



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

Final Decision and Response to Comments

Parcel K
Southeast Federal Center
Washington, D.C.

EPA ID: DC8 470 090 004

December 2011

I. Introduction

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) in connection with 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).

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.

On September 7, 2011, EPA issued a Statement of Basis (SB) in which EPA proposed a remedy for Parcel K. EPA held a thirty (30)-day public comment period which began on September 7, 2011 and ended on October 7, 2011. The only comments EPA received during the public comment period were submitted by GSA.

Based on comments received during the public comment period, EPA has determined that it is not necessary to make significant modifications to the proposed remedy as set forth in the SB. EPA is, however, making minor modifications to and clarifying certain aspects of the proposed remedy as described in more detail in Attachment A, EPA Responses to Comments. This Final Decision and the remedy selected herein incorporate those minor modifications and clarifications.

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 times. 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 residential use for arsenic only.

Beginning in 1997, GSA conducted a SEFC-wide Building Materials Survey and Abatement Program (Survey). 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 gaskets, 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 for residential use 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 to five 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, while low level petroleum hydrocarbons were found in the sub-slab soil, the levels found did not pose an unacceptable risk to construction and utility workers.

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.

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.

B. Groundwater

There are no groundwater monitoring wells located on Parcel K, however, groundwater 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. **Final Remedy for Parcel K**

EPA's final remedy for Parcel K requires that use of Parcel K be restricted to commercial and/or industrial purposes unless it demonstrated to EPA that residential use will not pose a threat to human health or the environment and EPA provides prior written approval for residential use. The land use restriction will be implemented through an enforceable IC 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 Remedy**

EPA evaluates 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 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 a component of EPA's final 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.

A human health risk assessment was completed, evaluating contaminants found in soil beneath the existing floor slab. The evaluation showed that the risks posed are within EPA's acceptable risk range for non-residential use.

2. **Achieve Media Cleanup Objectives** - GSA cleaned up PCB-contaminated soil to EPA's residential risk based concentration levels. 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.

B. Balancing/Evaluation Criteria

1. **Long-Term Effectiveness** - The remedy will be protective of human health and the environment over time by controlling exposure to any hazardous constituents remaining in soil. Current and future land use is restricted to commercial and/or industrial use unless it can be demonstrated that the Parcel meets EPA's residential use clean-up levels.

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 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 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** - The only comments that EPA received on its proposed remedy for Parcel K were from GSA. Based on GSA's comments, EPA has made minor modifications to and clarified certain aspects of the proposed remedy as described in Attachment A, Public Comments and EPA Responses.

7. **State/Support Agency Acceptance** - The District Department of the Environment (DDOE) concurred with EPA's final remedy selection.

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 by EPA 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 remedy at Parcel K. Given that EPA's 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 requiring no financial assurance.

VIII. Declaration

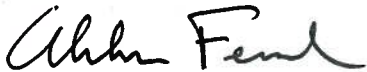
Based on the Administrative Record, EPA has determined that the Remedy as set forth in this Final Decision is appropriate and will be protective of human health and the environment.

Figure 1: Facility Diagram

Figure 2: Location of Building 167

Attachment A – Response to Comments

Signed by:



