

MEMORANDUM

To: Michael A. Moriello, Esq. of Riseley & Moriello, PLLC

From: Arlette St. Romain

cc: David Shepler

Date: February 5, 2018

Re: 87 N. Chestnut St. in New Paltz, NY

Job #: 41553.00

Chazen is providing the following supplemental information in response to the January 30, 2018 email from the Village Planning and Zoning Secretary's and letter from Mr. Grunblatt.

As a general comment: the available data collected from multiple rounds of site sampling do not indicate conditions that the project parcel is a source of off-site contamination. Sampling was conducted relative to removal/closure of underground storage tanks (USTs) and soil, and the New York State Department of Environmental Conservation ("NYSDEC") administratively closed the associated spill. More recent sampling was conducted to assess site conditions for potential residual concentrations. The data show that volatile and semi-volatile petroleum-related constituents meet unrestricted soil cleanup objectives; meaning that there are no petroleum related compounds that would preclude development on the parcel.

Insofar as a stated concern about the detection of a limited number of metals in the soil: the analytical data does not indicate leaching of metals from soil to groundwater that impacts water quality, and the dissolved metals results confirmed compliance with groundwater standards. It is worth noting that the development plan includes an extensive soil excavation component, involving the top 4 feet of existing soil in the western site area, that will remove identified metals that are above the protection of groundwater standard. In other words, the development project provides an environmental protection benefit.

As to specific conditions, the following is provided:

Groundwater sampling.

- During Ira D. Conklin & Sons Inc.'s 1994 tank removal, the UST excavation extended approximately 8 feet below grade and there was insufficient groundwater was encountered to collect a sample.

- During Precision's 2015 sampling event, one groundwater sample was collected from the deepest boring that extended approximately 14 feet below grade. No VOCs were reported in this sample.
- Chazen's 2016 sampling to supplement prior investigations and gather metals data, included attempts to sample groundwater in three locations and only one location provided sufficient water for sampling. The groundwater sample was analyzed for both total and dissolved Resource Conservation and Recovery Act (RCRA) metals. The data for the dissolved lead concentration was eight times lower than the applicable groundwater quality standard. The total lead concentration that exceeded the groundwater standard was from an unfiltered sample and is therefore not considered as reliable an indicator of groundwater quality because it reflects turbid sample conditions not representative of the actual water column quality.

Soil Sampling

- The 1994 UST closure included the removal of 12 storage tanks, the excavation of 75 cubic yards of soil and a sampling detection of Xylene (a gasoline range organic) in the base of the UST excavation. The NYSDEC administratively closed the spill and did not require further investigation or remediation.
- The 2015 soil borings and sampling within the footprint of the former tank excavation area did not identify petroleum impacts at or below the base of the former excavation area. The soil boring sample in the former building footprint did not identify petroleum range concentrations above the stringent CP-51 soil cleanup goals. In other words, even the trace concentrations in one of the seven borings on the site met standards and would not require remediation.
- Chazen's 2016 sampling focused on assessing potential impacts from a former outlet and from the building fire. Shallow soil samples did not report petroleum range VOCs or SVOCs impacts. Some metals were detected in surface and near surface soils. Additional sampling along the western side of the site was done to investigate the detection of metals in those areas where planned site redevelopment activities would include the removal of approximately four feet of soil. This sampling characterized the soil planned for removal to accommodate the installation of the infiltration system (estimated at 250 cubic yards), and assessed metals concentrations of the underlying soil that will remain following removal. As a point of reference, results of the soil samples that represent the top layer of soil that will remain after excavation meet Restricted-Residential Use Soil Cleanup Objectives (SCOs), with one slight exceedance for cadmium (4.84 mg/Kg exceeding the SCO of 4.3 mg/Kg) that was less than the Protection of Groundwater SCO of 7.5 mg/Kg. The site development will remove these metals in shallow soil, none of which preclude the redevelopment of the property. In addition, metals are often found in urban fill at commercial locations and are routinely addressed as part of pre-development site preparation.

Alleged historic petroleum impacts in area groundwater:

- No evidence of a reportable release of petroleum was detected in the on-site soils or groundwater in the sampling events conducted after the USTs were removed. Data collected to date do not

indicate the 87 N. Chestnut Street site is a source of contamination off site.

The property was subject to cleanup activity in the past with NYSDEC oversight, and the NYSDEC administratively closed that spill. Chazen understands that the site has remained vacant and unused since our more recent field work in 2016, and the owner has stated that there are no current activities on the property that would be a source of contamination.

- The many ongoing and historical automotive uses and identified petroleum spills in the vicinity of the Spencer property make it difficult to identify a source of alleged VOC and lead detections at the off-site Spencer well; but there are no current sources of such impacts on the project site. At the time of the 2015 Phase I ESA, several auto-related businesses were located within 350 feet of the site, including Smitty's Body Shop and Kwik Mart of New Paltz. The property at 76 North Chestnut has a history of uses associated with petroleum products including Citgo fueling station, Old Arco Gas S/S, Kwik Mart, and a towing facility. There are closed spills listed in NYSDEC's Spill database at three gasoline stations. As to the project site, it has been investigated and current conditions do not reflect a project-related source condition.

Site redevelopment by the current owner that took title in 2015:

- Site redevelopment plans include excavation and removal of 250 cubic yards of soil where metals were identified above the water table. This action will remove potential exposure to such metals and will result in the replacement of such soil with clean material installed around the infiltration system. There was a cadmium detection at four feet below grade that will also be covered and not present a potential exposure pathway for site occupants. Net Zero's soil erosion and sediment control plans should address concerns about on-site construction activities and routine site management measures will be taken to avoid off-site impacts. Dust control, for example, is a routine measure at any construction project.
- Site redevelopment plans include installation and operation of approximately 20 close-loop geothermal wells to depths of 300 to 400 feet below grade. These are typically installed using air rotary drilling to displace geologic material and groundwater upward and out to allow installation of geothermal piping and grout. Installed geothermal wells are closed-loop systems grouted into the formation, with grout media providing thermal connections between the closed-loop and the geologic formation and preventing vertical migration of groundwater upward or downward along the well length. Given the nature of these geothermal wells, they would not generate groundwater impacts in the area.

Responses to Village Board question about soil sample depths are set forth below. As you can see, the property has been the subject of multiple rounds of sampling to assess property conditions:

- 1994: After the excavation of 75 cubic yards of soil, grab soil samples were collected from both excavation walls and floor (approximately nine feet below grade).
- 1995: IDC advanced six soil borings in and around the former gasoline UST excavation area and samples were collected from 9 to 11 feet below grade.

- 2015: Seven borings were installed and soil samples were collected from 4 to 6 feet below ground surface (bgs) (SB-2, SB-3, and SB-9), 6 to 8 feet bgs (SB-7), 8 to 10 feet bgs (SB-1, SB-6, SB-10), and 12 to 14 feet bgs (SB-4).
- 2016: Six soil borings were installed and soil samples were collected from 1) the top four feet of soil that is planned for removal to assess waste disposal, and 2) from the underlying soil that will remain following removal (4 to 5 or 4 to 8 feet and included the capillary fringe).

Please let me know if you have any other questions about the project site. As noted in our earlier reports to the project sponsor, there is no evidence of significant environmental conditions associated with historic releases on the property that warrant further investigation or remedial action before or during site redevelopment. The residual detections of metal compounds will generally be removed as part of the 4 feet of soil excavation, thereby further eliminating concerns about past operations on this property.