UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

SAFETY KLEEN SYSTEMS INC.

SILVER SPRING, MARYLAND

EPA ID NO. MDD000737395

Prepared by
Office of Remediation
Land and Chemicals Division
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List of Acronyms

AR	Administrative Record
COC	Contaminant of Concern
COMAR	Code of Maryland Regulations
EI	Environmental Indicator
EPA	Environmental Protection Agency
FDRTC	Final Decision Response to Comments
GPRA	Government Performance and Results Act
IC	Institutional Control
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
MTBE	Methyl Tert-Butyl Ether
RCRA	Resource Conservation and Recovery Act
SB	Statement of Basis
SL	Screening Level
SSL	Soil Screening Level
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VOC	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Safety Kleen Silver Spring Maryland Service Center located in Silver Springs, Maryland (hereinafter referred to as the Facility or Site). EPA's proposed remedy for the Facility consists of the following components: 1) natural attenuation with continued monitoring until drinking water standards or background levels are met; 2) vapor intrusion controls 3) compliance with and maintenance of groundwater use restrictions to be implemented through institutional controls. This SB highlights key information relied upon by EPA in proposing its remedy for the Facility.

The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901 et seq. The Corrective Action program requires that facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. Maryland is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the state for the Corrective Action Program.

EPA is providing a 30-day public comment period on this SB. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the public comment period has ended.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating http://www.epa.gov/reg3wcmd/correctiveaction.htm. The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section VIII, Public Participation, for information on how you may review the AR.

Section 2: Facility Background

2.1 Introduction

The Facility is currently owned by Spectrum Partners LLC. From approximately 1982 until April 1996, Safety-Kleen Systems, Incorporated of Plano, Texas (Safety-Kleen) operated the Facility as an accumulation point for spent solvents and other fluids generated by Safety-Kleen customers. Safety Kleen occupied two warehouses in a building with other tenants in adjacent offices. Safety Kleen occupied the 12158 and 12164 Tech Road tenant spaces. The Facility is situated on 10 acres with a parking lot and an area where two underground storage tanks (USTs or tanks), a return and fill station area, and associated piping trench had been located (UST Area). The Facility is situated in an operating industrial park. Neighboring properties are involved in various forms of industrial activities.

Currently the Facility's former warehouses which Safety Kleen occupied are used as a Credit Union and a flower shop.

2.2 Areas of Investigation

2.2.1 UST Area

Previously, two 12,000-gallon USTs were used at the Facility. The USTs were located in a tank pit on the northeast side of the Facility building. One UST was used to store spent parts washer solvents and the other UST stored product, a mineral spirits based solvent. Two loading units, called drum washers, were used to transfer the solvents to the USTs. There were also two areas designated for container storage. The UST used to store spent parts washer solvents was under a Controlled Hazardous Substances permit issued by MDE.

The USTs were removed in April 1996 when Safety Kleen ceased operations. During the removal activities, soil was excavated from the tank pit and confirmatory soil samples were taken from the walls and floor of the excavation and along the trench containing the pipes running from the return and fill station to the USTs. The results from these samples detected total petroleum hydrocarbons (TPH) as mineral spirits and a number of volatile organic compounds (VOCs) in the soil. Groundwater monitoring at this Facility has been on-going since July 1989 and has historically shown detections of TPH, benzene, toluene, ethylbenzene, xylene, and some other VOCs.

Results for TPH sample analysis at this Facility represent the total mass of hydrocarbons present in the sample without identifying individual compounds. EPA has published screening levels (SLs) for individual fractions of TPH with similar physical and chemical properties; however, these SLs for TPH fractions cannot be compared to

results for the aggregate total concentrations. While no comparison of reported TPH concentrations to EPA SLs can be made, note that MDE has a groundwater cleanup standard for TPH of 0.1 mg/L and a soil cleanup standard for TPH of 100 parts per million (ppm) in the Facility Post Closure Permit.

