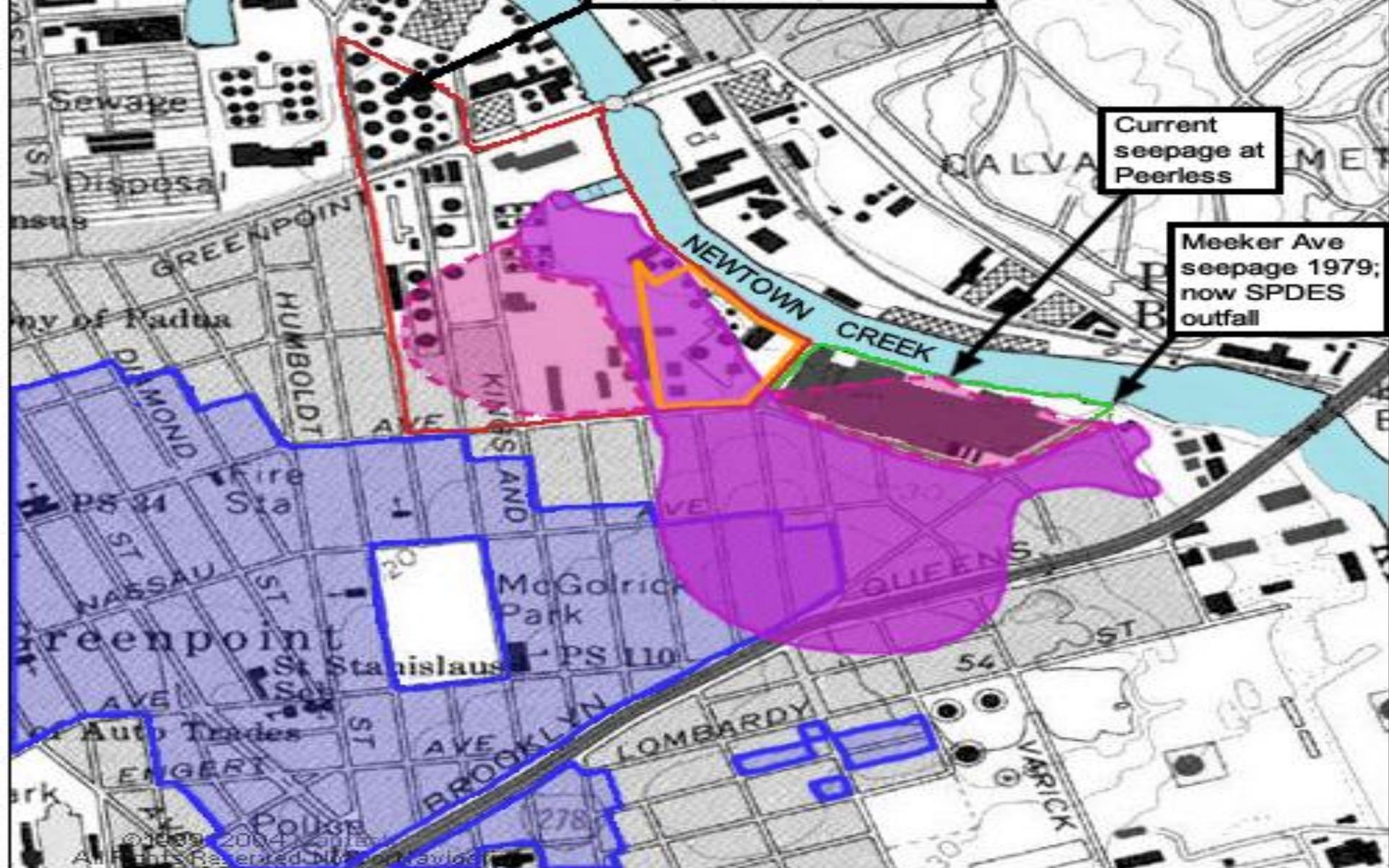




What we got here.

