



PRELIMINARY WIPE SAMPLING SUMMARY

Jenkintown, PA
SPS Technologies Fire
February 27, 2025

Submitted March 3, 2025

1.0 INTRODUCTION

On February 19, 2025, CTEH was contacted to provide community air monitoring for SPS Technologies, LLC in conjunction with the United States Environmental Protection Agency (USEPA) and the Pennsylvania Department of Environmental Protection (PA DEP). In addition to air monitoring support, CTEH conducted a preliminary wipe sampling investigation on February 27, 2025 to begin to characterize the nature and extent of potential particulate fallout from the smoke plume associated with the fire at the impacted facility.

This report summarizes the wipe sampling results from samples collected on February 27, 2025.

2.0 AIR MONITORING METHODS

On February 26, 2025, CTEH personnel developed a Surface Wipe Sampling and Analysis Plan to characterize the chemical composition of particulates on surfaces near the impacted facility (**Attachment A**). Sampled surfaces were limited to smooth and non-porous surfaces and samples were collected using a pre-wetted wipe and a 100 square centimeter (cm²) template. Collected samples were delivered by courier to the Pace Analytical Westborough Laboratory for analysis. Wipe samples were analyzed for metals, cyanide, and PAHs following USEPA Method 6010B, 9012, and 8270, respectively.

In total, CTEH collected five wipe samples near the impacted facility. One sample was collected on SPS Technologies' property in a downwind location from the fire (Q001). One sample was collected in an upwind location in a publicly accessible park, approximately one quarter mile north of the facility (Q002). Two samples were collected in downwind locations from the facility. The first downwind community location was on a street light power box at the corner of Jenkintown Road and Runnymede Ave (Q004). The second downwind community location was on top of an equipment box near the sports fields at Jenkintown Middle/High School. The remaining sample was collected at the corner of Elm Avenue and Cheltena Avenue. This final sample is currently being held at the analytical laboratory and has not been analyzed. Additionally, field blanks were sent for analysis for each analytical methods. Collection of a field blank involves removing a wipe from its packaging in the field and placing it straight into collection media without collecting a wipe sample. This sample serves as a control for potential impacts of the collection media and field conditions on the laboratory equipment. A map of wipe sampling locations is provided in **Attachment B**.

Health-based surface screening levels were derived for comparison to outdoor wipe sampling results. These screening values were based on surface screening levels established by the USEPA Contaminants of Potential Concern (COPC) Committee of the World Trade Center Indoor Air Task Force Working Group for

indoor settled dust¹ and adjusted for outdoor exposure scenarios. Per the USEPA COPC guidance document, surface screening levels for non-carcinogens (metals and cyanide) were developed to be protective for children as sensitive receptors, assuming a five-year exposure period covering ages one to six years old. Surface screening levels for carcinogens (PAHs) were developed to be protective over a thirty-year exposure period, covering ages one to thirty-one, and assumes a seventy-year human lifetime. Additional details about surface screening level calculation are included in the Surface Wipe Sampling and Analysis Plan in **Attachment A**.

When comparing wipe sampling results to the surface screening levels, the various metals analyzed and cyanide were considered individually against their respective screening levels. To evaluate PAHs, potency equivalency factors (PEFs) were applied to PAH sampling results and a single PAH total concentration was calculated by summing together PEF-adjusted PAH sampling results within each sample, as described previously by the Agency for Toxic Substances and Disease Registry². If a PEF was not published by ATSDR for a given PAH, the PAH was assumed to have an equivalent potency of benzo(a)pyrene as a conservative measure to avoid eliminating any evaluated PAH from risk analysis. Additionally, if a PAH species had a non-detect result, half of the method detection limit was substituted as the concentration as an additional conservative measure to avoid eliminating any evaluated PAH from risk analysis

3.0 WIPE SAMPLING RESULTS

Wipe sampling results are summarized in **Table 1**. Wipe sampling results for total concentrations of PAHs adjusted for PEFs and compared to the total PAHs outdoor surface screening level are summarized in **Table 2**.

