UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

Statement of Basis

Parcel K
Southeast Federal Center
Washington, D.C.

EPA ID: DC8 470 090 004

August 2011

I. Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on EPA's proposed remedy for the United States General Services Administration (GSA), Southeast Federal Center (SEFC or Facility), Parcel K/Building 167, located at 1st and M Street, SE, Washington, D.C, 20507 (Parcel K). EPA's proposed remedy for Parcel K consists of compliance with and maintenance of land use restrictions to protect current and future construction/utility workers. This SB highlights key information EPA relied upon EPA in making its proposed remedy.

SEFC is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program's purpose is to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The District of Columbia (District) is not authorized to implement the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the District for the Corrective Action Program.

A final remedy for Facility-wide groundwater will be proposed in a separate Statement of Basis which will also be subject to a 30-day public comment period. That final remedy for Facility-wide groundwater may include restrictions on groundwater use at Parcel K. GSA has agreed to voluntarily record an Environmental Covenant on the title to Parcel K which will prohibit the use of groundwater for domestic purposes and the installation of groundwater extraction wells, unless such wells are necessary for the performance or completion of remedial activities required by the District Department of the Environment (DDOE) and/or EPA.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed decision is based. See Section VIII, Public Participation, for information on how you may review the AR.

II. Background

SEFC is a 42-acre property that was previously a part of the Washington Navy Yard, located in southeast Washington, D.C. SEFC is owned by the United States and is under the custody and control of GSA's Administration National Capital Region (GSA-NCR). The SEFC Site Plan is shown in Figure 1.

Parcel K occupies 1.07 acres within SEFC. Parcel K is located on the north side of Tingey Street with the Department of Transportation Headquarters building to the north and west of Parcel K, and to the east, 4th Street, SE (Figure 1). Parcel K consists primarily of Building 167 (Figure 2).

In 1919, Building 167 was constructed on Parcel K. Before 1919, Parcel K was utilized for residential and commercial land uses. From 1919 to about 1950, Building 167 was used for industrial activities related to fabricating boilers for ships. Recently, Building 167 was used to store office equipment, supplies and vehicles. Three small additions were added to Building 167 at unknown time(s). These additions were located at the northwest corner, the south central

portion, and the southeast corner, respectively. The northwest addition most recently housed a kiln. The south central addition was most recently used to house electrical transformers. The three additions were demolished in 1999 after hazardous materials were removed.

Industrial activities at SEFC conducted adjacent to Parcel K include:

- North of Parcel K was the Gun Shop where various gun barrels and associated gun breaches were machined, treated, and repaired (former Building 153 on the DOT Parcel),
- To the east was the Foundry Storehouse (former Building 135 on Parcel D),
- To the south was a building where 'blank' gun barrels were casted (former Building 158 on Parcel N),
- Also to the south, there was a building used for support activities related to gun manufacture (former Building 160 on Parcel M),
- To the west was an electrical substation (former Building 170).

III. Summary of Environmental Investigation

From 1989 to 2000, GSA conducted a number of environmental investigations and remedial actions at SEFC to identify contaminants of concern; areas of contamination in buildings, soil, groundwater and sediment and to remove contaminants from buildings and Facility soils.

In 1991, GSA collected two soil samples from beneath the slab at Building 167; one from the bottom of the steam tunnel access pit and one beneath the slab on the west side of the building. The contaminants in the pit that exceeded EPA's Risk Based Concentration levels (RBCs) for residential use included PCB-Aroclor 1260, six polynuclear aromatic hydrocarbons, iron and arsenic. The sample from the western part of the building exceeded the RBC for arsenic only.

Beginning in 1997, GSA conducted a SEFC-wide Building Materials Survey and Abatement Program. The Survey identified the following items in Building 167: asbestos containing material (ACM), lead-based paint (LBP), concrete contaminated with polychlorinated biphenyl (PCB) in the attached transformer room, avian excreta, PCB and mercury containing lighting equipment, compressed gas cylinders, and containers of boiler treatment chemicals and coil cleaner (URS Greiner 1999b). ACM within the building interior and LBP on interior steel structures were removed from the building in 2000, and documented in the abatement close-out monitoring report (URS 2001b). In 1999, hazardous materials were removed from the three building additions before they were demolished including PCB-contaminated concrete from the transformer room addition. ACM roofing materials, ACM siding, ACM exterior window putty, ACM boiler insulation and gasket, and exterior LBP were left in place (URS Greiner 1999). These materials will be abated in accordance with federal and District regulations during the planned building renovation.

