STATE OF NEW YORK
DEPARTMENT OF HEALTH
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Commissioner

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690 Saint Paul Street
Rochester (C), Monroe County

Update: Site Investigation and Indoor Air Assessment
May 21, 2009

History

- Summer 2008 Phase II investigation lead to the discovery of petroleum and volatile organic compound (VOC) contaminated soil and groundwater. As a result the building owner performed the following actions:
  - ➔ excavation of approximately 1,700 cubic yards of contaminated soil
  - ➔ performance of a soil vapor intrusion investigation
- Based on the results of the soil vapor intrusion investigation the building owner proceeded by pro-actively installing a sub-slab depressurization system (SSDS) on the occupied portion of the building.
- Due to the presence of chlorinated solvents at the site, the owner began the process of entering the NYS Brownfield Cleanup Program to address the remaining environmental contamination.

Soil Vapor Intrusion Assessment

- **Overall, the levels detected in the indoor air do not represent an immediate exposure concern for the students or staff.**
- The attached table presents the validated trichloroethene (TCE) and cis-1,2-dichloroethene data collected to date. We have focused on these 2 compounds because TCE is a contaminant of concern at the site and cis-1,2-DCE is solely a result of environmental contamination and may help us to determine the source of the observed VOCs (outdoor source vs. soil vapor intrusion vs. indoor source).
- The levels detected in the indoor and outdoor air are slightly higher than what we would expect. Therefore, we have recommended the following actions be taken:
  - ➔ evaluation of potential users of solvents in the immediate vicinity of the property.

- ➔ to optimize the operation of the SSDS to improve its effectiveness.
- ➔ evaluation of the air quality in the attached, unused portion of the building, including an assessment of potential connections between the two air spaces.
- ➔ evaluation of elevator shafts as potential conduits for vapors to migrate to the indoor air.
- ➔ evaluation of historic building uses to determine whether these solvents were used within the building and where they were used
- ➔ completion of the above actions by early summer to ensure that any additional actions can be conducted over the summer

Ongoing Activities

- ♦ The building owner is drafting a work plan to address the above mentioned actions.
- ♦ At the District's request, the building owner is continuing to monitor the indoor air on a monthly basis.
- ♦ The State is currently reviewing the Remedial Investigation Work Plan submitted as part of the Brownfield Cleanup Program.

Summary of Validated Air Sampling Results at 690 Saint Paul Street – Rochester, New York
*see notes at end for additional information

Pre-mitigation Sampling

		Indoor Air							Outdoors
	Compound	Entrance 1	Entrance 2	Entrance 3	Rm 134	Rm 117	Rm 126	2nd Floor	outdoor air
	TCE*	1.37	3.44	3.71	2.24	1.42	1.97	1.42	48.1
08/15/08	CIS-1,2,DCE	ND	0.81	0.73	0.69	ND	0.52 J	ND	10.1

	Sub-Slab Samples					
Compound	Sub-slab 1	Sub-slab 2	Sub-slab 3	Sub-slab 4	Sub-slab 5	Sub-slab 6
TCE	9.1	3.9	29	45	56	2.6
CIS-1,2,DCE	2.7	1	8.7	9.3	7.5	0.56 J

		Outdoor Air				Outdoors
08/21/08	Compound	Playground	Parking Lot	Park	Saint Paul St.	Roof
	TCE	0.87	0.87	0.71	0.82	0.6
	CIS-1,2,DCE	ND	ND	ND	ND	ND

Installation of Sub-slab Depressurization System

Post-mitigation Sampling

		Indoor Air			Outdoors
09/03/08	Compound	Rm 134	Rm 107	Rm 117	Roof
	TCE	1.53	1.37	1.2	1.15
	CIS-1,2,DCE	ND	ND	ND	ND

		Indoor Air				Outdoors
09/05/08	Compound	Rm 134	Rm 117	Rm 117 Dup.	Rm 125	Roof
	TCE	1.42	1.91	1.64	0.93	1.04
	CIS-1,2,DCE	ND	0.56	ND	ND	ND

		Indoor Air				Outdoors
09/10/08	Compound	Rm 134	Rm 134 Dup.	Rm 117	Rm 107	Roof
	TCE	1.91	1.75	1.8	1.58	2.08
	CIS-1,2,DCE	0.69	0.6	0.6	0.48 J	0.77

		Indoor Air				Outdoors
09/18/08	Compound	Rm 134	Rm 117	Rm 117 Dup.	Office	Roof
	TCE	0.66	0.77	0.6	0.49	3.6
	CIS-1,2,DCE	ND	ND	ND	ND	ND

		Indoor Air				Outdoors
09/25/08	Compound	Rm 134	Rm 117	Rm 107	Rm 107 Dup.	Roof
	TCE	0.6	0.44	0.71	0.82	3.93
	CIS-1,2,DCE	ND	ND	ND	ND	1.13

		Indoor Air			Outdoors
10/15/08	Compound	Rm 134	Rm 117	Rm 125	Roof
	TCE	0.33	0.66	1.2	1.09
	CIS-1,2,DCE	ND	ND	ND	0.48 J

		Indoor Air				Outdoors
11/25/08	Compound	Rm 134	Rm 134 Dup.	Rm 117	Office	Roof
	TCE	0.44	6.72	2.68	0.55	0.66
	CIS-1,2,DCE	ND	3.3	1.33	ND	ND

		Indoor Air				Outdoors
12/17/08	Compound	Rm 134	Rm 134 Dup.	Rm 117	Rm 133	Roof
	TCE	1.15	0.87	0.38	ND	0.71
	CIS-1,2,DCE	ND	ND	ND	ND	ND

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		Indoor Air				Outdoors
12/24/08	Compound	Rm 134	Rm 117	Rm 135	Rm 135 Dup.	Roof
	TCE	1.26	1.53	2.51	3.66	0.38
	CIS-1,2,DCE	0.44 J	0.81	0.52 J	0.6	ND

		Indoor Air				Outdoors
01/16/09	Compound	Rm 134	Rm 117	Rm 117 Dup.	Rm 107	Roof
	TCE	ND	1.31	ND	2.18	3.11
	CIS-1,2,DCE	0.52	0.85	ND	0.85	ND

Notes

All results presented in micrograms per cubic meter (mcg/m^3)
J = the analyte was detected at or below the reporting limit
ND = the analyte was not detected
Reporting limit = the lowest limit that the laboratory can reliably quantify
TCE = 0.218 mcg/m^3
CIS-1,2-DCE = 0.604 mcg/m^3
Dup. = two samples were collected at the same location