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8 September 2021

Submitted via email

Megan Kuczka  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
270 Michigan Avenue  
Buffalo, NY 14203-2915

**Subject: Subsurface Investigation and Vapor Intrusion Investigation Work Plan**  
Former Champion Products Facility  
200 North Main Street  
Perry, New York 14530  
NYSDEC Site No. V00189

Dear Ms. Kuczka:

This Site Subsurface Investigation and Vapor Intrusion Investigation Work Plan has been prepared by Antea® Group, Inc. (Antea Group) and AG Geology D.P.C. on behalf of Hanesbrands, Inc. (Hanesbrands), for the Former Champion Products facility located at 200 N. Main Street, located in Perry, New York in association with the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Agreement (VCA) V00189.

## BACKGROUND

In March 2000, Champion entered into a VCA with NYSDEC for the remediation of soil and groundwater underlying the facility, which was impacted by chlorinated and non-chlorinated volatile organic compounds (VOCs). Remediation activities included: excavation of impacted soils, installation and operation of a dual phase vapor extraction system (DPVE) and installation and operation of a sub-slab depressurization system (SSDS). Engineering controls (EC) have been incorporated into the site remedy to control exposure during the use of the site. Institutional controls (ICs) were also placed on usage of the site and mandate operation, monitoring and reporting measures for all ECs and ICs through the NYSDEC approved Site Management Plan (SMP). The Quarterly Inspection and the Periodic Review Report (PRR) are all required by NYSDEC under the terms of the SMP that was finalized in May 2013.

The work proposed in this work plan is to confirm what remaining contamination is left onsite. Following the results of on-site investigation, a summary report will be presented to the NYSDEC detailing the results of the investigation. If VOC impacts are found to be below applicable NYS soil, groundwater, and air standards during this investigation, AG Geology will be requesting the removal of the EC/ICs requirements, discontinuing the use of the SDS, and the halting of the quarterly inspections.

## SUB-SURFACE INVESTIGATION

This subsurface investigation will consist of two soil borings to resample boring locations that previously exceeded the NYS Soil Cleanup Objectives (SCO) for unrestricted use (see attached Figure 1 for proposed locations). The proposed borehole locations will be cleared with soft-digging techniques to 5 ft to avoid striking any underground utilities. The remainder of the borehole will be advanced via a Geoprobe unit to a “clean”



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endpoint (approximately 16 feet based on previous analytical results). Soil samples will be collected at one-foot intervals, screened with a PID and classified using the Unified Soil Classification System (USCS). Three soil samples will be collected from each soil boring: one at 8-10', one at 10-12', and one at the endpoint. All samples will be submitted for laboratory analysis of volatile organic compounds (VOCs) via USEPA method 8260C and will be evaluated in accordance with NYSDEC CP-51 Soil Cleanup Guidance for Gasoline Contaminated Soils. Following the completion of the soil boring advancement all soil cuttings will be used to backfill the borehole.

Five groundwater samples will be collected from existing monitoring well locations, MW-101, MW-106, MW-107, CSW-01, and SCRW-05. The monitoring wells will be purged using bailers. The bailer will be used to extract a minimum of three casing volumes of ground water to remove the majority of the soil and silt captured in the well screen prior to sampling. Collected groundwater samples will be analyzed for chloroethane, methylene chloride, chloroform, 1,1,1-trichloroethane, 1,1-dichloroethane, 1,2,4- trimethylbenzene, 1,2,3-trimethylbenzene, cis-1,2-Dichloroethane, n-butylbenzene, tetrachloroethane, and vinyl chloride following USEPA Method 8260C. The locations of the monitoring wells are shown on Figure 1.

### VAPOR INTRUSION INVESTIGATION

This work plan is consistent with New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York and NYSDEC DER-13 – Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York.