In 1998, GSA completed a Site-wide storm drain cleaning program because sediment with PCB contamination was found in some SEFC storm drains. PCB-contaminated sediment was not found in the Parcel K storm drains.

In 1999, the PCB-contaminated concrete floor was removed from Building 167 before the transformer room addition was demolished. Soil beneath the concrete was sampled and PCB (Aroclor 1260) was found greater than the action level of 1 parts per million (ppm) under the regulations promulgated at 40 C.F.R. Section 761.61 pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Sections 2601 et seq. Soil was then removed to a 1 foot depth in an 8 by 9 feet area. Confirmation samples from below the excavation were below the PCB action level, but were above the RBC for residential use (0.32 ppm). In 2011, the soil below the excavation was delineated further and soil with PCBs above the RBC was removed.

In 1999, EPA and GSA entered into a Final Administrative Order on Consent (1999 Order), Docket No. RCRA III-019-AM, under Section 3013 of RCRA, 42 U.S.C. Section 6934 to perform, among other work, a RCRA Facility Investigation (RFI) to determine the nature and extent of any releases of hazardous waste at or from SEFC and to perform Interim Measures (IM) to remediate releases. GSA included the previous investigations and remedial actions in the RFI along with the results of new sampling required by the 1999 Order. EPA approved the RFI in July 2008. As parcels are developed for construction, data from RFI are used to create more specific workplans for each parcel. EPA approved the Parcel K Workplan in March 2008. The investigation and remedial actions were completed and are discussed in the Parcel K Completion Report which was approved by EPA in July 2011.

The IM remedial work conducted at Parcel K under the 1999 Order consists of the following:

A. Soil

The strip of ground around Building 167 was removed to a depth of 4 to 5 feet. The soil beneath the former transformer room area where Aroclor 1260 (PCB) was found was removed to a depth of 5 to 6 feet to meet EPA's RBC for PCBs in soil for residential use. The remaining soil around the Building was removed to a depth of about four feet. A 100 foot length of soil on Building 167's western side was left in place because contaminants were below EPA's RBCs (Figure 2). About 1,157 tons of soil from the former transformer area and approximately 5,706 tons of the remaining excavated soil were removed and replaced with clean fill. The excavated soil contained PAHs, petroleum hydrocarbons and PCBs.

Soil samples from beneath Building 167's slab were analyzed for Parcel specific contaminants. Sample results from the 15 borings showed that no PCBs or volatile organic compounds were found beneath the slab. While background levels of PAHs and arsenic were found at levels above EPA's RBCs, sub-slab soil excavation is not necessary because background soil samples located on and off-site of SEFC showed similar levels. Soil from one boring location exhibited lead above EPA's RBC of 400 ppm, and is not hazardous according to the Toxicity Characteristic Leaching Procedure (TCLP)[1] test. Also, low level petroleum hydrocarbons were found in the sub-slab soil.

1 EPA uses the Toxicity Characteristic Leaching Procedure (TCLP) to identify those wastes which might result in contamination of groundwater if improperly managed. TCLP is designed to determine the mobility of both organic and inorganic contaminants present in liquid, solid, and multiphasic wastes.

Two abandoned utility pipes were uncovered during soil excavation and appeared to be coated with ACM. A licensed asbestos abatement contractor removed the ACM pipe wrap and disposed of it off-site in accordance with federal and District regulations.

B. Groundwater

There are no groundwater monitoring wells located on Parcel K, however, samples taken from monitoring wells located hydraulically upgradient and around Parcel K do not exhibit contamination related to Parcel K.

IV. Corrective Action Objectives

EPA's Corrective Action Objective for Parcel K is to control human and environmental exposure to the hazardous wastes and hazardous constituents that may remain in the subsurface around and below Building 167.

V. Proposed Remedy

EPA's proposed remedy for Parcel K soils consists of the compliance with and maintenance of land use restrictions to be implemented through enforceable institutional controls (ICs). ICs are non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. EPA proposes that the ICs contain the following elements:

1) Parcel K shall be restricted to industrial uses and shall not be used for residential purposes unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment.

2) All earth moving activities at Parcel K, including drilling and construction activities, shall be done in accordance with an the Soil Management Plan approved by EPA on November 22, 2006.