¹ USEPA COPC, 2003: https://archive.epa.gov/wtc/web/pdf/contaminants_of_concern_benchmark_study.pdf

² ATSDR, 2022: <https://www.atsdr.cdc.gov/pha-guidance/resources/ATSDR-PAH-Guidance-508.pdf>

Table 1. Wipe Sampling Results and Settled Dust Screening Values Comparison ($\mu\text{g}/100 \text{ cm}^2$)

Analyte	Outdoor Surface Screening Level	Wipe Sampling Results by Location*			
		Q001	Q002	Q004	Q006
Aluminum, Total	94073	102	17.3	224	30.1
Arsenic, Total	23	1.31	< 0.216	< 0.216	< 0.216
Barium, Total	6585	11.1	0.646	3.64	1.18
Cadmium, Total	93	0.364 (J)	< 0.028	< 0.028	< 0.028
Chromium, Total	282	2.03	< 0.424	0.617	< 0.424
Cobalt, Total	1881	0.44 (J)	< 0.124	< 0.124	1.08
Copper, Total	3763	9.82	0.233	1.03	0.512
Lead, Total	16	3.23	0.141	0.819 (J)	0.763 (J)
Nickel, Total	1881	3.83	< 0.404	< 0.404	< 0.404
Selenium, Total	470	< 0.164	< 0.164	< 0.164	< 0.164
Silver, Total	470	0.418	< 0.149	< 0.149	< 0.149
Cyanide	33	< 0.23	< 0.23	< 0.23	< 0.23
Acenaphthene		< 0.04	< 0.04	< 0.04	< 0.04
2-Chloronaphthalene		< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene		0.21	0.05 (J)	0.03 (J)	< 0.01
Naphthalene		< 0.04	< 0.04	< 0.04	< 0.04
Benzo(a)anthracene		0.06 (J)	0.04 (J)	0.03 (J)	0.02 (J)
Benzo(a)pyrene		0.05 (J)	0.03 (J)	< 0.02	< 0.02
Benzo(b)fluoranthene		0.16 (J)	0.04 (J)	0.02 (J)	< 0.02
Benzo(k)fluoranthene		0.08 (J)	0.04 (J)	0.02 (J)	< 0.02
Chrysene		0.14 (J)	0.04 (J)	0.02 (J)	< 0.02
Acenaphthylene		< 0.03	< 0.03	< 0.03	< 0.03
Anthracene		0.02 (J)	< 0.02	< 0.02	< 0.02
Benzo(ghi)perylene		0.11 (J)	0.03 (J)	0.02 (J)	< 0.02
Fluorene		< 0.02	< 0.02	< 0.02	< 0.02
Phenanthrene		0.25	0.08 (J)	0.04 (J)	0.09 (J)
Dibenzo(a,h)anthracene		0.09 (J)	0.03 (J)	< 0.02	< 0.02
Indeno(1,2,3-cd)pyrene		0.12 (J)	0.04 (J)	< 0.02	< 0.02
Pyrene		0.09 (J)	0.04 (J)	0.02 (J)	< 0.01
2-Methylnaphthalene		< 0.06	< 0.06	< 0.06	< 0.06

*If no detectable concentration was observed, the method detection limit is preceded by a "<" symbol.
(J) – Estimated concentration above the method detection limit but below the reporting limit.

Table 2. PEF-Adjusted PAH Sampling Results and Settled Dust Screening Value Comparison ($\mu\text{g}/100\text{ cm}^2$)

Analyte	Outdoor Surface Screening Level	Wipe Sampling Results by Location			
		Q001	Q002	Q004	Q006
PAHs	8.7	1.3	0.5	0.3	0.3

Overall, metals and PAH concentrations were lower in the samples collected in community locations than the sample collected on-site. The upwind community sample (Q002) contained similar chemical detection frequencies and concentrations as the downwind community samples (Q004 and Q006). As such, potential smoke particulate-related compounds were not identified in downwind locations in concentrations that might be unexpected for the area. Additionally, cyanide was not detected in any sample.

There were no exceedances of outdoor surface screening levels for any analyte evaluated at any sampling location, including the on-site sample (Q001). These results indicate that measured surface chemical concentrations in the geographical areas evaluated near the facility do not pose a human health risk.

Attachment A

Surface Wipe Sampling and Analysis Plan



SPS TECHNOLOGIES FACILITY FIRE JENKINTOWN, PA

SURFACE WIPE SAMPLING AND ANALYSIS PLAN

Version 1.0

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February 26, 2025

Approval			
Interim Incident Commander		Date	
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1.0 Introduction and Purpose

This settled dust surface wipe sampling plan (Surface Sampling Plan) is intended to be used in response to the SPS Technologies Facility Fire which began on February 17, 2025.