Safety-Kleen has operated a Soil Vapor Extraction (SVE) system at the Facility from August 1993 until sometime in 2011. It was located just south of the UST Area. The Maryland Department of the Environment (MDE) issued a Post Closure Permit for the area in February 2001, which includes remediation goals and requirements for the cleanup of TPH, VOCs, organic compounds and metals in the groundwater and soil. The contaminant concentrations in groundwater have shown an overall decreasing trend over the past five years, although there have been some fluctuations from the overall trend. Trend charts for Perchloroethylene (PCE) and TPH in groundwater are located in the Safety Kleen Semiannual Progress Report July 1 – December 31, 2013. The concentrations of a number of contaminants have already dropped, and remained, below the groundwater protection standards specified by the Post Closure Permit. However, TPH concentrations, although significantly reduced, still remain above the groundwater protection standards in the Post Closure Permit.

The SVE system recovery rate had diminished to zero asymptotically. An attempt was made to recover additional contaminants by operating the system in a pulsing mode by turning it off for a period of time and then on again. However, there were no significant additional recoveries. In 2011, the SVE motor burned out and the SVE has not been operating since with approval from MDE.

MDE is currently reviewing a request from Safety-Kleen to terminate the Facility's Post Closure Permit.

2.2.2 Safety Kleen Building and Parking Lot

The Facility building contained two solvent storage areas. Each area was located in the warehouse part of the building, one of which also housed the Facility's offices and is referred to as the east container storage area. The second area is located in the other Facility warehouse and is called the west container storage area. These areas consisted of a concrete floor and curbing. Each container storage area included a spill containment trench at the entrance or entrances of the area (the east container storage area has one entrance and containment trench, and the west container storage area has two entrances and containment trenches).

Safety-Kleen also stored PCE product for distribution to local dry cleaners and collected and temporarily stored spent PCE from local customers. The PCE operations included four 550-gallon product storage tanks (which were located inside a concrete secondary containment area in the Facility building), and drums of immersion cleaner and waste PCE that were stored in a concrete secondary containment area prior to being

shipped off-site for recycling and/or disposal. In addition, PCE was spilled in the parking lot area from loading and unloading of solvents. MDE inspection reports also include details of leaking containers and problems with secondary containment for the PCE tanks in the building.

The Facility is impacted by PCE contamination in groundwater from the neighboring former International Fabricare Institute (IFI) facility to the north. The PCE plume associated with the IFI facility covers approximately 30 acres and impacts groundwater to the southeast of the Facility.

Section 3: Summary of Environmental Investigations

3.1 Environmental Investigations

For all environmental investigations, groundwater concentrations were compared to federal Maximum Contaminant Levels (MCLs) promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141, or EPA Region III Screening Levels (SL) for tap water for chemicals for which there are no applicable MCLs. Soil concentrations were screened against EPA SLs for residential soil and industrial soil. EPA also has Soil Screening Levels (SSLs) to evaluate the potential for transfer of contamination from soil to groundwater and soil concentrations were also screened against these SSLs.

3.1.1 UST Area

Closure Report and Certification, May 1996

April 1996 - the two USTs were removed at the Facility. Elevated TPH concentrations were observed at each of the April 1996 soil UST excavation soils samples, at concentrations ranging from 840 milligram per kilogram (mg/kg) along the south wall, to 11,000 mg/kg along the west wall of the tank pit. Low concentrations of nine volatile organic compounds (VOC) were also detected above the laboratory detection limit in the April 1996 soil UST excavation soil samples. The VOC concentrations were below the EPA Region 3 SLs for residential soils.

Tetrachloroethene Investigation Report, July 2, 2008.

In April 2008, Safety Kleen advanced two soil borings outside of the backfill material, along the north and former UST excavation. The objective of the soil sampling was to confirm residual soil quality, following operation of the SVE system at the Facility. TPH concentrations in the former tank basin area were non-detect. Two VOCs (1,2-dichlorobenzene at 0.0099 mg/kg and 1,4- dichlorobenzene at 0.034 mg/kg) were detected in one of the April 2008 samples, but the concentrations were below the applicable SLs for residential soil. These results indicate that the SVE system has effectively reduced soil impacts in the source zone.

3.1.2 Safety Kleen Warehouse and Parking Lot

December 18, 2008 Report for MDE

MDE performed a sub-slab vapor and indoor air sampling event, Membrane Interface Probe (MIP) survey, and soil boring program at the Facility. The findings of this work included the following:

• Soil gas beneath the Facility building has been impacted by subsurface PCE contamination. The highest sub-slab PCE vapor concentration (1,190 micrograms per cubic meter (ug/m3)) was detected in a sample collected from beneath Safety-Kleen's former 12158 Tech Road tenant space.