3) On-site workers and contractors shall be notified where contaminants may remain in the soil at Parcel K and the extent of contamination present at those locations.

EPA proposes to implement the land and resource use restrictions through enforceable ICs such as a permit, order and/or an Environmental Covenant pursuant to the District of Columbia Uniform Environmental Covenants Act of 2006, D.C. Code Section 8-671 (UECA) to be recorded with the deed for Parcel K.

VI. Evaluation of EPA's Proposed Remedy Decision

EPA evaluates proposed remedies according to three threshold criteria in determining whether remedies meet EPA's corrective action objectives. The following is a summary of EPA's evaluation of the proposed remedy for Parcel K:

A. Threshold Criteria

1. **Protect Human Health and the Environment** - Prior to excavation and disposal of contaminated soil around Building 167, the primary human health risks were related to direct contact with the soil. Also, Building 167 contained building materials with hazardous constituents that also posed a direct contact and inhalation risk to humans. With the removal of contaminated soil and abatement of building materials, human health exposure to contaminants has been eliminated.

In addition, while not required by EPA's proposed remedy, GSA proposes to install a new floor in Building 167. The existing concrete floor is one foot thick, with some areas of greater thickness. The new floor will consist of the existing floor with a new layer of concrete or other material on top. The new flooring will further prevent human exposure to any contaminants in the subslab.

Only work conducted below 4 feet around Building 167 and under the floor of Building 167 has a potential to expose construction and utility workers to any remaining soil contaminants. Therefore, EPA's proposed remedy requires that workers and contractors be notified of any remaining on-Site soil contamination.

2. **Achieve Media Cleanup Objectives** - GSA used EPA's non-residential risk based concentration levels to decide how much soil to remove. The proposed use of Parcel K is for non-residential purposes. Because clean fill was used to backfill the excavations and groundwater is not contaminated, EPA's cleanup objectives have been met.

3. **Remediating the Source of Releases** – In all remedy decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. As shown in the Parcel K/Building 167 Completion Report, sources of contamination have been removed. Workers and contractors will be notified where contaminants remain in the soil at Parcel K to prevent potential exposure to such contaminants.

B. Balancing/Evaluation Criteria

1. **Long-Term Effectiveness** - The proposed remedy will be protective of human health and the environment over time by controlling exposure to any hazardous constituents remaining in soils. EPA's proposed remedy requires the implementation of land use restrictions for excavations below 4 feet around Building and under the floor to inform workers and prevent exposure to any contaminants remaining in the soil.

2. **Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents** - The reduction of toxicity, mobility and volume of hazardous constituents at the Parcel has already been achieved by the excavation of contaminated soils.

3. **Short-Term Effectiveness** - EPA's proposed final remedy does not involve any additional activities, such as construction or excavation, that would pose short-term risks workers, residents, and the environment.

4. **Implementability** - EPA's proposed remedy is readily implementable. EPA does not anticipate any regulatory constraints in requiring GSA to record an environmental covenant with the deed to Parcel K.

5. **Cost** - The capital costs associated with soil excavation were used to remove contaminated soil. The remaining costs are minimal.

6. **Community Acceptance** - EPA will evaluate Community acceptance of the proposed remedy during the public comment period and will be discussed in the Final Decision and Response to Comments.

7. **State/Support Agency Acceptance** - EPA will evaluate the DDOE's acceptance based on comments received from DDOE during the public comment period and will describe DDOE's position in the Final Decision and Response to Comments.

VI. Environmental Indicators

EPA sets goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. EPA determined that the SEFC (including Parcel K) met these indicators as discussed in the EI documents signed in September in 2003 and 2004, respectively.

VII. Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at Parcel K. Given that EPA's proposed remedy does not require any further engineering actions to remediate soil, groundwater, or indoor air contamination at this time, and given that the costs of implementing institutional controls at the Parcel K will be de minimus, EPA is proposing that no financial assurance be required.

VIII. Public Participation

Before EPA makes a final decision on its proposal for Parcel K, the public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed decision. It is available for public review during normal business hours at:

U.S. EPA Region III
1650 Arch Street (3LC20)
Philadelphia, PA 19103

Contact: Ms. Barbara Smith
Phone: (215) 814-5786
Fax: (215) 814-3113
Email: smith.barbara@epa.gov

Interested parties are encouraged to review the AR and comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that the notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Ms. Barbara Smith. EPA will hold a public meeting to discuss this proposed decision upon request. Requests for a public meeting should be made to Ms. Smith.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed decision will receive a copy of the FDRTC. Others may obtain a copy by contacting Ms. Smith at the address listed above.

