

MEMORANDUM

To: David Shepler  
From: Arlette St. Romain  
Date: March 28, 2017  
Re: 87 North Chestnut Site  
Job #: 41553.00

This memorandum is provided in response to the updated site development plan provided to us. We understand that the modified plan adds four ground-floor spaces to the ground floor, displacing approximately 40% of the originally planned retail space. Consequently, a Planning Board inquiry has requested additional information related to potential impacts from the intrusion of petroleum vapors on ground floor residents.

Chazen reviewed the available environmental sampling data. Based on the data and applicable NYSDEC and NYSDOH guidance, this proposed modification for the planned development does not indicate the need for mitigation or for additional review by NYSDEC and/or NYSDOH.

The 2015 boring investigation reported by Precision identified “petroleum odors” in the 4 to 6-foot depth interval in two (SB-3 and SB-7) of seven borings, with field screening PID measurements of 7.6 and 9.5 parts per million volatile organic compounds (VOCs), respectively. The laboratory did not detect VOCs in the SB-3 sample at concentrations greater than or equal to the laboratory practical quantitation limit. The low level VOC concentrations reported in the SB-7 sample were approximately an order of magnitude less than the applicable Unrestricted Use Soil Cleanup Objectives (SCOs) (CP-51, Table 1 or 6 NYCRR Part 375-6.8(a)).

**6 NYCRR Part 375-6.3(a):** *The unrestricted use soil cleanup objectives represent the concentration of a contaminant in soil which, when achieved at a site, will require no use restrictions on the site for the protection of public health, groundwater and ecological resources due to the presence of contaminants in the soil.*

The reported residual impacts meet the regulatory criteria for Unrestricted Use. Consequently, no additional mitigation, administrative, or engineering controls are required for the Site.

NYSDOH “Guidance for Evaluating Soil Vapor Intrusion” does not include specific guidance values for petroleum range compounds. If necessary, a compound could be evaluated by assigning it to one of the

two matrixes included in the guidance based on their relative volatility. Highly volatile compounds (benzene) would be evaluated based on Matrix 1 and less volatile compounds (e.g., trimethylbenzene) would be evaluated based on Matrix 2. However, given that on-site soils meet Unrestricted Use SCOs and there is no evidence of residual groundwater impacts, there is no apparent regulatory nexus to warrant a soil vapor intrusion study of the site.

Many volatile compounds can be detected by a sensitive nose at one to three orders of magnitude less than the action thresholds in NSYDOH guidance matrixes. Additionally, field screening measurements with a PID cannot be directly converted to soil gas measurements and are not used by NYSDEC or NYSDOH for critical decisions in site evaluations. Consequently, the apparent “odor” in a thin layer of clayey soils with relatively low PID measurements and analytical data indicating the presence of impacts at concentrations significantly less than the SCOs would not warrant additional investigation or mitigation of the site regardless of the ultimate end-use.