- * Sewage treatment plant
- * Waste transfer stations
- * State Superfund sites
- * TRI air polluters
- * Incinerator shut down
- * Contaminated Newtown Creek (by 1870 over 50 refineries were located along the banks of Newtown Creek) - federal Superfund
- * Legacy of oil refineries:
 - * Massive oil spill (17 million gallons)
- * Oh and condos! And fancy coffee.



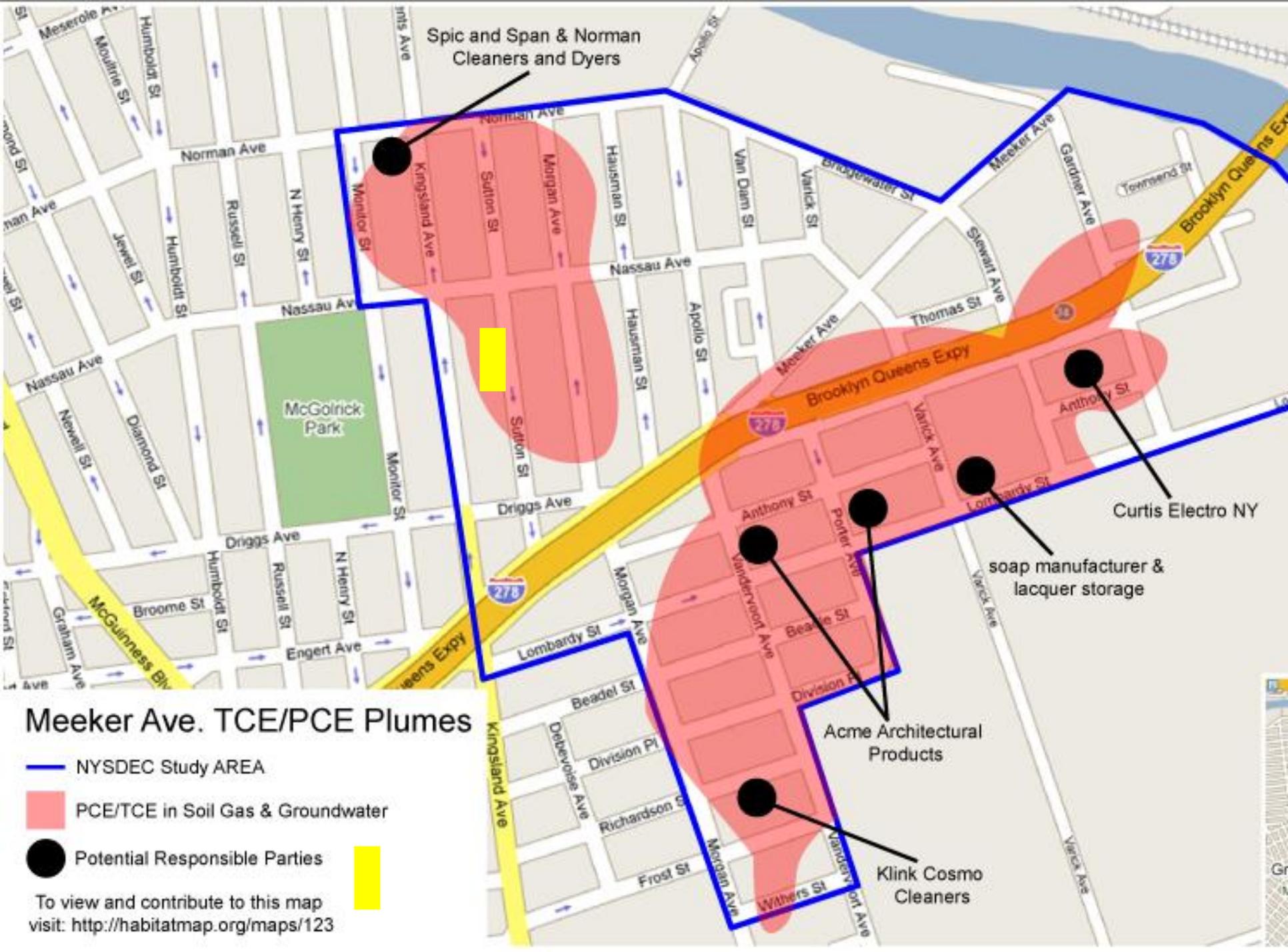


Current seepage at Peerless

Meeker Ave seepage 1979; now SPDES outfall

- Current Peerless Importers, former Texaco Terminal
- Historic Standard Oil Property
- Nearby residential areas
- Amoco property boundaries
- Newtown Creek