• The highest Electron Capture Detector (ECD) reading was recorded in the MIP boring (MIP-12) advanced closest to the former location of the PCE storage tanks in the 12164 Tech Road tenant space. MIP-12 is surrounded by wells MW-6, 7, 9, 10 and 11.

• The highest PCE groundwater concentration (91 micrograms per liter (ug/L)) was detected in the groundwater sample obtained from SB-12, which is also the area with the highest ECD response.

• PCE was detected (0.032 mg/kg) in soil in SB-04 (34'), but not in any of the other soil samples and is below the SL residential soil for PCE (22 mg/kg).

• Subsurface PCE contamination exists in the area of 12158 Tech Road tenant space. The sub-slab vapor sample collected in this space (VMP-01) at 12158 Tech Road exhibited the highest PCE vapor concentration detected at the Facility. The second highest ECD reading recorded at the Facility occurred in MIP-01 installed next to the 12158 Tech Road tenant space. A confirmatory groundwater sample (SB-01(20')) collected at the same location contained PCE at a concentration of 6.3 ug/L (the MCL for PCE is 5 ug/L).

• MIP, soil, and groundwater data collected for this investigation did not identify evidence of a PCE source area in the open area between the southeast side of the Facility building and Tech Road.

• PCE in groundwater was detected in SB-01 (20'), SB-04 (38'), and SB-12 (30') at concentrations of 6.3 ug/L, 11 ug/L, and 91 ug/L, respectively (the MCL for PCE is 5 ug/L).

• Methyl tert-butyl ether (MTBE) was detected in two of the samples at concentrations of 2.6 and 3.9 ug/L, respectively (tap water SL of 12 ug/L). Toluene was detected in one sample at a concentration of 2.8 ug/L (MCL of 1000 ug/L). 1,1,2-Trichloro-1,2,2-trifluoroethane was detected in one sample at a concentration of 1.7 ug/L (tap water SL of 53,000 ug/L).

3.1.3 Facility Wide Conditions

Soil Gas Survey Results and Proposed Soil Boring locations, June 1991

In April 1991, Safety-Kleen conducted a soil gas survey, which revealed the presence of a petroleum- based solvent, tetrachloroethene, 1,1,1-trichloroethane and trichloroethene at the Facility.

Elevated contaminants in the soil gas were centered near the dispenser, at the southeast parking lot, and between the end of the tank pit and Tech Road. No vapors of PCE were detected at the grassy strip between the end of the parking lot and Tech Road on the South side of the Facility.

Tetrachloroethene Investigation Report, July 2, 2008

In order to dismiss the Facility as the source of tetrachloroethene (PCE) in monitoring well WSSC MW-4 (south and down gradient of the Facility), the Facility voluntarily agreed to conduct additional assessment and evaluation activities, specifically focused on determining the potential impact (if any) of the Facility's historic PCE operations. Three specific and targeted lines of evidence were considered as part of the additional evaluation, including:

1. Review of historic documents and reports pertaining to the historic on-site PCE operations;
2. Additional soil assessment in areas of potential PCE spills; and
3. Supplemental groundwater assessment immediately down-gradient of the former PCE operations, targeted in the same water-bearing zone as WSSC well MW-4.

A total of 18 shallow borings (SB-1 through SB-18) were advanced between the former Facility building and Tech Road, in the direction of WSSC well MW-4. PCE was not detected in 12 of the 18 submitted soil samples, and the maximum PCE detection was 83 micrograms per kilogram (ug/kg) or .083 mg/kg. This concentration is lower than the EPA SL for residential soil of 22 mg/kg.

A supplemental groundwater investigation was completed to determine if the Facility's historic PCE operations and above ground PCE storage areas could have been the source of elevated PCE impacts in WSSC well MW-4. Three new wells (MW-9, MW-10, and MW-11) were advanced near the Facility building and completed within the same screened interval as WSSC MW-4 (30-40 feet (ft) below ground surface (bgs)). Additionally, MDE had installed a well (TR-2) in the 30-40 ft bgs interval immediately down-gradient (east) of the Facility building. The maximum detected PCE concentration in the groundwater samples from the three new Facility wells was 390 ug/L, which is over 23 times less than the PCE concentration (9,300 ug/L) observed in WSSC well MW-4 in December 2007. The results of these additional groundwater samples, and the Facility historical groundwater sampling results, provide further verification that the Facility's historic PCE operations are not the source of elevated PCE impacts in WSSC well MW-4.

