

PERIOD REVIEW REPORT

FORMER "SAKMANN RESTAURANT CORP." PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

NYSDEC Voluntary Cleanup Site Number: V-00083-3

November 2017



Prepared by:

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The undersigned has reviewed this Periodic Review Report and certifies to Palisades Interstate Park Commission and to the New York State Department of Environmental Conservation (NYSDEC) that the information provided in this document is accurate as of the date of issuance by this office.

The undersigned is **NOT** a Qualified Environmental Professional as defined by 6NYCRR Part 375-1.2(a) but is a NYS Professional Engineer. The undersigned possesses sufficient training and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the integrity of the soil cap ground cover and potential soil erosion issues which may impact this site.

Michael Tesik, P.E.
Capital Facilities Regional Manager I
NYS OPRHP

Date

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1.0 INTRODUCTION

1.1 Site Overview

This Period Review Report (PRR) details on-going site management actions to address known environmental conditions at the former "Sakmann Restaurant Corp." (hereafter referred to as the "Site"), located at US Route 9W, Town of Highlands, Orange County, New York. The reporting period for this PRR is November 1, 2012 through November 1, 2017.

On-site contamination resulted from the historic use of the Site as an automotive repair facility. During a site inspection in 2001, wastewater contaminated with degreasers was observed to be discharging into a floor drain in the basement of an on-site garage structure. Laboratory analysis of subsurface soils in the vicinity of the floor drain documented the presence of multiple volatile organic compounds (VOCs) at concentrations above NYSDEC guidance levels (including BTEX, MTBE and chlorinated hydrocarbons). Based on these findings, a spill event (number 0107005) was reported to the NYSDEC in October 2001. The Site entered the New York State Voluntary Cleanup Program (VCP) in November 2003.

A Remedial Action Work Plan RAWP developed to address contamination at the Site was approved as a "final" document by the NYSDEC and New York State Department of Health (NYSDOH) in January 2005. The RAWP addressed the removal of an on-site fuel oil UST, demolition of the Garage and remediation of contaminated soil, additional soil and soil vapor characterization, installation of a soil barrier layer, continued monitoring of on-site groundwater monitoring wells.

During the course of the environmental investigation and remediation, NYSDEC personnel requested specific modification to the scope of work presented in the formerly approved RAWP. These changes were incorporated into a subsequently approved Supplemental Work Plan, issued in December 2005, which called for documentation of indoor air quality at the Restaurant and additional soil investigation. Following building demolition and soil removal activities, contractors for the property owner imported soils for use as a barrier layer. A portion of this material was not from an approved source and a Scope of Work for Investigation of Imported Cover Soils (SOW) was developed to document the imported soil quality. The imported soils were documented to be acceptable for use as backfill and were subsequently covered by an approved barrier layer of imported certified clean soil. NYSDEC requested that the Supplemental Work Plan and the SOW be incorporated into a revised RAWP, which was accepted as a Final document in July 2007 and issued in August 2007. Site monitoring wells were decommissioned in April 2012 and annual ground water sampling is no longer required as approved by NYS DEC.

Site and Well Location Maps are included as Appendix B.

1.2 Effectiveness of Remedial Program

Remedial activities, performed under the NYSDEC approved RAWP, included:

- Investigation of soil gas and air quality in the vicinity of the Restaurant;
- Demolition of the former Garage;
- Remediation of contaminated soil beneath the Garage slab;
- Soil investigations at the former septic system location and west of the Garage;
- Removal of the abandoned fuel-oil UST and confirmatory sampling;
- Installation of a soil barrier layer over areas of low-grade soil contamination;
- Post-remediation groundwater sampling events, no longer required as of 4/19/2012;
- Implementation of an approved Site Management Plan; and,
- Implementation of Required Institutional Controls.

These remedial activities were completed in order to allow the southern portion of the Site to be used as a parking lot and the northern portion to remain undeveloped while limiting impacts to human health and the environment. On-site soil contamination consisting of polycyclic aromatic hydrocarbons (PAHs), metals, and areas containing petroleum odors continues to be present in soils and low level volatile organic compound (VOC) concentrations have been detected in on-and off-site groundwater; however, monitoring of the soil cover and groundwater sampling and analysis indicate that remedial efforts have been sufficiently protective.

A Final Engineering Report (FER), documenting the completion of remedial activities at the site was issued in May 2009 and was approved by the NYSDEC in a letter, dated May 18, 2009. The FER includes a Site Management Plan (SMP) which sets forth guidelines for annual inspections (changed to every 5 years on 11/29/12) of the barrier layer to document SMP compliance, and specifies protocols and reporting requirements for sampling and eventual closure of the monitoring wells. (Monitoring Wells were decommissioned 4/9/2012 and approved by DEC on 4/19/12). The monitoring activities discussed in this PRR are those described in the SMP.

2.0 SITE MANAGEMENT PLAN

After the completion of Site remediation, a SMP, dated October 2007 (Revised January 2009) was prepared which documented operations and maintenance (O&M) plan requirements for the Site. These O&M requirements are to remain in place until the NYSDEC issued a finding that a specific activity or activities can be terminated.