- 2003 mapping of spill's combined outline, according to ExxonMobil
- Estimated potential additional spill areas (dotted border)



Spic and Span & Norman Cleaners and Dyers

Curtis Electro NY

soap manufacturer & lacquer storage

Acme Architectural Products

Klink Cosmo Cleaners

Meeker Ave. TCE/PCE Plumes

- NYSDEC Study AREA
- PCE/TCE in Soil Gas & Groundwater
- Potential Responsible Parties

To view and contribute to this map visit: <http://habitatmap.org/maps/123>

Looks can be deceiving.



Probers unearth toxin shock in Greenpoint groundwater

BY ERIN DURKIN [Follow](#) / DAILY NEWS WRITER / Wednesday, February 17, 2010, 9:26 PM

AAA



There's something in the water.

Investigators probing a toxic underground chemical plume in [Greenpoint](#) have discovered groundwater with levels of a cancer-causing cleaning solvent more than 14 million times the state standard.

The New York Times

N.Y. / Region

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION

A Problem Rises to the Surface in Greenpoint



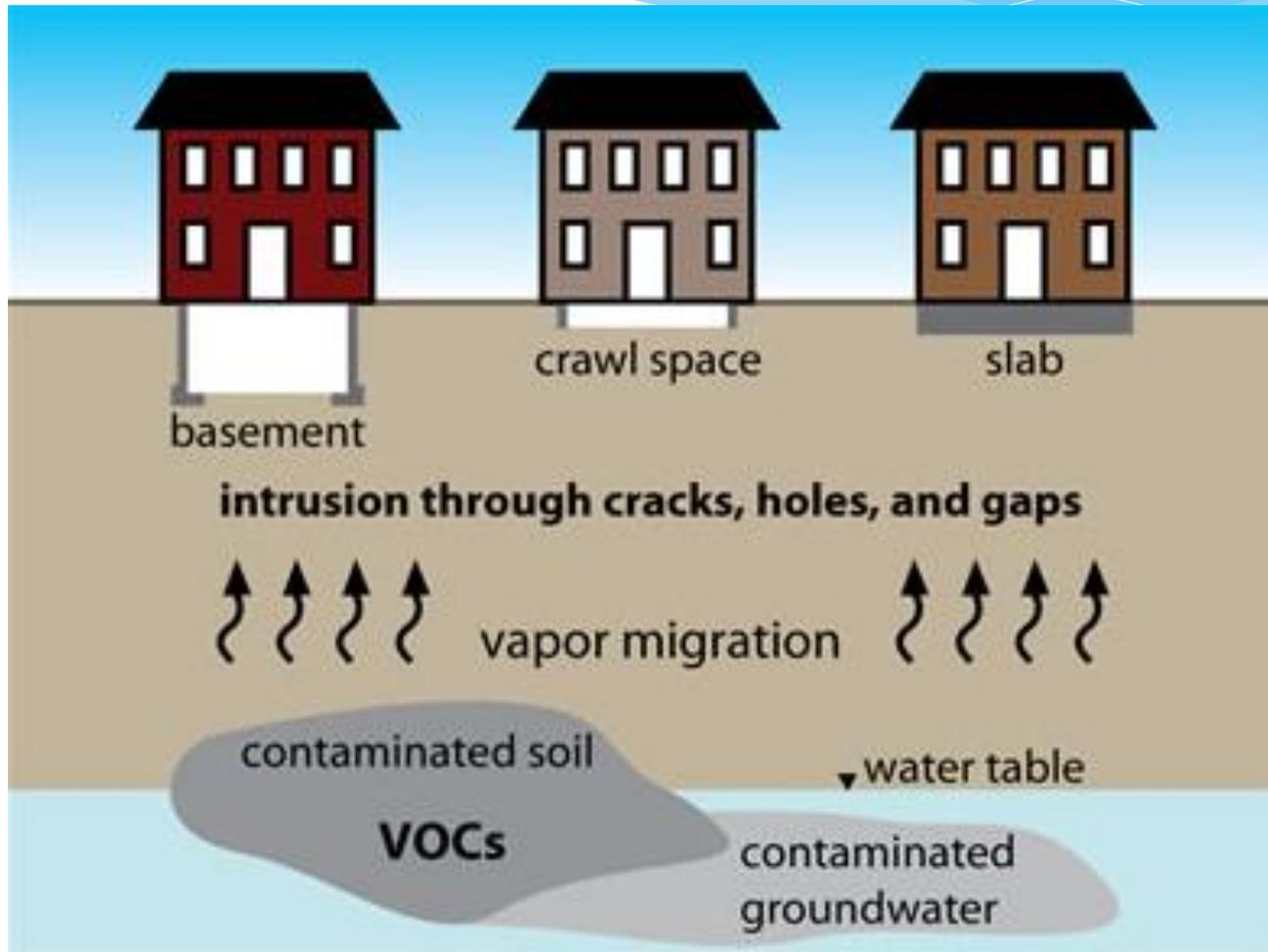
Katie Orlinsky for The New York Times

Charley Friedman owns a building on Sutton Street, in an area of Brooklyn that showed no contamination, but he is worried about the proximity of some areas that tested positive.

By MIREYA NAVARRO

Published: December 7, 2008

Vapor Intrusion (fancy way of saying – chems seeping into homes)



Five State Super(fun)d sites in our own backyard.

* **Meeker Ave. Plumes:**

- * Spin and Span Drycleaners (Kingsland and Norman)
- * Klink Cosmo (Richardson – between Morgan and Vandervort)
- * Acme Steel / Metal Works (95 Lombardy)
- * Acme Steel / Brass Foundry (72 Anthony St)
- * Former Lombardy Street Lacquer and Soap Mfg (Lombardy and Varick)

+ MORE SITES TO LIKELY COME...

DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Environmental Site Remediation Database Search

There are two ways to search the database: by site code or by other search criteria (see the record for one site). Entering other search criteria will provide a list of sites that meet the criteria.

