

Phase I & II Environmental Site Assessment at Former Jerry's Nissan, Rutland, Vermont



Services / Expertise

Phase I ESA ASTM E1527-27
Phase II ESA ASTM E1903-11

Markets

Commercial Client

Project Location

Rutland, Vermont

Date Completed

Present

Project Owner

Vermont Electric Power Company (VELCO)

Project Manager

Lee Rosberg

Project Team

Dan Voisin
Katrina Mattice
Laura Rajnak
Sarah Rathay
Rebecca Mitchell

Subcontractors

Con-Test/Pace Analytical
Platform Drilling and Remediation Services
Vermont Underground Locators



Eastern façade of the former Jerry's Nissan automobile sales and service building in Rutland, Vermont

JERRY'S NISSAN in Rutland, Vermont operated as an automobile sales and service center property from 1974 until its closure in 2014. The Vermont Electric Power Company (VELCO) recently retained Stone Environmental, Inc. to perform Phase I and II environmental site assessments (ESAs) of the property prior to their potential purchase of the property. The Phase I ESA identified recognized environmental conditions (RECs) associated with known releases from two former gasoline underground storage tanks (USTs), operation of a floor drain system in the automotive maintenance garage with an unknown point of discharge, and evidence of releases from automotive service operations.

The Phase II ESA, completed in July and August 2021, included assessments of soil, groundwater, drinking water, soil vapor, and building materials for a broad range of contaminants of concern.

Vapor intrusion assessment included collection of sub-slab soil gas samples, measuring differential pressure between indoor air and sub-slab environments, and collection of vapor dome samples to evaluate mass flux of volatile organic compounds potentially off-gassing from the concrete slab in the automobile service center. Soil gas results indicate that there is a risk of vapor intrusion to indoor air, particularly from the chlorinated volatile organic compounds (VOCs) tetrachloroethylene (PCE) and trichloroethylene (TCE). Vapor dome sample results indicate that petroleum products and chlorinated solvents have been spilled on the concrete slab in sufficient quantity to potentially serve as a long-term source of indoor air contamination via

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volatilization from the slab. Stone anticipates preparing an Evaluation of Corrective Action Alternatives to compare vapor intrusion mitigation/remediation technologies appropriate for planned site reuse.

Soil and groundwater results indicate that multiple releases of petroleum and hazardous materials have occurred at the Site, including

- VOC contamination in soil and groundwater associated with the spreading of petroleum contaminated soil previously excavated from the former UST area.
- Releases of VOCs to the site septic system have resulted in VOC soil and groundwater contamination.
- Historic releases and potential future releases to the floor drain system, which discharges to a wetland on the southern property boundary.
- Releases from former USTs have resulted in groundwater contamination.

Stone anticipates that the Vermont Department of Environmental Conservation will request the property owner conduct additional site investigations to determine the degree and extent of contaminated media from resulting from these releases.