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

12/20/11

Date

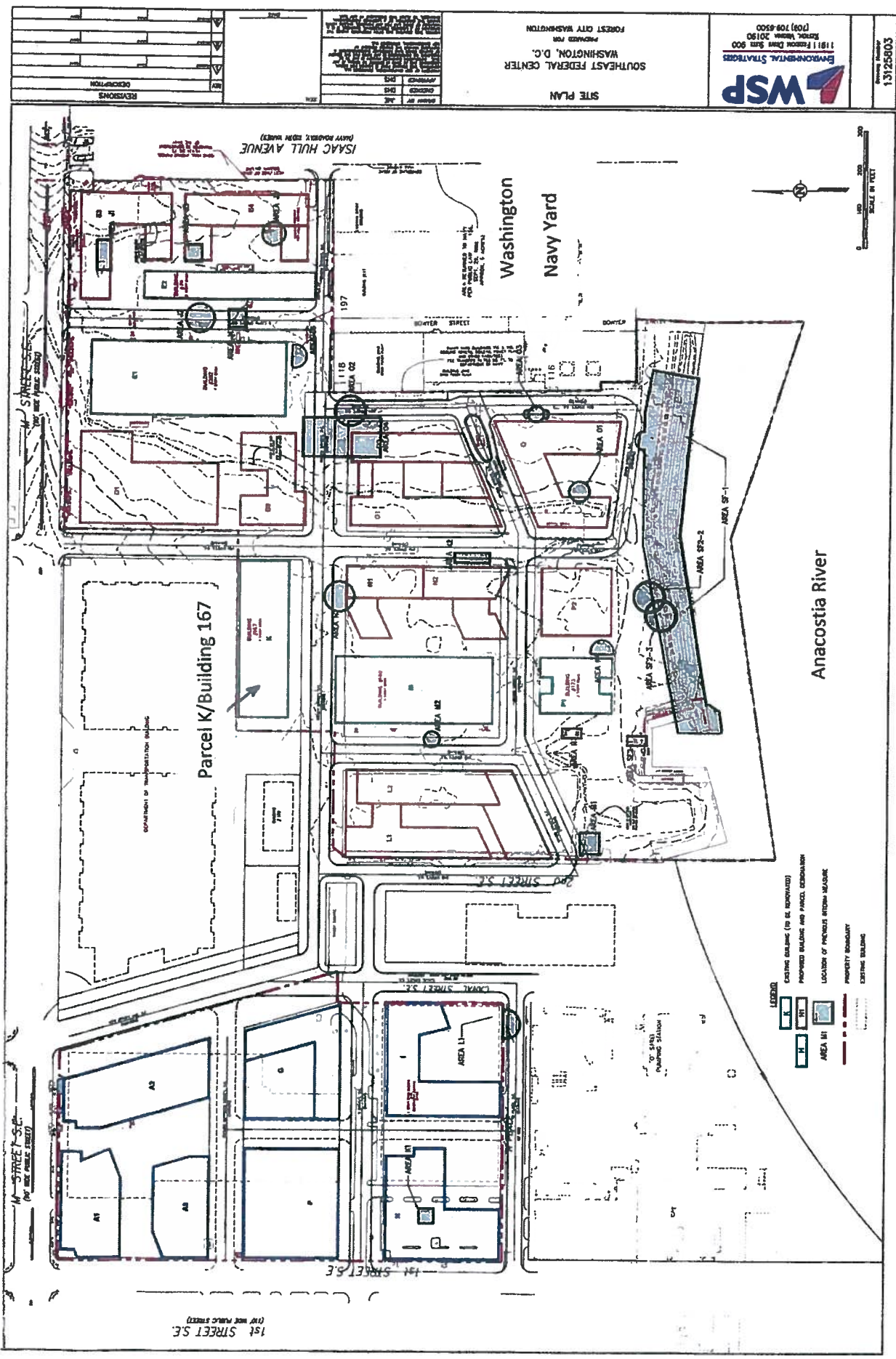


Figure 1: Site Plan

Southeast Federal Center
 Washington, D.C.

WSP
 ENVIRONMENTAL STRATEGIES
 1181 Fenton Drive Suite 800
 Forest Hill, MD 21050
 (703) 708-6500