Other well concentrations above the EPA MCL for PCE were MW-9 at 140 ug/L and MW-10 at 350 ug/L. These wells were adjacent to the Facility building and downgradient. Figure 9 of the Tetrachloroethene Investigation Report also had

monitoring well results shown detecting PCE. The upgradient and background well MW-5 had concentrations of PCE at 77 ug/L. MW-4 which is east of the Facility and near Tech Road had concentrations of 76 ug/L. Wells in the parking lot, MW-6 and 7, had values of 240 ug/L and 16 ug/L, respectively. MW-8 which is east of MW-4 and offsite had a value of 28 ug/L.

Semiannual Progress Report (July - December 2012) December 18, 2012

Sampling results from 2012 show MW-4 thru 8 having VOCs above their respective MCLs. The most common VOC detected was PCE (MCL of 5 ug/L) . MW-4 had 68 ug/L PCE. MW-5 had 46 ug/L PCE. MW-6 had 220 ug/L PCE. MW-7 had 5.2 ug/L PCE. MW-8 had 330 ug/L PCE. The other VOCs above their applicable MCLs were as follows: MW-7 had 99 ug/L of cis-1,2-dichloroethene (MCL of 70 ug/L), 8.2 ug/l of trichloroethene (MCL of 5 ug/L), and 31 ug/l of vinyl chloride (MCL of 2 ug/L). Semi Volatile Organic Compounds SVOCs and metals were not detected above their respective MCLs.

Semiannual Progress Report (January - June 2013), June 13, 2013

PCE concentrations in five wells (MW-4 at 56 ug/l, MW-5 at 56 ug/l, MW-6 at 200 ug/l, MW-7 at 8.6 ug/l and MW-8 at 350 ug/l) were greater than the MCL of 5 ug/L. PCE concentrations in these wells have been stable or decreasing with the marked exception of off-site well MW-8, which has had increasing PCE concentrations over time.

Groundwater Monitoring Event, October 29, 2013

Safety-Kleen completed installation of three new up-gradient wells, MW-12, 13 and 14, as well as piezometers PZ-1 and 2 in October 2013. The new wells and existing wells were sampled in October 2013 for PCE. The following table shows the results:

Well ID	PCE ug/L
Shallow Overburden Wells	
MW-1	ND(5)
MW-2	ND(5)
MW-3	ND(5)
MW-4	**76**
MW-5	**93**
MW-6	**170**
MW-7	**8.4**

Off-site, Side Gradient	
MW-8	**300**
Deep Overburden Zone Wells	
MW-9	**170**
MW-10	**260**
MW-11	**210**
PZ-1	ND(5)
Up-Gradient, On-Site	
MW-12	**130**
MW-13	**6.4**
MW-14	**24**
Up-gradient, west side of building	
PZ-2	**55**
MCL (ug/L)	5

ND (5)—not detected with a quantitation limit of 5 ug/L

The data establish that there is an upgradient off-site source of PCE from IFI as shown by the PCE concentrations in groundwater at wells MW-13 and MW-14. The PCE in these wells ranged from 6.4 to 24 ug/L of PCE. To evaluate whether the PCE in on-Site groundwater is attributable to the Facility or is coming from off-Site, EPA will compare PCE concentrations in the groundwater with a calculated background concentration after each sampling event from wells MW-13 and MW-14.

Indoor Air and Sub Slab Characterization Report November 2013

The consulting firm GES was retained by Spectrum Partners LLC (Spectrum), the owners of the Facility, to perform indoor air (IA) and sub-slab vapor (SSV) sampling within the building located at 12144-12164 Tech Road (Safety Kleen occupied 12158 and 12164 Tech Road tenant spaces) in Silver Spring, MD. The building currently has seven tenants. The objective of the sampling was to characterize and delineate potential contaminant vapor sources (PCE, trichloroethylene, dichlorothylene and vinyl chloride) beneath the building foundation at the Facility while also assessing the indoor air quality for potential contaminants and VOCs.