This plan is designed to support the collection of outdoor surface wipe samples in publicly accessible areas surrounding the incident site, in an effort to characterize the potential hazards associated with particulate fallout from fire smoke, if any. Wipe sampling in areas near the incident site will be used to assess the need for further evaluation, containment, and/or cleanup activities.

2.0 Sampling Plan Objectives

The overall goal of this plan is to characterize the chemical composition of particulate fallout from fire smoke, specifically focusing on common hazards of structure fire smoke. Specific objectives include:

- Characterize outdoor surface levels of cyanide, metals, and polycyclic aromatic hydrocarbons (PAHs) in the neighborhoods downwind of the smoke plume from the facility fire.
- Determine what follow-up actions, such as additional investigation or clean-up, are warranted in the community for any identified surface impacts.

All fieldwork and data collection will be conducted in accordance with this plan. Use of this plan will aid documentation, communication, planning, and overall quality associated with the monitoring/ sampling and analysis by:

- Encouraging Field Teams to consider their goals and objectives before the generation of environmental data;
- Documenting information in a standardized format;
- Increasing communication between sampling personnel and decision makers; and
- Detailing expectations and objectives before samples are collected.

3.0 Data Quality Objectives

The data collected during field activities can be used to assess potential human exposures to constituents of concern related to the incident. A strategic planning approach based on the scientific method will be employed for data collection activities, providing a systematic procedure to ensure the type, quantity, and quality of data used in decision-making will be appropriate for the intended application. All samples will be submitted to the analytical laboratory for a Level II data quality package. Additionally, 20% of samples may be submitted to the analytical laboratory for a Level IV data quality package.

4.0 Community Outdoor Surface Wipe Sampling

Wipe samples will be used to identify potential outdoor surface impacts from the deposition of chemicals of concern, to assess the need for further evaluation, containment, and/or cleanup activities, and to inform Incident Command. These sampling efforts will focus on target metals identified under USEPA guidance (e.g., cobalt, manganese, and nickel), with sampling locations determined by visual inspection in areas that could be reasonably concluded to have been impacted by smoke particulate fallout. Samples will be collected in publicly accessible locations, avoiding private property and concerns of trespassing.

For the purposes of this Sampling Plan, 'Community' will refer to accessible geographical areas outside the SPS Technologies fence line, including but not limited to residential, commercial, and industrial areas where Field Teams can safely and feasibly conduct outdoor surface sampling activities. The data that will be generated as part of this Surface Sampling Plan will be used to 1) compare with settled dust screening levels; and 2) compare to an established background level or with collected background sample(s).

4.1 Location Selection

Wipe sampling will be performed on flat, non-porous surfaces that may have been impacted by smoke particulate fallout from the SPS Technologies facility fire. Sampling locations to characterize potential smoke particulate fallout will be chosen in publicly accessible areas in the neighborhoods and/or commercial areas to the southeast of the impacted facility, which was downwind during the fire. Background sample locations may be selected to the north/northwest of the incident site from upwind areas of the facility during the time of the fire. Background samples can be used to assist in the comparison of samples collected within the potentially affected area to previously existing environmental conditions from the surrounding area.

4.2 Surface Wipe Sampling Methodology and Analysis

Sampled surfaces will be limited to smooth and non-porous surfaces, as rough or porous surfaces may hinder collection efficiency of particulates resulting in underestimation of any surface contamination. The history of the surface must also be considered as previous contamination, recent cleanings, special coatings, and other factors may result in sample bias. Surface wipes will be collected using a pre-wetted wipe and a 100 square centimeter (cm²) template. Where a template cannot be used due to the irregular nature of the surface being sampled, the sample area will be approximated to as close to 100 cm² as the sampler can achieve. Nitrile gloves will be worn by sampling personnel and changed between activities at each discrete sample collection location. Previously worn nitrile gloves will be discarded in appropriate waste receptacles with other PPE. General wipe sample collection will use the following procedure:

1. Remove a wipe from its package and unfold it.

2. Wipe the surface to be sampled using fingertips held together and applying firm pressure. Use an overlapping 'S' pattern to cover the entire surface with horizontal strokes.
3. Fold the exposed side of the wipe in and wipe the same area using vertical 'S'-strokes.
4. Fold the exposed side of the wipe and perform a third wiping around the perimeter of the sampling area within the template.
5. Fold the wipe, exposed side in, and place it into a clean hard-walled sample container (e.g., 4oz soil jar) with preservative as indicated by the necessary analytical methods. Seal securely and label the sample container.