Search method #1: Enter a site code:

OR

Search method #2: Enter as many search criteria as are known. Leave the site name, or search results screen, click on a site number to access the full record for a given site.

Site Name:

Program:

All Programs



Site Class:

All Classes



Who cares?



TCE aka super toxic solvent

- * Breathing small amounts of TCE can irritate the eyes and throat, cause headaches, dizziness and difficulty concentrating.
- * Drinking water contaminated with small amounts of TCE over a length of time may cause liver and kidney damage, impaired immune system function and possibly birth defects.
- * It is associated with cancers of the liver, kidneys, and prostate, and non Hodgkin's lymphoma.
- * The EPA concluded that it is ***“highly likely to produce cancer in humans.”***
- * TCE has been found in more than 1500 of the most hazardous (Superfund) waste sites around the country.

Don't listen to me.

“Drinking or breathing high levels of trichloroethylene may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death.... Drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.”

**- U.S. Agency for Toxic Substances and Disease Registry
(ATSDR)**

PERC (PCE) *aka drycleaning nasty stuff*

- * PERC can harm the brain and central nervous system, damage the liver and kidneys, and is likely to cause cancer.
- * Of these health concerns, the best documented is PERC's damage to the nervous system and brain.
- * Breathing low levels of PERC can cause people to experience dizziness, sleepiness, headaches, and nausea.
- * **Long term or chronic exposure to PERC, even at low doses, can lead to permanent harm, including brain effects such as loss of short term memory and concentration, or central nervous system effects such as loss of muscle coordination.**

Let's take a look at one site *(right around the corner)*



Spic and Span (*right down the block from Vinnies*)