Spectrum installed 13 vapor monitoring points (VMPs). The conclusions reached were:

- PCE was detected above the method detection limit in12 of 13 sampled indoor air locations at all seven tenant space locations, but none exceeded the industrial EPA SL (47 µg/m3).
- The highest PCE concentration was 38 µg/m3 (sample IA-4R at 12158 Tech Rd). PCE in indoor air at the building reduces from this highest concentration in successive sample locations moving both northwest and southeast from highest concentration location.
- The indoor air concentrations of trichloroethene (TCE) occurring at VMP-12 (210 µg/m3) and VMP-14 (240 µg/m3) tenant space exceed the EPA industrial SL of 3 µg/m3 for indoor air. The occurrence of TCE within the indoor air space reduces in successive tenant spaces moving southeast from the dry cleaner location.
- Benzene was detected above the EPA industrial SL of 1.6 µg/m3 for indoor air at several tenant spaces. Benzene was also detected in the two outdoor air samples collected for this investigation which may contribute to the indoor presence of this constituent.
- Benzene, TCE and 1,2-dichloroethane concentrations were generally elevated in the IA samples but were low-level to non-detect in the SSV samples at corresponding paired locations. This indicates that possible sources of these constituents exist above-grade as opposed to constituents sourced from impacted soil or groundwater.
- The highest concentration of PCE was measured in sub-slab vapor (SSV) in sample VMP-4R (24,000 µg/m3) near the center of the Facility building.
- As seen with PCE indoor air distribution, peak PCE concentrations in SSV samples diminish in both the northwest and southeast directions, with the exception of SSV sample VMP-13 which revealed a PCE concentration of 210 µg/m3.
- Comparison of recent sub-slab PCE concentrations (24,000 µg/m3) with values obtained from corresponding tests collected below the tenant space in 2008 (1,190 µg/m3) indicate that PCE vapor continues to exist beneath the Phase IB building.

- A summary of these EPA industrial SL exceedances in IA is presented below:

  Benzene (EPA industrial SL for IA= 1.6 µg/m3)
  - IA-5 at 3.0 µg/m3
  - IA-11 at 1.7 µg/m3
  - IA-12 at 4.4 µg/m3

  1,2,4-Trimethylbenzene (EPA industrial SL for IA = 31 µg/m3)
  - IA-12 at 45 µg/m3

  1,2-Dichloroethane (EPA industrial SL for IA = 0.47 µg/m3)
  - IA-4R at 16 µg/m3
  - IA-5 at 13 µg/m3
  - IA-6 at 1.6 µg/m3
  - IA-7 at 1.4 µg/m3
  - IA-8 at 1.4 µg/m3
  - IA-9 at 0.81 µg/m3
  - IA-11 at 3.8 µg/m3
  - IA-12 at 1.6 µg/m3
  - IA-15 at 0.45 µg/m3

  Trichloroethene (TCE) (EPA industrial SL for IA = 3.0 µg/m3)
  - IA-13 at 210 µg/m3
  - IA-14 at 240 µg/m3

3.2 Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and the facility met this indicator on May 22, 2002, and (2) Migration of Contaminated Groundwater Under Control and the facility met this indicator on February 5, 2003. The environmental indicator determinations are available at http://www.epa.gov/reg3wcmd/ca/md.htm.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media at the Facility are the following:

1. Soils

EPA has determined that EPA's screening levels for residential soils for direct contact with soils are protective of human health and the environment for individual contaminants.

2. Groundwater

EPA's Corrective Action Objectives for Facility groundwater is to restore the groundwater to drinking water standards and until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the groundwater monitoring program, the installation of vapor intrusion control systems where necessary, and compliance with and maintenance of groundwater use restrictions.

Section 5: Proposed Remedy

A. Soils

EPA has made a Corrective Action Complete without Controls determination for Facility soils because based on the available information, there are currently no unacceptable risks to human health and the environment from Facility soils for the present and anticipated use of Facility property.