The sampling team will make a reasonable effort to avoid damage to sample location surfaces. Whenever possible, the sampling team will avoid collecting wipe samples on painted surfaces that may be damaged by abrasion from any present soil or debris from the wiping process. If the surface is inadvertently damaged because of the sampling process it will be brought to the attention of the sampling team manager so appropriate actions can be taken.

Wipe samples will be sent under chain-of-custody (COC) to an accredited, off-site laboratory for analysis. Wipe samples will be analyzed for metals, cyanide, and PAHs following USEPA Method 6010B, 9012, and 8270, respectively.

4.3 Outdoor Surface Screening Levels

For initial screening, surface wipe sampling results will be compared to surface screening levels established by USEPA Chemicals of Potential Concern (COPC) Committee of the World Trade Center Indoor Air Task Force Working Group. The USEPA COPC screening levels were originally derived for assessing indoor residential surfaces and were therefore adjusted to account for the greater dissipation of dust on outdoor surfaces as well as the lesser amount of time spent outdoors by children and adults. Additional details pertaining to the derivation of these residential outdoor surface screening values is attached in **Appendix A**.

If sampling results indicate that concentrations of target analytes are below their respective screening values or background concentrations, no further action is needed. Exceedances of screening values do not necessarily indicate the existence of a health concern but may indicate the need for further investigation. If exceedances are observed, an additional site-investigation, which may include additional surface wipe sampling or other sampling types, may be performed.

5.0 Sample Handling Procedures

Samples will be placed in laboratory-supplied sample containers, appropriate for the intended analysis, labeled, and placed in a container pending shipment and laboratory analysis. Samples will be packaged, labeled, and documented in an area which is free of impact and provides for secure storage. Custody seals will be placed on each sample container, and chain-of-custody procedures will be maintained from the time of sample collection until arrival at the laboratory to protect sample integrity. Shipping or transporting of samples to the laboratory will be done within a timeframe that meets recommended holding times, as applicable.

6.0 Sample Labeling

Sample containers will be clearly labeled with the following information:

- Unique sample identification;
- Sample Type;
- Sampler name or initials;
- Date sample collected;
- Time sample collected; and
- Analysis to be performed.

7.0 Quality Assurance

Sampling will be carried out in conjunction with a well-defined quality assurance (QA) program. The goal of the field QA program is to document that samples are collected without the effects of accidental cross- or systematic contamination and refers to the sampling, analysis, and data validation procedures for generating valid and defensible data. To provide QA for the proposed sampling event, the following sampling, analysis, and data validation procedures may be performed as deemed necessary by the CTEH project manager, project technical director, or environmental lead in accordance with sampling equipment and activities:

7.1 Field Blank Samples

Field blank samples will be submitted with approximately every ten samples. Field blanks will be used to evaluate the potential for sample contamination with target analytes from the manufacture, storage, handling, shipping, and analysis of the sample. Field blanks will be handled and treated following the same steps in Section 3.0, except for actually wiping the surface.

7.2 Laboratory QA

Laboratory quality control procedures will be conducted in a manner consistent with relevant State and federal regulatory guidance. Deliverables will contain the supporting documentation necessary for data

validation. Internal laboratory quality control checks will include method blanks, matrix spikes (and matrix spike duplicates), surrogate samples, calibration standards, and laboratory control standards (LCSs).

7.3 Data Validation

Validation of the data generated by the laboratory performing the analyses will include at a minimum sample holding times, accuracy, precision, contamination of field generated or laboratory method blanks, and surrogate compound recovery. Accuracy may be determined by evaluating LCS and MS recovery. Precision may be determined by evaluating laboratory and field duplicate samples. Level II data validation may be performed on 100% of submitted samples. Level IV data validation may be performed on at least 20% of submitted samples.

8.0 Decontamination Procedures

Decontamination procedures refer to the steps taken to minimize the potential for offsite contamination and cross-contamination between individual sampling locations. Fresh wipe sampling template will be used for each sampled location.