Institutional control/engineering control (IC/EC) requirements are not explicitly stated in the SMP; however, they are specified in the Declaration of Covenants and Restrictions for the Site. IC/EC controls and O&M requirements for the Site are detailed in Sections 2.1 and 2.2, below.

2.1 Institutional Control/Engineering Control Compliance Report

The institutional controls (IC) for the Site include:

- Land use restrictions; and,
- A site management plan.

The sole engineering control at the Site is a soil cover/cap, installed at the time of remediation.

The land use restriction includes the following components:

- No construction, use, or occupancy of the property can result in the disturbance or excavation of the property which threatens the integrity of the soil cap, or which results in unacceptable human exposure to contaminated soils. However, if disturbance of the cap is necessary prior approval of the NYSDEC is required.
- The owner of the property will maintain the cap by maintaining the landscaped cover or by capping the property with another material, with approval of the NYSDEC.
- The property may only be utilized for limited recreational uses including benches, picnic tables, and/or scenic overlooks. In addition, use of the Site will be in conformance with NYSDEC Part 375 (Remedial Program) regulations for "Restricted Commercial Use" and will be not subject to other use without a written waiver from the NYSDEC.

- No construction or site use has resulted in the contravention of applicable land use restrictions following the current owner taking possession of the property in May of 2010. No construction or use of the Site has occurred that has resulted in the disturbance or excavation of the soil cover and none is planned (demolition of the former on-site structure is discussed in Section 2.2.3, below). In the case of a situation which requires excavation (i.e., repair of the on-site utilities), the NYSDEC will be notified and appropriate health, safety and environmental protection measures (i.e., stockpiling excavation soil on and beneath plastic) will be instituted prior to the commencement of excavation. The land use restriction is effective in protecting human health and the environment.
- A soil management plan is included as part of the SMP and addresses the management of any soils generated by potential future soil disturbances (see Section 2.2, below). The plan includes the property monitoring of activities and off-site disposal of any excavated material. Although no on-site excavation has been completed to date, the soil management plan will effectively protect human health and the environment in the event soil needs to be excavated in the future.

Both the deed restrictions on this Site and the SMP have been approved by the NYSDEC.

2.2 Operations and Maintenance Plan Compliance

The O&M plan is detailed in the SMP and includes the following components:

- Groundwater monitoring (no longer necessary as of 4/19/12); and,
- Inspection of the soil cover.

Site monitoring is included as part of the O&M plan, and as such no separate monitoring plan compliance section is included in this PRR. Compliance for each component of the SMP is described below.

2.2.1 Groundwater Monitoring

Monitoring well MW-3D was decommissioned on February 26, 2009 by personnel from Hydro Tech Environmental Corp.

The remaining monitoring wells, MW-1S, MW-1D, MW-2S, MW-2D & MW-4S were closed and decommissioned by Ecosystems Strategies, INC. in April 2012 as in accordance with DEC's standards and the approved Site Management Plan.

2.2.2 Monitoring of Barrier Layer Integrity

As documented in the FER, soil cover had been installed across the northern portion of the Site during June 2007 (Area A). Additional soil cover was installed subsequent to demolition of the restaurant structure during November 2009 (Area B). The two areas of soil cover are depicted on the Well Location Map as produced by Ecosystems Strategies, Inc, dated November 2011 in Appendix B.

On November 10, 2017, Michael Tesik, P.E., employed by the NYS Office of Parks, Recreation and Historic Preservation, inspected all areas of the Site where the soil cover had been previously installed. Overall, these areas were found to be intact; however, in a portion of Area "A" in the northwest corner of site, no vegetation cover remains due to the likelihood of vehicles turning around in this area and some of the soils have been slightly disrupted (to a depth of approximately 3 inches) along with a small depression just south of this area (1' wide x 2' long x 1' deep) was observed. These areas should be filled in with topsoil and seeded to establish vegetation growth. Additionally, the southeast Area "B" is thinly covered with vegetation which appears to be subject to some natural erosion and should be reseeded. The southern area of the property, covered by asphalt, is intact.



Northwest Area "A"



Southeast Area "B"

3.0 CONCLUSIONS and RECOMMENDATIONS

3.1 Compliance with the Site Management Plan

1. All of the requirements of the SMP including monitoring of the barrier layer have been met during this period of review.
2. All the requirements of the institutional controls (groundwater use restriction, the land use restriction) have been met during this review period.
3. The barrier layer was found to be slightly disrupted. It is recommended that these areas should be filled in with topsoil and reseeded to establish vegetation growth

3.2 Performance and Effectiveness of the Remedy

1. Monitoring of the soil cover efforts to date indicate that remedial efforts have been sufficient in protecting human health and the environment.

The Institutional/Engineering Control Certification for the Site is included as Appendix C

3.3 Future Periodic Review Report Submittals

After consultation with NYSDEC, recommendation is terminate the requirements for submission of a future PRRs for this site, and this report, date November 2017, shall serve as the final PRR but periodic monitoring of soil cover shall be continued as the site soil cover is stable and relatively at low risk to natural occurring erosion based on past performance.

APPENDIX A

Photos



Looking Northwest



Looking South



Looking West-North (Asphalt)

APPENDIX B

Maps
(by Ecosystems Strategies, Inc. dated November 2011)

APPENDIX C

Institutional Control/Engineering Control Certification