

**Adelaide Avenue Environmental Justice Coalition
60 Crescent Street
Providence, Rhode Island 02907**

September 4, 2007

Gregory L. Simpson
Sr. Project Manager-Site Remediation
Textron Inc.
40 Westminster Street
Providence, Rhode Island 02903

**Re: Soil Vapor Investigation Results
Parcel A – Abandoned Stop & Shop Retail Complex**

Dear Mr. Simpson:

On August 7, 2007 Mactec Engineering and Consulting, Inc. (**Mactec**) performed a sub-slab soil vapor-sampling event at the now abandoned new Super Stop & Shop located at the former Textron/Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence Rhode Island (**the Site**). The community has repeatedly requested clarification on the interpretation and application of the Connecticut Department of Environmental Protection (**CT DEP**)'s Soil Vapor Volatization Criteria (**svvc**), as it pertains to your project. To date we have had no response from your contractor, Michael J. Murphy, Senior Principle Scientist, for Mactec Inc. Since Textron and the City of Providence (**City**) have decided the community is not a Stakeholder in this particular aspect of the process, and continues to refuse to acknowledge our concerns directly, we met with both the CT DEP and the Connecticut Department of Health (**CT DOH**) to solicit an interpretation of your soil vapor test results from the retail complex. Churchill & Banks Ltd. constructed this complex less than five years ago on Textron's hazardous waste site here in South Providence, as a "*Showcase Brownfield*". Below is the essence of those consultations, and unfortunately, they seem to contradict Mr. Murphy's interpretation and application of Connecticut's vapor intrusion regulations, specifically his "no further action criteria".

- As the community has stated repeatedly, sub-slab soil vapor values do not have a direct correlation to CT DEP svvc's and they are not intended to be used directly as action values for a "no further action" stipulated by Mr. Murphy on your behalf: "*The analytical data from the sub-slab soil gas samples will be compared to the CT-DEP Proposed Soil Vapor Volatilization Criteria. Consistent with the proposed CT-DEP regulations, if the analytical results are below these criteria, no further investigation of the vapor intrusion pathway will be required for the retail building*". Since the sub-slab results have been made available, and the concentrations are dramatically elevated, well above any reasonable action value,

we are encouraged that the responsible parties will now implement an emergency mitigation plan for the retail complex. Remembering that by all accounts a vapor intrusion mitigation system is a temporary measure, and the next phase for Textron and the City would include identifying the source(s) of these VOC vapors located below the floor region of the retail complex, the footprint of your old facility.

- After our initial consultation with the CT DEP to establish the appropriate use of the soil vapor volatilization criteria, the primary question was, and still is; given the data available for the site (1989-2001) how was the building allowed to be built in the first place without an integral active vapor intrusion mitigation system? The consensus is that Mactec's conceptual site models are fatally flawed. These models were designed by Dave McCabe; at the time with Mactec ('93-'01); but now working for Textron. They seriously misrepresented the conditions at the Textron site and consistently misled the Rhode Island Department of Environmental Management and others as to the best alternatives for remediation.
- In a May 20, 2007 letter to Mr. Murphy (to date unanswered) the community included a small table identifying what we believed should be the sub-slab soil vapor action values based on a generic application of the EPA's attenuation factors. The CT-DEP suggested a number of corrections and modifications, (*based on their own extensive field experience with soil vapor behavior*) and we incorporated them into the revised table provided below:

Contaminate of Concern	CT-DEP TAC I/C Indoor air	EPA Sub-Slab Action Values Attenuation Factor= 0.05¹	CT-DEP I/C SVVC Mactec's Sub-Slab Action Values²	Average Concentration Found below Stop & Shop³
Trichloroethylene*	1	50	1,396	25,614.9 ug/m3
Vinyl Chloride	1.9	95	2,560	2,000 U ug/m3
1,2 Dichloroethane	0.31	15.5	445.5	2,000 U ug/m3
1,1 Dichloroethylene	20	1,000	27,720	50,149.7 ug/m3
Benzene	3.3	165	4,466	1,880 U ug/m3
Tetrachloroethylene*	5	250	6,780	2,000 U ug/m3
1,1,1-Trichloroethane	500	25,000	708,500	466,540.2 ug/m3
1,1-Dichloroethane	430	21,500	607,500	31,925.4 ug/m3
1,4 Dichlorobenzene*	24	1,200	26,796	1,880 U ug/m3

1. CT DEP sub-slab attenuation factor 2006 (EPA '04)

2. Mactec's application of CT DEP svc values as sub-slab action numbers

3. Average soil vapor concentrations under retail complex, Parcel A

4. All values are micrograms per cubic meter ug/m3

* CT DEP will be adjusting (more conservative) the risked-based TACs for these compounds in 2007

- The CT DEP's response to the sub-slab values under the retail complex on Parcel A was to suggest immediate active mitigation, regardless of indoor air values. Similar to the matrix used by the New York Department of Health; they proposed that if Trichloroethylene (TCE) vapor is found in exceedence of 200-250 micrograms per cubic meter (ug/m3) below the foundation area, Connecticut will typically insist on the installation of an active vapor intrusion mitigation system. There were repeated queries into why the slab area was not being tested at least annually since being built, to maintain a data set on the soil vapor activity. Given that all the site information was (or should have been) indicative as to the very likely potential for an eventual concentration exceedence under the floor of the Stop & Shop, and eventual indoor air intrusion.

Is the City of Providence, Kimco Realty Trust (present lease holder), Churchill & Banks Ltd, or Textron responsible for acting on the remedy for the potential vapor intrusion problems at the abandoned Super Stop & Shop? We were told the retail complex would not need a vapor mitigation system when it was first proposed by Churchill & Banks because (according to Mactec) there was absolutely no opportunity for a problem to develop. Since the High School was essentially planned around Textron's Conceptual Site Model, and its relevant data, can we be sure the High School's temporary mitigation system is going to be adequate? We seem to always return to the issue of an inadequate site-characterization on the part of Textron's consultants in respect to the Volatile Organic Compounds (VOCs) released on your hazardous waste site, here in the heart of our community.

Sincerely,

Adelaide Avenue Environmental Justice Coalition

cc:

Terrence D. Gray, P.E., Assistant Director, RIDEM/AW&C
 John Langlois, Esq., RIDEM/LEGAL
 Leo Hellested, RIDEM/OWM chief
 Joseph T. Martella II, RIDEM/OWM
 Richard Enander, PhD, RIDEM/OTCA/Risk Assessment
 Barbara Morin, RIDEM/OAR
 Karen Leslie, CEO, YMCA
 Senator Juan Pichardo, District 2
 Representative Thomas Slater
 Leon Tejada, City Council
 Robert Vanderslice, PhD, RIDOH
 Thomas Deller, City of Providence
 Sara Rapport, Esq., City of Providence
 Tammie A. McRae, ATSDR
 John Simmons, City of Providence
 Peter M. Grivers, EA Engineering
 Tim Regan, EA Engineering
 PTA of the Adelaide Avenue School
 James Ryan, Esq., Partridge, Snow, & Hahn