OCCUPATIONAL EXPOSURE EVALUATION REPORT, REV. 00

GENERAL SERVICES ADMINISTRATION
GOODFELLOW FEDERAL COMPLEX
ST. LOUIS, MISSOURI

Contract Number GS10F0076K, Order Number GS-06P-10-GX-A-0030/GS-P-06-11-GX-5201

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June 2013

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1.0 INTRODUCTION

Under order number GS-06P-10-GX-A-0030/GS-P-06-11-GX-5201, the General Services Administration (GSA) tasked Tetra Tech, Inc., (Tetra Tech) to prepare this report for site investigation activities associated with the Occupational Exposure Evaluation at the Goodfellow Federal Complex (GFC) at 4300 Goodfellow Boulevard in St. Louis, Missouri (see Appendix A, Figure 1).

1.1 DISTRIBUTION LIST

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1.2 SCOPE OF WORK

GSA requested that Tetra Tech characterize occupational risks at the GFC that may be attributed to on-site legacy contamination associated with former ordnance plant operations (see Appendix A, Figure 2, and Appendix B, Table 1). Tetra Tech reviewed 100 environmental reports associated with GFC, and evaluated potential occupational exposures to GSA associates, construction contractors, custodial contractors, operation and maintenance contractors, tenants, and visitors at the GFC (see Appendix B, Table 2). This review/evaluation was based on the nature, magnitude, and extent of contamination historically detected or suspected to be present as a result of historical activities. Tetra Tech identified data gaps, determined whether follow-up investigation had been conducted, and recommended additional investigation where needed (see Appendix B, Table 3).

Based on this Occupational Exposure Characterization Study, Tetra Tech proposed two follow-on projects to address data gaps and associated recommendations. The first project is this Occupational Exposure Evaluation, which was conducted according to Tetra Tech EM Inc.'s Work Plan and Quality Assurance Project Plan (QAPP) dated April 29, 2012. The Occupational Exposure Evaluation was designed to further investigate occupational risks that may be attributed to on-site legacy contamination associated with former ordnance plant operations. This evaluation was designed to fill data gaps and update existing environmental investigation information, focusing primarily on potential contamination within building envelopes and on exterior surfaces. The second project will be a Remedial Investigation. A separate Work Plan and QAPP will be developed for the Remedial Investigation, which will be designed to evaluate cleanup needs attributable to on-site legacy contamination associated with former

ordnance plant operations. The primary focus of the Remedial Investigation will be on potential soil and groundwater contamination at the exterior grounds.

1.3 REPORT ORGANIZATION

The format of this report complies with information requirements in Tetra Tech EM Inc.'s approved Work Plan and QAPP dated April 29, 2012. Section 1.0 presents introductory information regarding the scope of work and the organization of this report. Section 2.0 discusses the facility background, including the facility location and demographics, regulatory history, and physical setting. Sections 3.0 and 4.0, respectively, discuss the sampling investigation field activities and results. Section 5.0 provides a preliminary risk evaluation based on known contamination and potential receptors and pathways. Section 6.0 summarizes the sampling investigation and offers recommendations regarding future response actions. Section 7.0 lists references.

2.0 SITE BACKGROUND

This section describes the site and previous assessments of the site.

2.1 SITE LOCATION AND LAYOUT

The GFC is at 4300 Goodfellow Boulevard in St. Louis, Missouri (see Appendix A, Figure 1). It is a portion of the former St. Louis Ordnance Plant (SLOP) near the western boundary of the City of St. Louis, Missouri. The GFC encompasses approximately 64 acres, and is bordered northeast by the SLOP, southeast by Planned Industrial Drive, southwest by Edelle Avenue and the SLOP, and northwest by Goodfellow Boulevard (see Appendix A, Figure 2). GFC Building 208B is beyond the security perimeter of the central GFC, within a fenced area on Planned Industrial Drive, approximately 170 yards northeast of GFC Building 105 A/B/C/D. The GFC is developed with buildings, utility tunnels, and a combined stormwater and sanitary sewer collection system (see Appendix A, Figure 2).

