## Summary of Indoor Air Sampling Data - Adelaide Avenue School Project - Volatile Organic Compounds Pre-Sub Slab Depressurization System Start-up Sampling Event - March 22, 2007

					Kitchen Storage Room <sup>A</sup>	Cafeteria <sup>B</sup>		Gymnasium <sup>C</sup>		Elevator Hallway <sup>D</sup>		Room 118 <sup>E</sup>	Room 110 <sup>F</sup>		Media Center (Rm 145) <sup>G</sup>		Room 152 <sup>H</sup>	A	mbient Outdoor	1
	CT Draft Proposed	CT Existing Indoor	NYSDOH																	
Volatile Organic Compounds via	Indoor Residential Target	Residential Target	Air Guideline	Units	Qual		Qual		Qual		Qual	Qual		Qual		Qual		Qual		Qual
TO-15	Air Concentrations *	Air Concentrations **	Values***																	1
																				1
Carbon tetrachloride1	0.5	1	None	µg/m³	0.63	0.63		0.63		0.75		0.63	0.63		0.75		0.69		0.63	1
Ethylbenzene <sup>2</sup>	53	1040	None	µg/m³	9.59	11.6		93.5		0.91		1.17	1.43		10.6		2.99		0.65	1
Chloroform <sup>3</sup>	0.5	3	None	µg/m³	0.20	0.24		0.29		0.39		0.24	0.59		0.49		0.20		0.098	U
Tricholoroethene <sup>4</sup>	1	5	5	µg/m³	1.72	0.16		0.11		0.11		0.11	0.11		0.22		0.20		2.74	1
1,2,4-Trimethylbenzene <sup>5</sup>	9.3	None	None	µg/m³	8.1	16.6		18.3		1.57		1.52	1.72		14.3		2.7		0.098	U

\* State of Connecticut Draft Proposed Indoor Residential Target Air Concentrations [Proposed Revisions to Connecticut's Remediation Standard Regulations Volatilization Criteria, CTDEP, March 2003]; These concentrations have been established as Action Amended February 2007] with the exception of several compounds (1,2-Dichloroethane, Bromodichloromethane, 1,1,1,2-Tetrachloroethane, and 1,1,2,2-Tetrachloroethane) where laboratory reporting limits can not achieve these concentrations of the second secon

\*\* State of Connecticut Existing Indoor Residential Target Air Concentrations [Remediation Standard Regulations, CTDEP, 1996]. Please note, these concentrations are provided for comparative purposes only and are not Action Levels for the Adelaide Avenue School project. "None" indicates that air concentration has been established for this compound by CTDEP.

\*\*\* New York State Department of Health (NYSDOH) air guideline concentrations [Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006]. Please note, these concentrations are provided for comparative purposes only and are not Action Levels for t project. "None" indicates that no air guideline has been established for this compound by NYSDOH.

U: designation indicates that the compound was not detected by the laboratory. Reporting limit shown in the data column.

gray shading indicates that the sample concentration for this compound exceeds the applicable Indoor Air Action Level.

- 1: Carbon Tetrachloride was a manufactured chemical used in aerosols, cleaning fluids, fire extinguishers, and degreasing agents. This compound was measured at 0.63 ug/m3 in ambient outdoor air and was not detected in soil vapor at the site in 2005 at a reporting limit of 3.1 ug/m3. SSD System not on-line during this sampling event. Continue to sample and evaluate over time after SSD System is turned on-line.
- 2: Ethylbenzene is found in cigarette smoke, gasoline, automobile exhaust, varnishes, and carpet glues. Ethylbenzene was found in soil vapor at the site at max. concentration of 7.4 ug/m3. Continue to sample and evaluate over time...
- 3: Chloroform is formed when chlorine is added to water. Chlorination of school water supply was in progress during week prior to this sampling event. Continue to sample and evaluate over time.
- 4: Trichloroethene is used to remove grease from metallic parts and is also found in paint removers, adhesives, spot cleaners, and typewriter correction fluids. This compound was measured at 2.74 ug/m3 in ambient outdoor air during this sampling event and was found at up to 4,020 ug/m3 in s Trichloroethene was not detected in sub-slab air during this sampling event, however, the reporting limit was 67.1 ug/m3.
- 5: 1,2,4-Trimethylbenzene is found in paints, paint thinners, vinyl flooring, rubber floor and wall coverings, wood furniture, and building insulation products. 1,2,4-Trimethylbenzene was found in one soil vapor sample at the site in 2005 at a concentration of 4.3 ug/m3. Continue to sample and evaluate over time.

A: Smoking in kitchen storage room observed during week prior to this sampling event. Several cans of spray paint containing xylenes, toluene, and acetone (per manufacturer's labeling) noted in room. Room not sealed off from remainder of kitchen which i B: Painting occurred during the week prior to this sampling event in hallway adjacent to cafeteria. Cafeteria is not sealed off from hallway. Cafeteria currently being used as primary materials storage area for subcontractors. Materials include, paint, plywood s C: Gymnasium floor installation in progress at time if sampling. Floor adhesive/glue, xylene, and acetone being used to install flooring. Also, smoking in gymnasium area observed during sampling event and painting within adjacent hallway occurred during the D: Paint odor noted in elevator hallway area. Some touch-up painting within this hallway ongoing during this sampling event.

E: Carpeting installed in Room 118 several weeks ago. Multiple containers of floor covering adhesive noted and flooring materials (vinyl composite floor tiles, rubber mats) observed in Room 118 at time of sampling.

F: Room 110 being used as a carpenter's equipment and supply area at the time of sampling. Aeresol spray paints, urethane, foam sealants, laminated boards, putty, silicone sealants noted within the room.

G: Room 145 was carpeted several weeks ago. Extra rolls of carpet noted within Room 145 during the sampling event.

H: Tubes of silicone sealant previously noted in Room 152 no longer present at the time of this sampling event.

Levels for indoor air in the RIDEM Or	
rations.	

is also "open" to the cafeteria an	d gy
d sheeting, pipe insulatio	
the week prior to this sampling even	t.

oil var

der of

no

he A