Signed by:

Abraham Ferdas, Director
Land and Chemicals Division
US EPA, Region III

9/6/11
Date

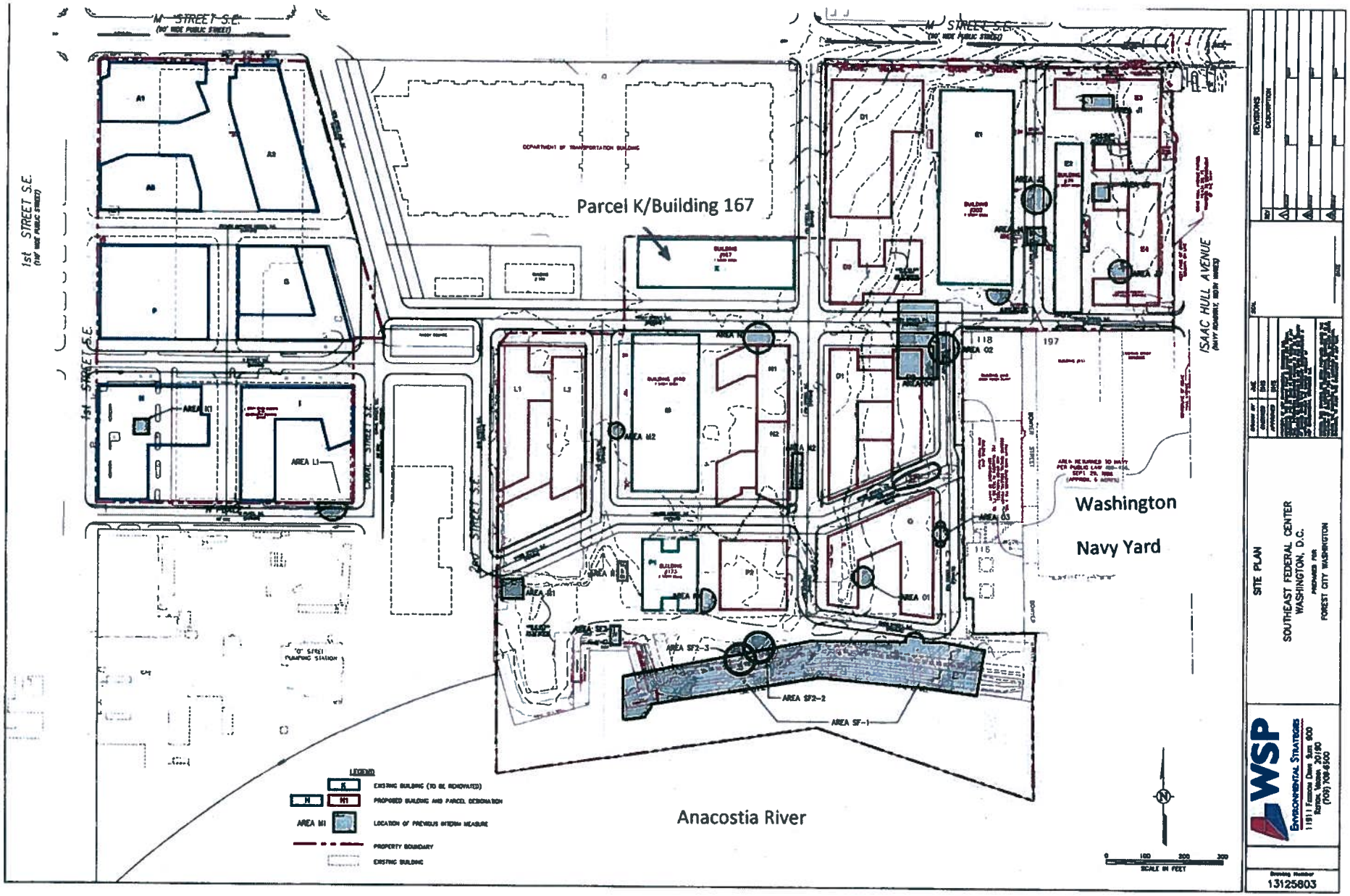
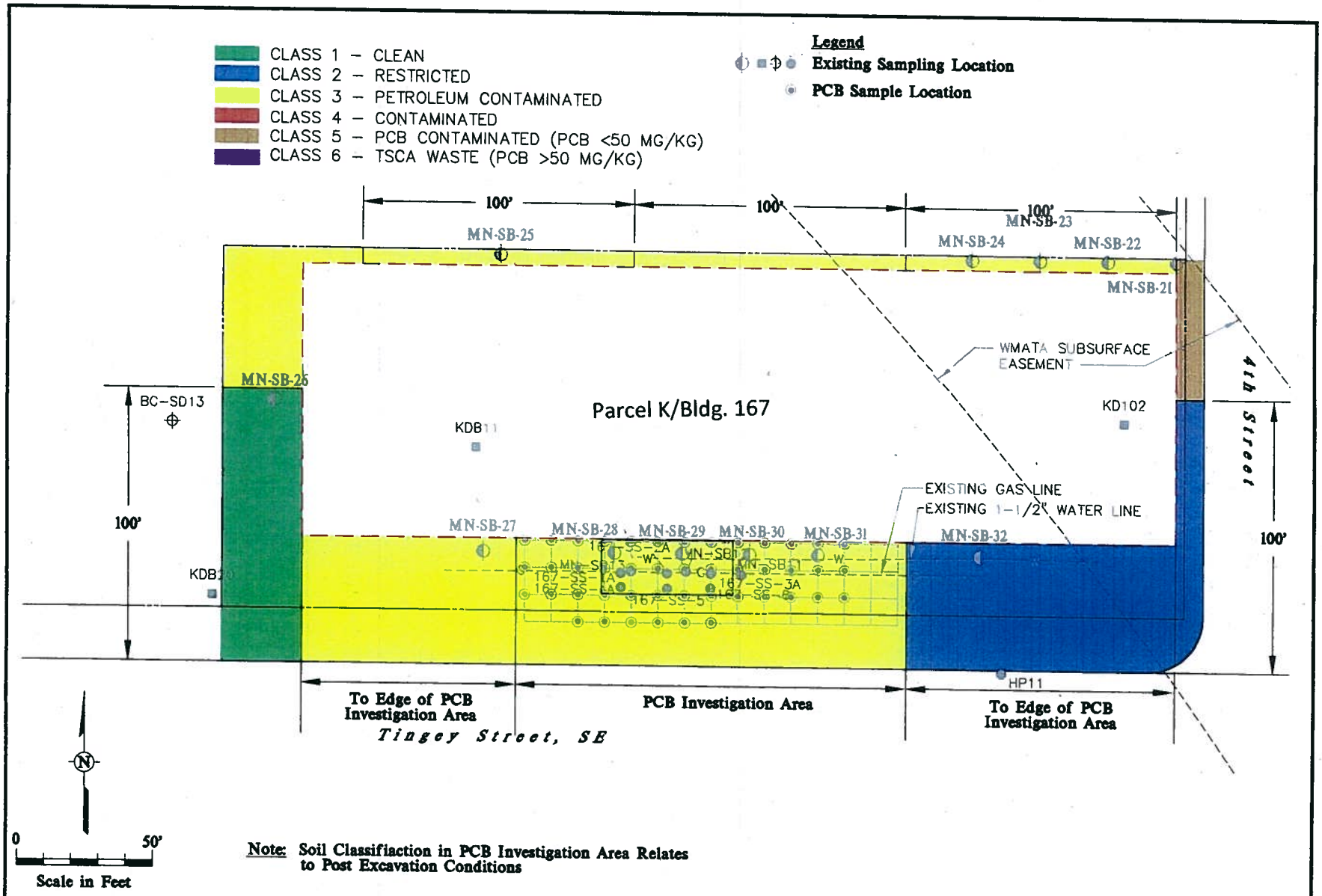


Figure 1: Site Plan

Southeast Federal Center

Washington, D.C.



Note: Soil Classifiaction in PCB Investigation Area Relates to Post Excavation Conditions

WSP
Environmental Strategies
11911 Freedom Drive Suite 900
Reston, Virginia 20190
(703) 709-6500

Figure 2
Soil Classification on Parcel K (Depth 0-5 ft./bgs)
Southeast Federal Center
Washington, DC

1312583LDWG