2.2 SITE PHYSICAL SETTING

The Site is on the northern flank of the Ozark Plateau in the Dissected Till Plains Physiographic Province, which is characterized by gently rolling hills (Miller et al. 1974). The U.S. Geological Survey (USGS) 7.5-minute series Clayton, Missouri topographic quadrangle depicts the site on a relatively flat terrace with elevations ranging from approximately 550 to 580 feet above mean sea level, 1927 North American Datum (NAD27) (USGS 1954). From Goodfellow Boulevard, the site generally slopes eastward toward the Mississippi River; the northernmost portion of the site slopes more northeasterly, and the southernmost portion of the site slopes more southeasterly.

The Mississippi River is approximately 2.5 miles east of the site. Although drainage from the site generally follows the topographic gradient toward the Mississippi River, any surface water that leaves the site is directed through the combined storm/sanitary sewers and a wastewater treatment facility before discharging into the Mississippi River (SCS Engineers [SCS] 2008). Similarly, in the absence of site-specific hydrogeological data, site groundwater can be assumed to follow a hydraulic gradient that is a subdued replica of the topographic gradient. Based on the general topographic gradient, groundwater beneath the site likely flows easterly toward the Mississippi River.

The ground surface of the Site is covered by fill dirt, streets, parking lots, buildings, and other structures. Site surface soils are identified as Urban Land-Upland with 0- to 5-percent slopes (U.S. Department of Agriculture [USDA] 1979). The Urban Land designation is given to areas where structures, asphalt,

concrete, and other impervious materials cover over 85 percent of the site. These objects obscure and their construction has altered the soils such that identification of the series is not feasible. Subsurface investigations at the site have identified soils below the fill as predominantly silty clay or silty clay loam (Geotechnology, Inc. 2006; SCS 2008) (see also Appendix C). According to the Geologic Map of St. Louis City and County, the site is underlain by stratified sequences of Pennsylvanian sedimentary rock (Brill et al. 1991).

The climate in St. Louis County is characterized by cold winters, hot summers, and heavy rains in the spring and early summer (USDA 1979). The prevailing wind is from the south. The average annual temperature in St. Louis, Missouri, is 56°F, with monthly average temperatures ranging from 30°F in January to 79°F in July (Weatherbase 2012). The average annual precipitation is 37.1 inches, with monthly averages ranging from 2 inches in January to 3.9 inches in May (Weatherbase 2012). The average annual snowfall is approximately 19.8 inches (Weatherbase 2012).

2.3 CURRENT AND HISTORICAL SITE USE

Known historical uses of the GFC property include a residence and farmstead (dairy farm) between 1912 and 1925, a community garden between 1936 and 1940, Hickey Park from 1940 to 1941, and Plant 1 of the SLOP from 1941 through the close of World War II. The SLOP reportedly was the largest small-arms ammunition installation in the world, producing small arms ammunition (0.30 and 0.50 caliber) and components for 105 millimeter (mm) artillery shells. In the 1960s and 1970s, the U.S. Department of Defense (DoD) converted Plant 1 to a federal office complex under management of GSA (SCS 2010).

Table 1 in Appendix B identifies known historical and current buildings on site, as well as available information regarding construction, use, and renovation of each.

2.4 PREVIOUS SITE ASSESSMENTS

Tetra Tech reviewed approximately 100 documents recording past environmental work at GFC; of these, 86 contained unique information and are summarized in Table 2 in Appendix B. Data gaps and outstanding investigation recommendations associated with former ordnance plant operations, identified in that document review, formed the basis for conducting this Occupational Exposure Evaluation. Table 3 in Appendix B summarizes environmental conditions by building, and Tetra Tech's recommendations for addressing issues/risks of occupational exposure.

3.0 DATA AQUISITION ACTIVITIES

The following sections discuss the data acquisition activities in support of the GFC Occupational Exposure Evaluation from April 30 through May 10, 2012. These sections discuss sampling rationale, as well as procedures employed for field measurement, sample collection, sample handling and custody, quality control (QC), equipment decontamination, and management of investigation-derived waste (IDW). Samples were collected in a manner consistent with EPA methods and standard operating procedures (SOP). Table 4 in Appendix B summarizes the sampling method requirements. Field documentation of data acquisition activities is provided in Appendices D (field logbooks), E (photographic documentation), and F (chains of custody).

3.1 PREPARATORY ACTIVITIES

Prior to initiating field data acquisition and as necessary to maintain data accuracy and reproducibility, members of the field team personnel tested, inspected, and maintained sampling equipment and instrumentation in accordance with manufacturers' recommendations. Maintenance and calibration activities are documented in the field log book (see Appendix D).