#### Sub-Slab Sampling

As per the October 2006 NYSDOH SVI Guidance, five temporary probes will be installed in the sub-slab of the facility, using inert tubing and will not be advanced any further than 2 inches into the sub-slab material. The probes' tips will be covered with porous inert backfill material, and the implants will be sealed to the surface with non-VOC containing and non-shrinking products. One to three volumes of the sample probe and tube will be purged, while not exceeding 0.2 liters per minute, prior to collection of the two samples. Tracer gas will be used as a quality assurance/quality control measure to verify that no outside air will dilute the sub-slab vapor samples. The samples will be collected in a Summa canister and analyzed for VOCs via TO-15. All conditions during sampling will be documented as per the NYSDOH guidance. The proposed locations of the temporary vapor points are shown on Figure 2.

Prior to sampling, a survey of the facility will be conducted. Potential sources of volatile organic compounds (VOCs) from within and around the facility will be documented prior to sampling. This initial site survey will be completed in accordance with Section 2.11, Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance. The SSDS system will be turned off for at least 24 hours prior to sampling in order to determine neutral conditions onsite.

#### Indoor Sampling

Indoor air sampling activities will be conducted in accordance with NYSDOH guidance. Five indoor ambient air samples will be collected concurrently with the sub-slab vapor samples within the same five areas of the facility. The indoor air samples will be collected over an eight-hour period to be representative of an eight-hour work shift. Samples will be collected in a Summa canister and analyzed for VOCs via TO-15. The proposed locations of the indoor air samples are shown on Figure 2.

#### Outdoor Sampling

One outdoor ambient air sample will be collected concurrently with the indoor ambient air samples and the sub-slab vapor samples. The outdoor air sample will also be collected over an eight-hour period to represent an eight-hour work shift. Field observations will be recorded to help interpret the sampling results, including weather conditions, odors, readings from field instrumentation, and significant activities in the work vicinity. The sample will be collected in a Summa canister and analyzed for VOCs via TO-15. The proposed location for the outdoor air sample is shown on Figure 2 and is susceptible to change based on the wind direction observed during the day of the investigation.

Ms. Mega Kuczka  
NYSDEC  
8 September 2021



**SUMMARY REPORT PREPARATION**

An Investigation Summary Report will be subsequently submitted to the NYSDEC following completion of these field activities and review of the subsequent laboratory analytical data. Please note if VOC impacts are found to be below applicable NYS standards during this investigation, AG Geology will be requesting the removal of the ICs, discontinuing the use of the SDSS, and the halting of the quarterly inspections.

Sincerely,  
Antea®Group/ AG Geology D.P.C.,

A handwritten signature in black ink that reads "Katharine Angel".