SOUTH EAST FEDERAL CENTER
 WASHINGTON, D.C.
 PREPARED FOR
 FOREST CITY WASHINGTON

SITE PLAN

REVISIONS

DATE

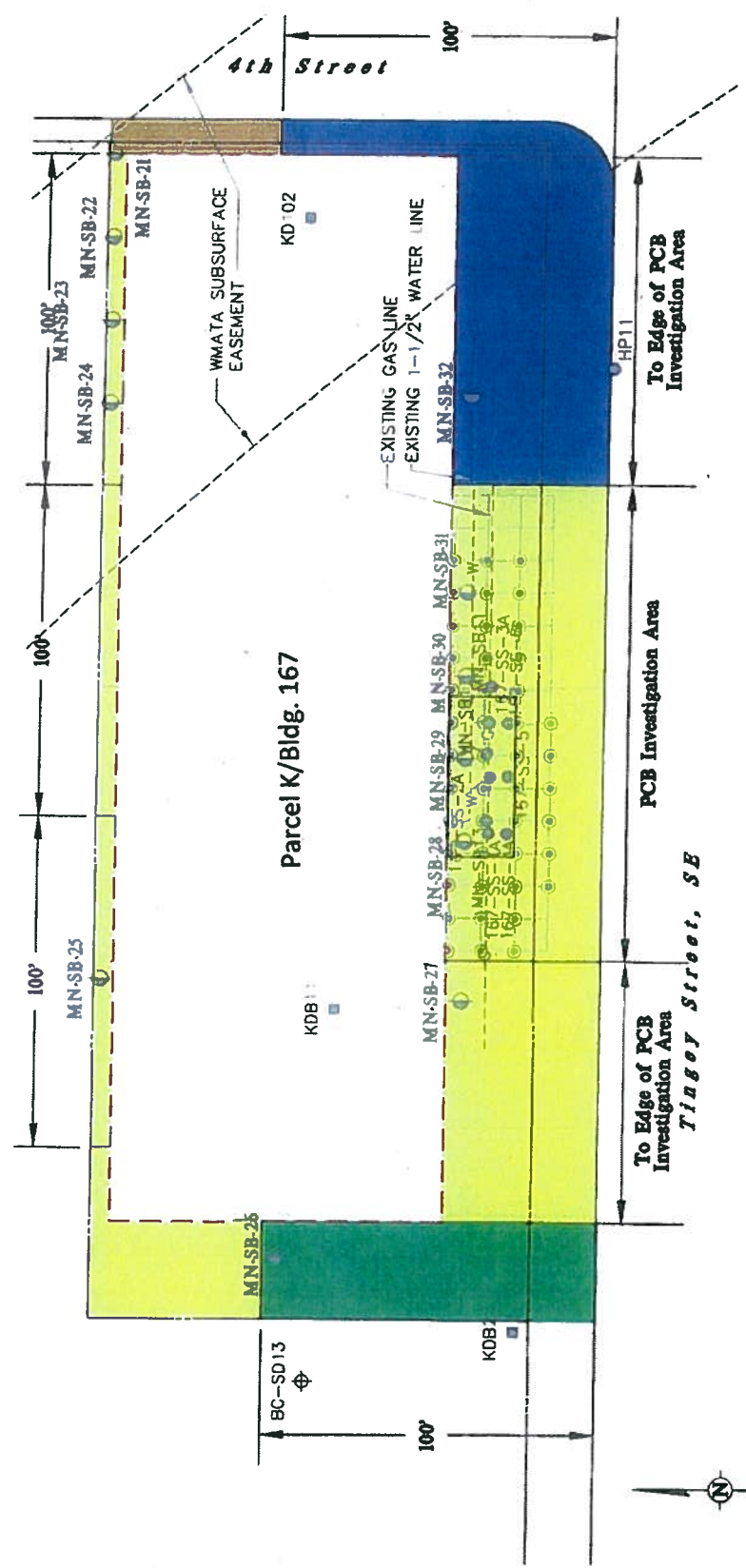
DESIGNED BY

CHECKED BY

APPROVED BY

- CLASS 1 - CLEAN
- CLASS 2 - RESTRICTED
- CLASS 3 - PETROLEUM CONTAMINATED
- CLASS 4 - CONTAMINATED
- CLASS 5 - PCB CONTAMINATED (PCB <50 MG/KG)
- CLASS 6 - TSCA WASTE (PCB >50 MG/KG)

- Legend**
- Existing Sampling Location
 - PCB Sample Location



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



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

11911 FREEDOM DRIVE SUITE 900
 RESTON, VIRGINIA 20190
 (703) 709-6500



**Attachment A to
GSA – Parcel K FDRTC**

EPA Response to Comments

During the public comment period, EPA received comments from GSA on the Statement of Basis. EPA's summary of GSA's comments and EPA's responses to those comments are set forth below:

GSA Comment No. 1 (Summary):

GSA commented on EPA's proposal remedy to restrict land use to "industrial" uses. GSA stated that EPA's use of the word industrial appeared to prohibit commercial uses of the Facility property. GSA sought clarification that EPA intended to prohibit residential uses of the property while permitting industrial and commercial uses.

EPA's Response

EPA agrees with this comment and has incorporated language into Section V (EPA's Remedy for Parcel K") to reflect so.

GSA Comment No. 2 (Summary):

GSA commented that EPA's proposal to require certain earth moving activities be conducted in accordance with an EPA-approved Soil Management Plan is not necessary to protect human health and the environment. GSA noted that the Human Health Risk Assessment (HHRA) demonstrates that soils below the Building 167 slab and below the five foot soil cover around Building 167 were within EPA's acceptable risk range for non-residential use.

EPA's Response

EPA agrees with this comment and has not included a SMP as a component of the Final Remedy.

GSA Comment No. 3 (Summary):

GSA commented that EPA's proposal to require that on-site workers and contractors be notified that contaminants remain in place at the Facility is not necessary to protect human health and the environment. GSA noted that the HHRA demonstrates that soils below the Building 167 slab and below the five foot soil cover around Building 167 were within EPA's acceptable risk range for non-residential use.

EPA's Response

EPA agrees with this comment and has not included the notice requirement as a requirement of the Final Remedy.