Tetra Tech also located underground utilities in the vicinity of sampling locations, using utility maps provided by GSA, the Missouri One-Call service, and Baker-Peterson, a private utility-locating service. Based on discussions with GSA, Tetra Tech contracted with Baker-Peterson because Missouri One-Call is not responsible for locating private underground utilities, and the GSA utility maps are not sufficiently reliable.

3.2 SAMPLING PROCESS

The sampling scheme employed for this project was judgmental (based on the best professional judgment of the sampling team), in accordance with the *Guidance for Performing Site Inspections Under CERCLA*, Office of Solid Waste and Emergency Response (OSWER) Directive #9345.1-05, September 1992. The following presents the sampling process for the GFC Occupational Exposure Evaluation.

Based on discussions with GSA, the focus of the GFC Occupational Exposure Evaluation is on contaminants of concern associated with former ordnance plant operations, and not on construction and maintenance materials such as lead-based paint, asbestos-containing building materials (ACBM), polychlorinated biphenyl (PCB)-based caulking, or appropriately applied pesticides and herbicides. Asbestos management plans are in place at occupied buildings where ACBM has been identified. To

address potential for asbestos in soil, GSA requested soil sampling as appropriate based on known or suspected historical conditions.

Buildings 102 and 102 D have been mothballed and are no longer maintained or serviced by utilities pending demolition or complete renovation. According to GSA, Building 102D should not be entered without a respirator equipped with proper filtration cartridges or supplied air because of mold issues. GSA requested no additional investigation at these buildings until their futures are determined.

Access to buildings within the GFC complex was controlled by the GFC tenants but generally was provided as requested. Escorts were required in portions of Buildings 103, 103 E, 104, 104 E, 104 F, 105 E, and 110; photography was prohibited or restricted in portions of Buildings 103 and 104.

Sampling locations are shown on Figures 3 through 23 in Appendix A. Tables 5 through 8 in Appendix B present additional details of the samples collected from each building—including sample types, identifiers, and analyses.

3.2.1 Interior Concrete Core Sampling

In buildings for which available records were insufficient to verify completion of proper removal and disposal of all PCB-containing equipment, and completion of cleanup where needed, clearance samples were collected for PCB analysis. Historically, wipe sampling had been conducted for PCB analysis. Although the wipe sampling technique is acceptable for impervious materials, the Missouri Department of Natural Resources (MDNR) requires destructive core sampling for concrete and other pervious materials that might have absorbed PCBs. Tetra Tech collected destructive core samples for analysis on a mass concentration basis (i.e., mass of analyte per unit mass of sample collected), allowing direct human health risk assessment.

Based on available transformer inspection, replacement, and spill cleanup records, destructive core sampling was conducted in transformer vaults and utility rooms within the following buildings (see Figures in Appendix A):

- 101
- 103 A/B/C
- 103 D
- 103 E
- 103 F (former 112)
- 104 A/B/C/D
- 104 E
- 104 F
- 105 A/B/C/D
- 105 E
- 105 F
- 105 L
- 107
- 108 A
- 108 B
- 110
- 115
- 122 B
- 208 B

Samples were collected for the laboratory analyses specified in Table 5 in Appendix B.

Sampling was consistent with MDNR Risk-Based Corrective Action (MRBCA) requirements, procedures specified in 40 *Code of Federal Regulations* (CFR) 761.123, and EPA's *Polychlorinated Biphenyl Inspection Manual* (2004).

3.2.2 Interior Surface Dust Sampling

Although wipe samples had been collected from numerous surfaces throughout GFC, many wipe sample results had not been directly comparable to MRBCA target levels or EPA regional screening levels (RSL). Therefore, Tetra Tech conducted bulk surface dust sampling as necessary to verify wipe sample results, more directly evaluate risk and mitigation needs, and otherwise fill data gaps. Tetra Tech used a micro-vacuum technique that allowed for collection of a bulk surface dust sample that could be analyzed on a mass concentration basis (i.e., mass of analyte per unit mass of sample collected), allowing direct human health risk assessment via ingestion, particulate inhalation, and dermal contact pathways. Moreover, the micro-vacuum technique facilitated collection of dust from crevices, irregular surfaces, and hard-to-reach areas that would be difficult to sample otherwise. Because composition of surface dust on interior building surfaces may be influenced by day-to-day activities such as foot traffic or cleaning, dust samples were collected from building locations outside primary foot-traffic pathways. Dust samples were analyzed for lead and/or mercury, depending on the building and its historical use.