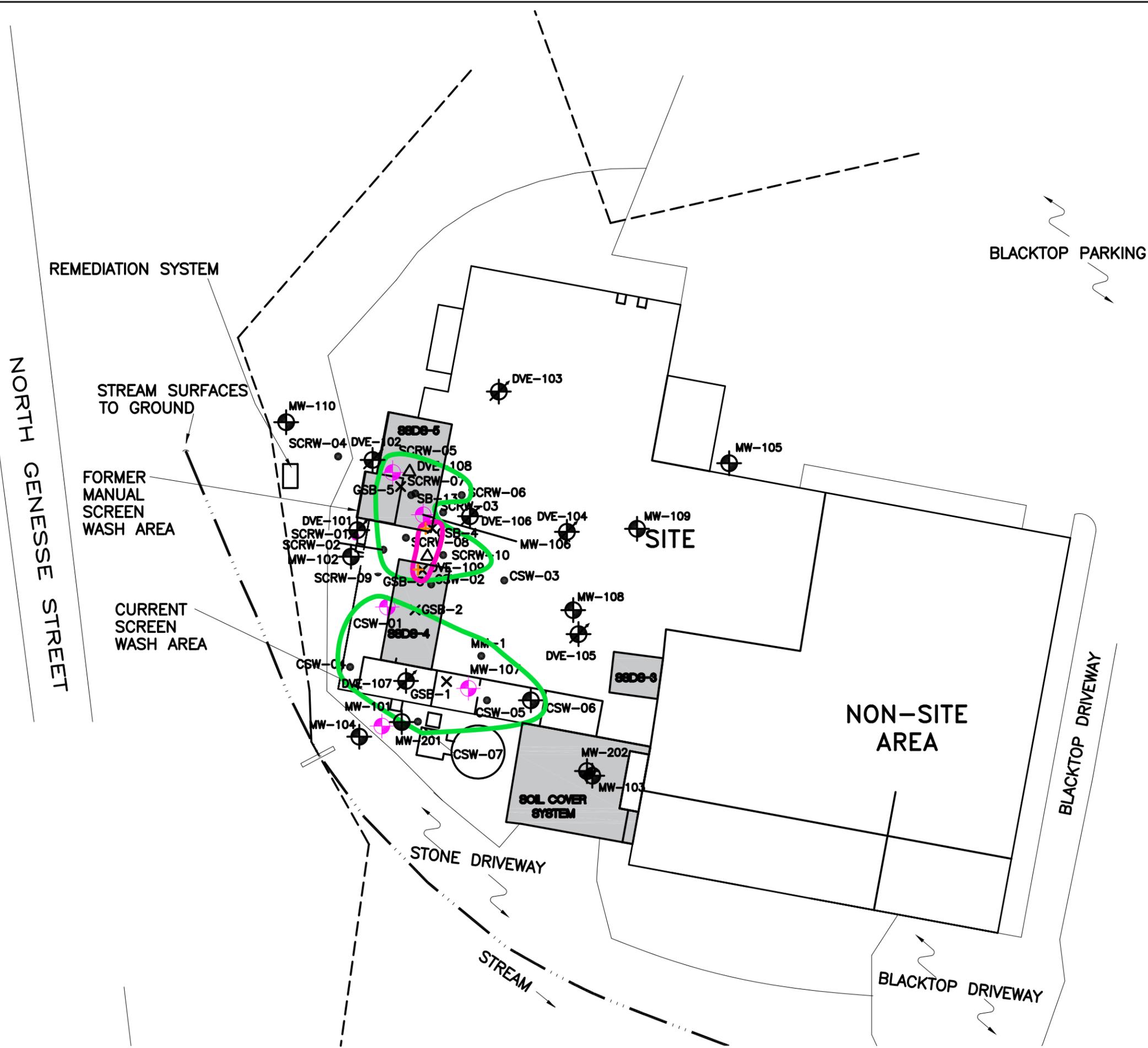
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A handwritten signature in black ink that reads "Eric J. Wu".

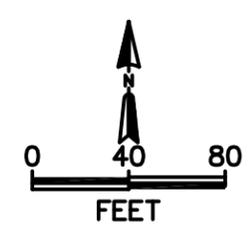
Eric Wu, P.E.  
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**ATTACHMENT 1**

**FIGURES**



- LEGEND**
- SHALLOW MONITORING WELL
  - DEEP WELL LOCATION
  - RECOVERY WELL LOCATION
  - SOIL BORING
  - EXTRACTION WELL
  - SUB-SLAB SAMPLE LOCATION
  - PROPOSED BORING LOCATION
  - 2003 AREAS EXCEEDING PART 375 UNRESTRICTED USE SCOs
  - 2007 AREAS EXCEEDING PART 375 UNRESTRICTED USE SCOs
  - AREA OF ENGINEERING CONTROL
  - PROPOSED GROUNDWATER SAMPLE LOCATIONS