Nitrile gloves will be worn by sampling personnel and changed between activities at each discrete sample collection location. Previously worn nitrile gloves will be discarded in appropriate waste receptacles with other Personal Protective Equipment (PPE).

9.0 Sampling Waste Disposal

Decontamination fluids and contaminated PPE will be containerized and collected at the designated onsite waste staging area as needed.

All produced waste onsite will be managed and disposed of in a manner consistent with regulatory guidelines and requirements.

10.0 Data Analysis

To assess potential outdoor surface impacts from chemicals of concern associated with the SPS Technologies Facility Fire, the wipe samples will be analyzed for the presence/absence of the con, and should they be found, the concentrations of these metals will be evaluated relative to screening levels in **Section 4.3**.

11.0 Records Management

Records management refers to the procedures for generating, controlling, and archiving project-specific records and records of field activities. Project records, particularly those that are anticipated to be used as evidentiary data, directly support current or ongoing technical studies and activities, and provide historical evidence needed for later reviews and analyses, will be legible, identifiable, retrievable and

protected against damage, deterioration, or loss on a centralized electronic database. Handwritten records will be written in indelible ink. Records will likely include, but are not limited to, the following: bound field notebooks on pre-numbered pages, sample collection forms, personnel qualification and training forms, sample location maps, equipment maintenance and calibration forms, chain-of custody forms, maps and drawings, transportation and disposal documents, reports issued as a result of the work, procedures used, correspondences, and any deviations from the procedural records. Documentation errors will be corrected by drawing a single line through the error so it remains legible and will be initialed by the responsible individual, along with the date of change, and the correction will be written adjacent to the error.

Appendix A: Assessment of Health-Protective Residential Screening Levels in Settled Dust



Selection of Health-Protective Residential Screening Levels for Settled Dust on Indoor and Outdoor Surfaces

Beginning on February 17, 2025, the SPS Technologies facility in Jenkintown, PA experienced a fire. As part of the response efforts, CTEH collected outdoor surface wipe samples in publicly accessible areas near the incident site to test for surrogate chemicals of smoke particulate fallout.

For initial screening purposes, analytical surface wipe sample results were compared to surface screening levels established by the USEPA Contaminants of Potential Concern (COPC) Committee of the World Trade Center Indoor Air Task Force Working Group for indoor settled dust.¹ The USEPA COPC derived surface screening levels based on input parameters associated with a reasonable maximum exposure (RME). For non-carcinogens, this incorporates a childhood residential exposure scenario that considers ingestion and dermal contact with dust residues on indoor surfaces for 12 hour per day, 365 days a year, from age 1 through 6, with contact assumed to begin at age 1, when infants generally become mobile. For carcinogens, this incorporates a residential exposure scenario that considers ingestion and dermal contact with dust residues on indoor surfaces for 12 hours per day, 365 days a year, from age 1 through 31, and assumes an average human lifetime of 70 years. Dose rates were estimated based on a number of assumptions - for example, the fraction of dust residues that can be transferred to the skin, daily skin loads, mouthing behaviors, and dissipation of surface loading over time. For dermal exposure, USEPA calculated daily skin loads of dust as a function of skin surface area and exposure time with indoor surfaces. Dust ingestion considered the frequency of hand-to-mouth events, assuming a frequency of 9.5 times/hr for children aged 1 to 6. The derivation of these screening levels, including equations and exposure assumptions, can be found in Appendix D of the USEPA COPC document.¹ In the case of cyanide, the USEPA COPC did not derive a surface screening value for indoor settled dust. As such, a surface screening value was derived for the purposes of the current evaluation using the equations cited by USEPA COPC, the current Reference Dose for cyanide², and a citation for a dermal absorption factor for free cyanide³.

For at least two reasons, higher settled dust surface screening levels are justifiable for outdoor surfaces sampled in response to the incident. First, people will likely spend much less than 12 hours per day, on average, in contact with outdoor surfaces. Further, it is likely that dust deposited on outdoor surfaces will dissipate faster than dust on indoor surfaces.

Exposure to settled dust is a function of the amount of time an individual is in contact with the surface where the dust deposits. In developing surface screening levels for indoor surfaces, the USEPA COPC assumed an exposure time of 12 hours per day to indoor surfaces affected by settled dust.¹ In contrast, most people do not spend 12 hours per day in contact with outdoor surfaces. For example, for “doers” (i.e., people that spend time outside), the mean time spent outdoors for individuals 18 to <64 years of age is 281 minutes (4.7 hours per day).⁴ This includes time spent outdoors at the residence as well as locations away from the residence. The mean outdoor time for children is considerably less; therefore, the use of 281 minutes is conservative and health-protective of child exposures.³ The USEPA COPC assumption of indoor surface contact overestimates the amount of outdoor surface contact by as much as 2.6 times.