B. Groundwater

Monitoring at the Facility has shown that the extent of contamination in groundwater attributable to the Facility is not increasing and concentrations of those contaminants are declining over time. Therefore, the proposed remedy for groundwater consists of natural attenuation with continued monitoring until drinking water standards or background concentrations are met, and compliance with and maintenance of groundwater use restrictions, to be implemented through institutional controls, at the Facility to prevent exposure to contaminants while concentrations remain above drinking water standards.

These restrictions will be implemented through an enforceable mechanism which shall consist of an order, environmental covenant and/or regulations and local ordinances, such as the State of Maryland Well Construction Regulations, Article Title 9, Subtitle 13, Annotated Code of Maryland; Code of Maryland Regulation (COMAR), Title 26, Subtitle 4, Chapter 4, COMAR 26.04.04. If an environmental covenant is implemented as part of the final remedy, it will be recorded in the chain of title for the Facility property and, once recorded, will be enforceable against future land owners.

EPA's proposed remedy includes the following groundwater use restrictions:

1. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities required by MDE and/or EPA, unless it is demonstrated to EPA, in consultation with MDE, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and EPA, in consultation with MDE, provides prior written approval for such use;

2. The Facility shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy;

3. No new wells shall be installed on Facility property unless it is demonstrated to EPA, in consultation with MDE, that such wells are necessary to implement the final remedy, and EPA provides prior written approval to install such wells;

4. A vapor intrusion control system, the design of which shall be approved in advance by EPA, shall be installed in each current and new structure constructed above the contaminated groundwater plume or within 100-feet of the perimeter of the contaminated groundwater plume, unless it is demonstrated to EPA that vapor intrusion does not pose a threat to human health and EPA provides prior written approval that no vapor intrusion control system is needed;

5. The Owner shall comply with the EPA-approved groundwater monitoring program.

6. The then current owner shall submit an annual written certification to EPA documenting; (1) an evaluation of the effectiveness of the remedy reducing contaminant concentrations and restoring groundwater to MCLs and (2) that the use restrictions are in place and effective;

7. Within one month after any of the following events, the then current owner of the Facility shall submit to EPA written documentation describing the following: observed noncompliance with the groundwater use restrictions; transfer of the Facility; changes in use of the Facility; or filing of applications for building permits for the Facility and any proposals for any site work, if such building or proposed site work will affect the contamination on the Facility.

C. Additional Requirements

In addition, the Facility shall provide EPA with a coordinate survey as well as a metes and bounds survey, of the Facility boundary. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Google Earth or Google Maps.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	With respect to groundwater, while low levels of contaminants remain in the groundwater beneath the Facility, the contaminants are contained in the aquifer and decreasing through attenuation at the Facility as shown by groundwater monitoring. In addition, groundwater monitoring will continue until groundwater clean-up standards are met. Groundwater monitoring will also track background levels of PCE entering the site. The existing State of Maryland well construction regulations will aid in minimizing exposure to contaminated groundwater by restricting the installation of wells in contaminated water sources. Montgomery County, Maryland does not allow new drinking water wells to be installed in Silver Spring; potable water is provided to homes by Washington Suburban Sanitation Commission. With respect to future uses, the proposed remedy requires groundwater use restrictions to minimize the potential for human exposure to contamination and protect the integrity of the remedy. Results from indoor air and sub slab vapor monitoring show that contaminants are above industrial EPA SLs. Vapor intrusion controls for existing and new construction shall be installed where EPA determines they are necessary.
2) Achieve media cleanup objectives	The Facility has achieved the EPA's residential SLs for soils. The groundwater plume appears to be stable (not migrating); although contaminants are above MCLs, they are either stable or declining over time. In addition, groundwater monitoring will continue until groundwater clean-up standards are met. There is upgradiant background PCE migrating onto the Facility. Background levels of PCE will be taken into account to determine a clean up standard. The Facility meets the EPA risk guidelines for human health and the environment. The

	EPA proposed remedy requires the implementation and maintenance of institutional controls to ensure that groundwater beneath Facility property is not used for any purpose except to conduct the operation, maintenance, and monitoring activities required by MDE and EPA. EPA will require vapor intrusion controls for current and future development at the Facility if EPA determines it is necessary.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment. As shown in the Request for Permit Termination Report, the Facility met this objective. Contaminants are declining through attenuation. There are no remaining large, discrete sources of waste from which constituents would be released to the environment. Groundwater is not used for potable purposes at the Facility or at neighboring facilities. In addition, groundwater monitoring will continue until groundwater clean-up standards are met through attenuation. The existing State of Maryland well construction regulations will aid in minimizing exposure to contaminated groundwater by restricting the installation of wells in contaminated water sources. Montgomery County, Maryland does not allow new drinking water wells to be installed in Silver Springs as potable water is provided to homes by Washington Suburban Sanitation Commission. Therefore, EPA has determined that this criterion has been met.