- * The site was operated by Spic and Span Cleaners and Dyers, Inc. (a.k.a. Eastern District Dye Works) from the early 1900's until the mid-1960's.
- * **GROUNDWATER CONTAMINATION:**
 - * PCE has been found in shallow groundwater at concentrations up to 39,000 ppb, and in deep groundwater at concentrations up to 120,000 ppb, well above the Part 703.5 class GA standard of 5 ppb.
 - * PCE DNAPL has also been found on-site at concentrations up to 730,000 ppm (73%) in deep monitoring wells.
 - * Trichloroethene (up to 5,000 ppb), cis-1,2-dichloroethene (up to 14,000 ppb), and vinyl chloride (up to 3,200 ppb) have also been found in shallow groundwater at concentrations above their respective Part 703.5 class GA standards (5 ppb each).

Spic and Span (cont'd)

* **SOIL AND VAPOR CONTAMINATION:**

- * Soil PCE has been found in soil up to 290,000 ppm, well above the soil cleanup objective for unrestricted use (1.3 ppm)
 - * Soil Vapor and Indoor Air Concentrations of PCE in soil vapor have been found up to 8,200,000 ug/m³, and in indoor air up to 170 ug/m³.
 - * Concentrations of TCE in soil vapor have been found up to 32,000 ug/m³, and in indoor air up to 12 ug/m³.
- * **The site poses a significant environmental threat due to ongoing release of PCE from source areas into soil and groundwater.**

The NYS DEC says....

“We got hit in the face with it before we got our gear on. It smelled like white-out times a thousand with a lot of sugar thrown in for a couple of seconds until my nasal lining burned out. That’s pure product. If you smell something like that, that’s when you know you’ve got the good stuff.”

“This has been in the ground for 67 years. This is not going to be out in weeks or months. It is going to take years to remove this stuff,”

– David Harrington, NYS Department of Environmental Conservation

One of the (new) sites being researched...

5.2.1 Sources

Using data obtained during the EOA SVI Phase I Investigation, and supported by data gathered during the Phase II Investigation and Phase III sampling efforts, one source of CVOC contamination has been identified and is shown on Figure 5-1. A description and location of the source is discussed below.

- Premier Dye Polish Corporation, located at 25 Bridgewater Street (Brooklyn Tax District, Block 02664, Lot 0127) is a likely source of soil vapor contamination. Based on an EDR

SG-161, which is located on Bridgewater Street, contained PCE at 5,400; 660; and 1,100 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively. TCE was detected at 12,000; 2,200; and 2,800 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively. Cis-1,2-DCE was detected at 320; 84; and 94 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively. 1,1,1-TCA was detected at 11,000; 3,400; and 3,500 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively. 1,1-DCA was detected at 1,900; 640; and 450 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively. Freon-11 was detected at 2,000; 1,000; and 940 $\mu\text{g}/\text{m}^3$ during the Phase I, Phase II and Phase III sampling events, respectively.

Live Above the Meeker Avenue Plumes?

- * *“It’s important to get your property tested to determine whether or not chemicals are migrating into your home, so that DEC and DOH can take appropriate action to prevent this from occurring. Note that just because you live above the plumes, it doesn’t necessarily mean chemicals are migrating into your home. Getting your home tested can offer you peace of mind by determining whether or not your home is safe from TCE and PCE vapor intrusion. **Testing is free and confidential. If your home is determined to have elevated levels of chemicals of concern, DEC and DOH will install a mitigation system free of charge to reduce your exposure and protect your home.**”*
- * - Newtown Creek Alliance

Questions for DEC or DOH?