¹ USEPA COPC, 2003: https://archive.epa.gov/wtc/web/pdf/contaminants_of_concern_benchmark_study.pdf

² USEPA, 2025: https://iris.epa.gov/ChemicalLanding/&substance_nmbr=31

³ DTSC, 2015: https://dtsc.ca.gov/wp-content/uploads/sites/31/2023/06/PEA_Guidance_Manual.pdf

⁴ USEPA, 2011: <https://www.epa.gov/expobox/exposure-factors-handbook-2011-edition>

As such, settled dust screening levels based on the duration of exposure to indoor dust will overestimate outdoor dust exposure by 2.6 times.

Additionally, the surface loading of a contaminant in dust is likely to diminish exponentially over a 30-year exposure period as a result of factors including degradation, surface cleaning, and transfer. When comparing the potential rate of dust dissipation in an indoor environment compared to an outdoor environment, the dissipation half-life for an outdoor environment is considerably less (i.e., outdoor dust would be expected to dissipate more quickly than indoor dust) due to meteorological factors (e.g., wind and rainfall). In fact, studies by Allott et al., (1992) report a mean half-life of 270 days (9 months) for deposited dust in outdoor environments where the source of contamination is re-suspended and re-deposited.⁵ In contrast, the USEPA COPC assumed a half-life for deposited indoor dust of 22 months. Based on the assumed half-life for outdoor dust (9 months) versus indoor dust (22 months), outdoor dust can be said to dissipate at a rate 2.4 times more rapidly than indoor dust. As such, surface screening levels based on the dissipation rate of indoor dust will overestimate outdoor dust exposure by 2.4 times.

The greater dissipation of dust from outdoor surfaces as well as the lesser amount of time spent outdoors justifies a modification of the USEPA COPC indoor surface screening levels when applying these values to outdoor surfaces. In the USEPA COPC equations used to derive indoor surface screening levels, the effects of the dissipation factor and exposure time are multiplicative. Considering the effects of increased outdoor dust dissipation rate and decreased outdoor exposure time, the USEPA COPC indoor surface screening levels can be increased by a factor of 6 (2.4-fold x 2.6-fold = 6.2) and still be protective of the health of residents contacting outdoor surfaces.

The adjustment of surface screening levels for indoor and outdoor surfaces is in keeping with the California Department of Public Health (CDPH) practice of identifying lead contaminated dust on floors. The CDPH definition of lead-contaminated dust on indoor floors is 10 µg/ft² or higher whereas for outdoor floors, the limit is 400 µg/ft².⁶ In this case, the health-protective screening level for outdoor exposures is 40 times greater than the indoor screening level.

Table 1 includes indoor surface screening levels cited in the USEPA COPC document, as well as the derived cyanide surface screening using the same methodology described by USEPA COPC. This table also includes outdoor surface screening levels derived by increasing the adjusted indoor surface screening levels by a factor of 6 to account for the greater dissipation of dust from outdoor surfaces as well as the lesser amount of time spent outdoors. This table contains screening values in units of µg/100 cm² to match the units in which that analytical laboratory will report wipe sampling results.

⁵ Allott et al., 1992: <https://pubs.acs.org/doi/10.1021/es00035a011>

⁶ CDPH, 2022: https://www.cdph.ca.gov/Programs/CCDCPP/DEOD/CLPPB/Pages/lead_contaminated_dust.aspx