Section 6: Evaluation of Proposed Remedy (continued)

Balancing Criteria	Evaluation
4) Long-term effectiveness	Groundwater is not used on the Facility for drinking water, and no downgradient users of off-site groundwater exist. Therefore, the proposed long term effectiveness of the remedy for the Facility will be maintained by the continuation of the groundwater monitoring program, and implementation of land use controls (institutional controls).
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	The reduction of toxicity, mobility and volume of hazardous constituents will continue by attenuation at the Facility. Reduction has already been achieved, as demonstrated by the data from the groundwater monitoring. In addition, the groundwater monitoring program already in place will continue.
6) Short-term effectiveness	EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment. In addition, EPA anticipates that the groundwater use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments. The groundwater monitoring program is already in place and will continue.
7) Implementability	EPA's proposed decision is readily implementable. All of the engineering components of proposed remedy, namely, the groundwater monitoring program is already in place and operational. EPA does not anticipate any regulatory constraints in implementing its proposed remedy. EPA proposes to implement the institutional controls through an enforceable mechanism such as an Environmental Covenant
8) Cost	EPA's proposed decision is cost effective. The costs associated with this proposed remedy and the continuation of groundwater monitoring have already been incurred and the remaining costs are minimal or under $2,000 per year. The costs for a vapor mitigation system at the Facility are minimal or estimated at $14,000. The costs to record an environmental covenant in the chain of title to the Facility property are minimal. The costs associated with issuing an order are also minimal.
9) Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period, and it will be described in the Final Decision and Response to Comments.

10) State/Support Agency Acceptance	MDE has reviewed and concurred with the proposed remedy for the Facility.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. The costs to obtain orders or environmental covenants are minimal. Given that EPA's proposed remedy does not require any further engineering actions to remediate soil or groundwater contamination at this time and given that the costs of implementing institutional controls, vapor intrusion controls and the continuation of groundwater monitoring at the Facility will be minimal, EPA is proposing that no financial assurance be required.

Section 8: Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last 30 calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Leonard Hotham at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Leonard Hotham at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Mr. Leonard Hotham (3LC20)
Phone: (215) 814-5778
Fax: (215) 814 - 3113
Email: hotham.leonard@epa.gov

Attachments
Figure 1: Site Location Map

Date: 5.15.14

John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

Section 9: Index to Administrative Record

Soil Gas Survey Results and Proposed Soil Boring locations, Safety Kleen Corporation, Silver Spring Service Center, 12164 Tech Road, Silver Spring, Maryland June 1991

Closure Report and Certification May 1996

Controlled Hazardous Substance Permit A-302 for Safety Kleen Systems Inc. Silver Spring, MD February 1, 2001

Tetrachloroethene Investigation Report, Former Safety Kleen Systems, Inc. Service Center, 12164 Tech Road, Silver Spring, Maryland, July 2, 2008

Remedial Alternatives Evaluation Report, Former Safety-Kleen Corp. Service Center, 12164 Tech Road, Silver Spring, Maryland (MDD000737395), Controlled Hazardous Substance Permit No. A-302 December 11, 2008

Chesapeake Geoscience December 18, 2008 Report for MDE

Semiannual Progress Report Former Safety Kleen Corp. Service Center (January 1- June 30, 2011) June 30, 2011

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Technical Review and Summary Regarding Sources of Regional Tetrachloroethene, Former Safety Kleen Service Center, 12164 Tech Road, Silver Spring, Maryland (MDD000737395) October 9, 2012

Semiannual Progress Report Former Safety Kleen Corp. Service Center (July 1- December 31, 2012) December 18, 2012