Who to Contact

Comments and questions are always welcome and should be directed as follows:

Project Related Questions

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Department of Environmental Conservation

Division of Environmental Remediation

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dkharrin@gw.dec.state.ny.us

Site-Related Health Questions

Dawn Hettrick

New York State Department of Health

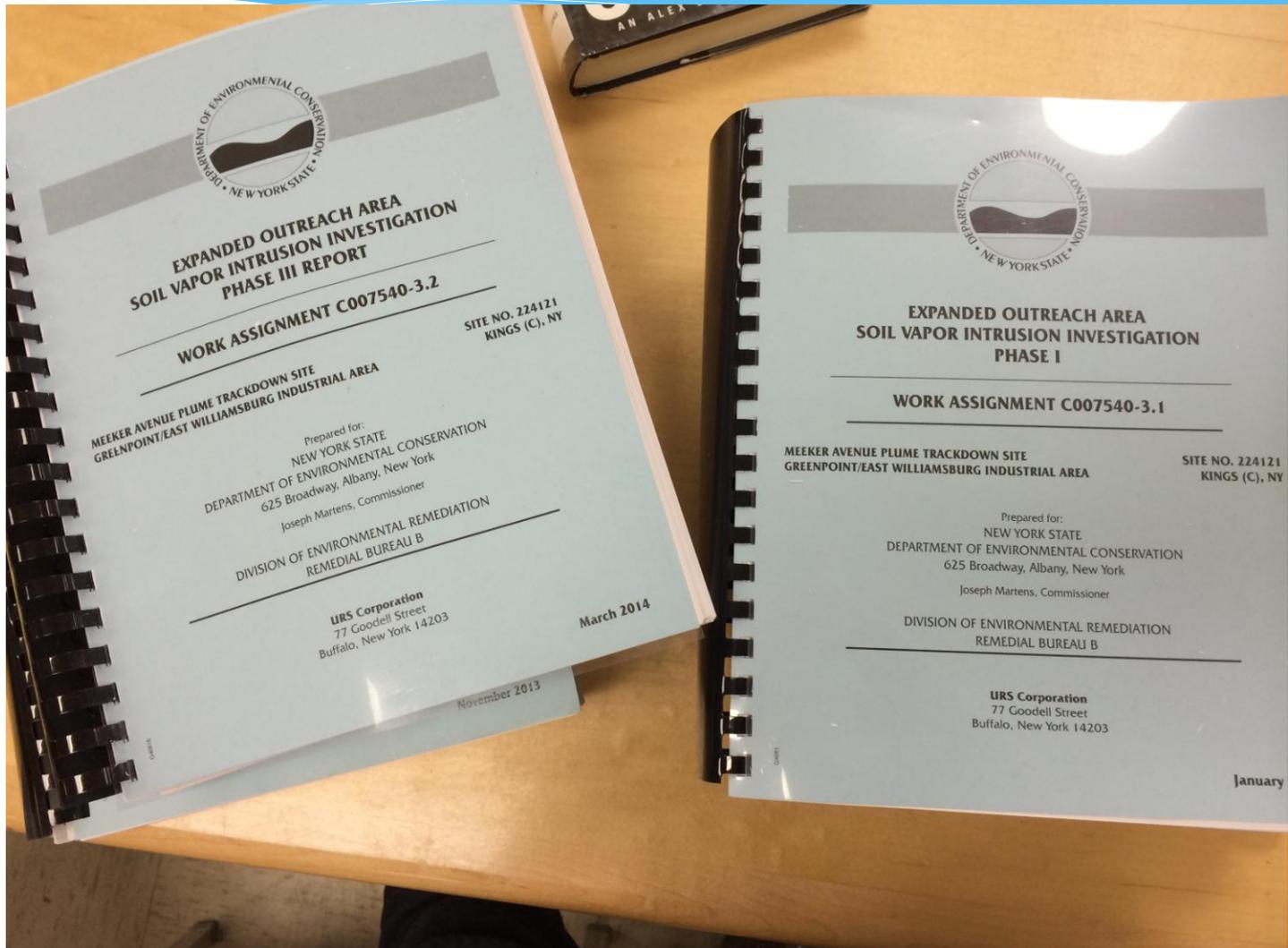
Empire State Plaza Corning Tower Room 1787

Albany, NY 12237

(518) 402-7860

deh02@health.state.ny.us

Lotsa reports at the library...



Get involved. Take action.

Follow up questions?

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To Learn More:

Newtown Creek CAG:

www.newtowncreekcag.wordpress.com

Newtown Creek Alliance:

<http://www.newtowncreekalliance.org/meeker.htm>

Habitat Map:

<http://habitatmap.org>