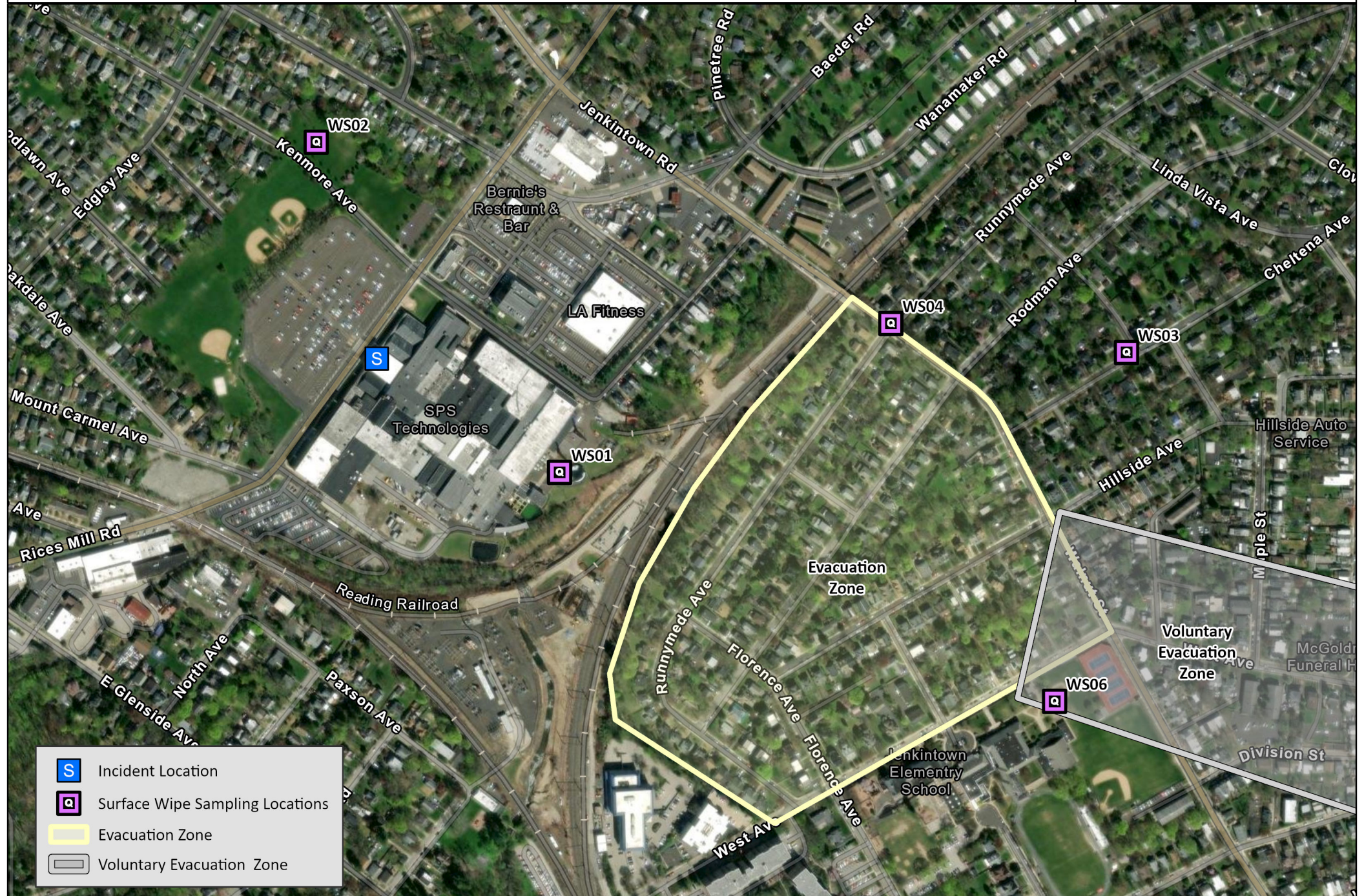
Table 1: Indoor and Outdoor Surface Residential Screening Levels ($\mu\text{g}/100\text{ cm}^2$)

Analyte	Indoor Screening Level	Outdoor Screening Level*
Aluminum	15679	94073
Arsenic	3.9	23
Barium	1098	6585
Cadmium	16	93
Chromium	47	282
Cobalt	314	1881
Copper	627	3763
Lead	2.7	16
Nickel	314	1881
Selenium	78	470
Silver	78	470
Cyanide	5.6	33
PAHs	1.45	8.7

*Derived by multiplying the adjusted indoor surface screening levels by a factor of 6 to account for the greater dissipation of dust from outdoor surfaces as well as the lesser amount of time spent outdoors.
 $\mu\text{g}/\text{cm}^2$ = micrograms per square centimeter

Attachment B

Map of Sampling Locations



- S Incident Location
- Q Surface Wipe Sampling Locations
- Evacuation Zone
- Voluntary Evacuation Zone