Groundwater Monitoring Event October 29, 2013

Indoor Air and Sub Slab Characterization Report November 2013

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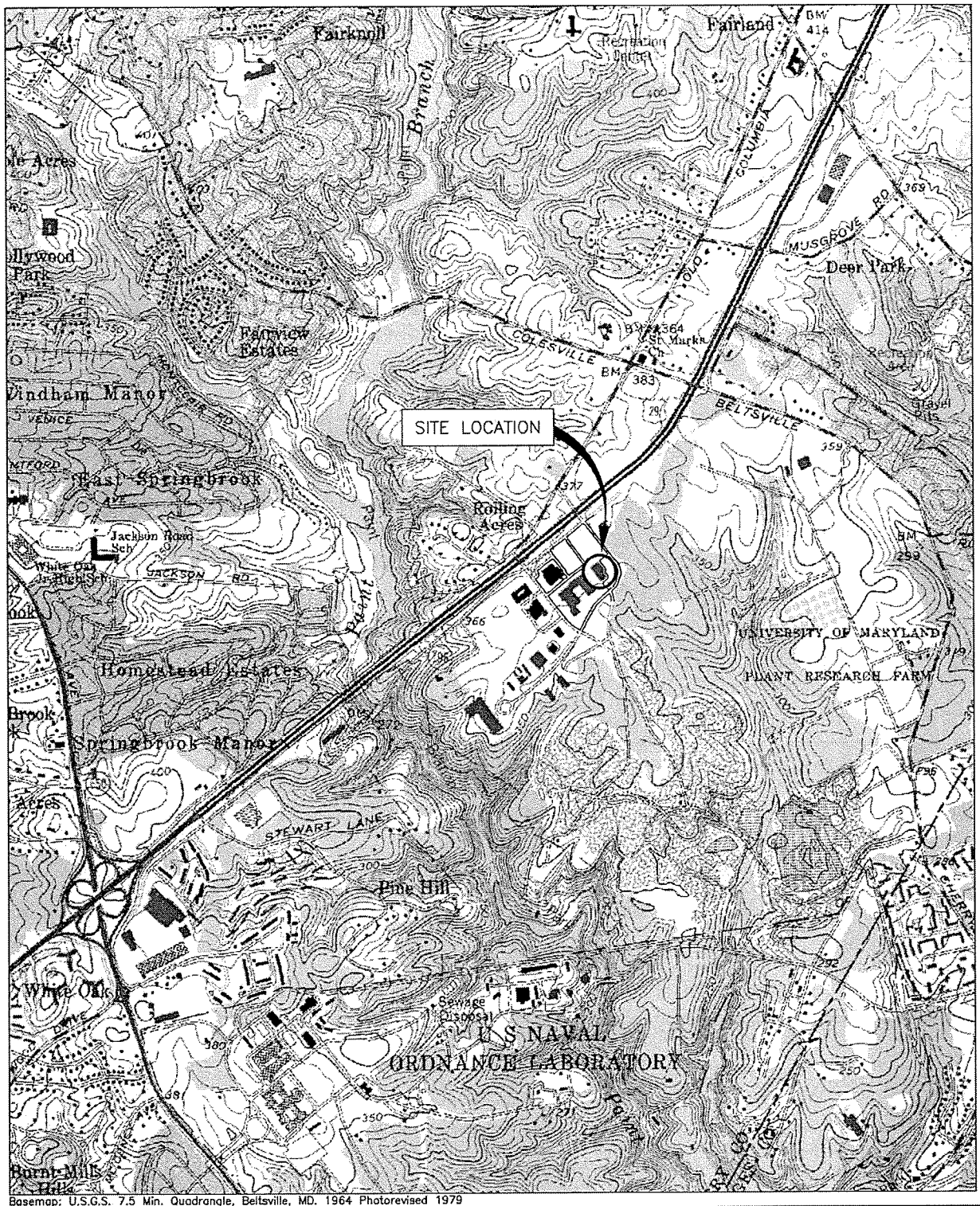

Basemap: U.S.G.S. 7.5 Min. Quadrangle, Beltsville, MD. 1964 Photorevised 1979

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FIGURE 1

SITE LOCATION MAP

FORMER SAFETY-KLEEN CORP. SERVICE CENTER
SILVER SPRING, MARYLAND

Drawn By: REP	Checked By: AR	Scale: 1" = 2,000'	Date: 3/11/09	File: 198USGSSITE