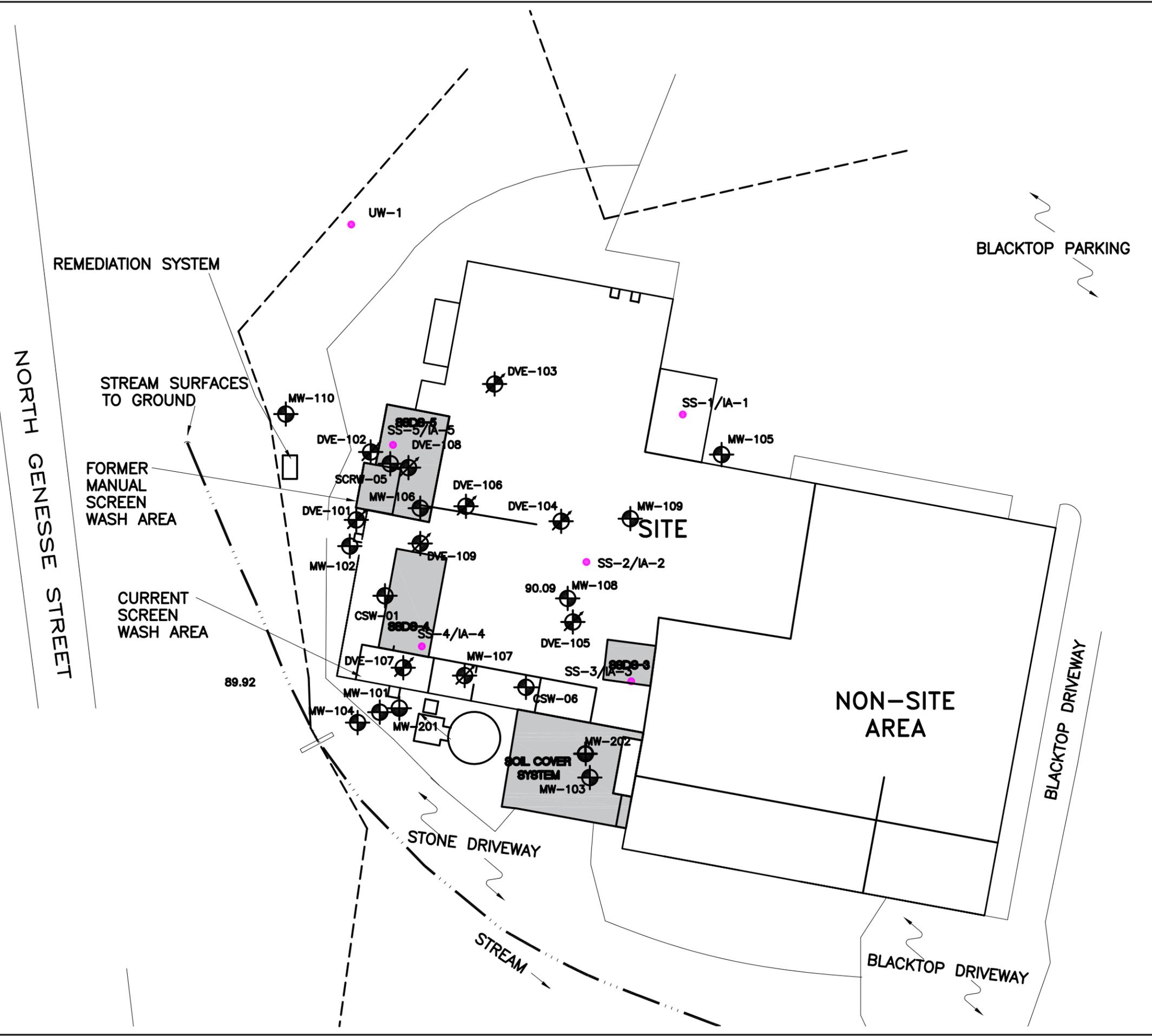


**FIGURE 1**

**SOIL SAMPLE LOCATION MAP**  
FORMER CHAMPION PRODUCTS, INC.  
PERRY, NEW YORK

PROJECT NO. 0610756P	PREPARED BY MTG	DRAWN BY SAA
DATE 05/24/2021	REVIEWED BY KA	FILE NAME FIGURE 3

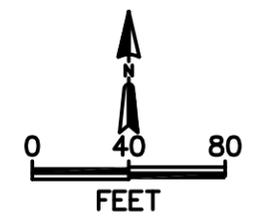




**LEGEND**

- MONITORING WELL LOCATION
- DEEP WELL LOCATION
- RECOVERY WELL LOCATION
- SOIL VAPOR INTRUSION SAMPLE LOCATION
- UW UP WIND
- SS SUB-SLAB
- IA INDOOR AIR

AREA OF ENGINEERING CONTROL



**FIGURE 2**

**SOIL VAPOR SAMPLE LOCATION MAP**

**FORMER CHAMPION PRODUCTS, INC.**  
**PERRY, NEW YORK**

PROJECT NO. 0610756P	PREPARED BY MTG	DRAWN BY SAA	
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