Based on available information, bulk surface dust samples were collected from the following buildings (see Figures in Appendix A):

- 102 E
- 103 A/B/C
- 103 D
- 103 E
- 103 F (former 112)
- 104 A/B/C/D
- 104 E
- 104 F
- 105 A/B/C/D
- 105 E
- 105 F
- 110
- 115

Samples were collected for the laboratory analyses specified in Table 6 in Appendix B.

At each surface dust sampling location, Tetra Tech collected a bulk dust sample by micro-vacuum sampling into a micro-vac cartridge. Sampling was consistent with procedures described in ASTM International (ASTM) D7144 *Standard Practice for Collection of Surface Dust by Micro-vacuum Sampling for Subsequent Metals Determination* (2011). Sampling occurred over an area sufficiently large to obtain at least 1 gram of sample.

3.2.3 Interior Crawlspace and Basement Surface Soil Sampling

Within dirt-floor crawlspace and basement areas where no sampling had been conducted historically or where past sampling had revealed existing contamination, Tetra Tech collected surface soil samples to support direct assessments of human health risks via ingestion, particulate inhalation, and dermal contact pathways. No surface soil samples were collected from basement tunnels, as concrete was present at these locations.

Targeted contaminants of concern for sample analysis were specified building-by-building, based on former ordnance plant operations within each building, and included lead, mercury, and semivolatile organic compounds (SVOC). Although asbestos management plans are in place at occupied buildings where ACBMs have been identified, surface soil samples from crawlspace and basement areas also were tested for asbestos, given the frequent occurrences of asbestos-containing utility wrap and waste burial beneath buildings of this age.

Based on available information, surface soil samples were collected from crawlspaces and basements beneath or leading to the following buildings (see Figures in Appendix A):

- 102 E
- 103 A/B/C
- 103 D
- 103 E
- 103 F (former 112)
- 104 A/B/C/D
- 104 E
- 104 F
- 105 A/B/C/D
- 105 E
- 105 F
- 107

Samples were collected for the laboratory analyses specified in Table 7 in Appendix B.

Surface soil samples were collected from 0 to 0.5 foot below ground surface (bgs) using a disposable stainless steel spoon. The soil was homogenized in a disposable aluminum pie pan, and placed in laboratory-supplied containers.

3.2.4 Exterior Soil Sampling

Exterior soil samples were collected within areas where historical building use, tank presence, demolition practices, or analytical data indicated potential for either: (1) direct exposure of construction workers, other workers, or visitors to contaminants of concern in soil; or (2) inhalation by indoor workers or visitors of contaminants of concern volatilized from exterior soil to occupied interior spaces. Contaminants of concern for analysis were specified building-by-building based on former ordnance plant operations, and included volatile organic compounds (VOC), SVOCs, total petroleum hydrocarbons (TPH), PCBs, pesticides, herbicides, metals, and asbestos.

Based on currently available information, soil samples were collected within the footprints or around the perimeters of the following buildings (see Figures 22 and 23 in Appendix A and Table 8 in Appendix B):

- 102 F/G/H
- 102 J
- 102 K
- 103 F/G/H
- 103 J
- 103 K
- 104 A/B/C/D
- 104 G/H/J
- 104 K
- 104 L
- 104 M
- 104 N
- 105 M
- 105 N
- 108 A
- 108 B
- 110
- 115 and USTs
- 122 B
- 136 A
- 136 B
- 136 E
- 136 F
- 137 A
- 208 B

Samples were collected for the laboratory analyses specified in Table 8 in Appendix B. No soil samples were collected directly from the footprints of former Buildings 105 G/H/J or 111; only fill material was expected as a result of recent removal associated with utility renovations and construction of a new parking lot.

Tetra Tech collected the external soil samples in general accordance with EPA Environmental Response Team (ERT) SOP 2012, *Soil Sampling* (EPA 2000b). At each location, a Geoprobe Macro-Core direct-push technology (DPT) sampler fitted with disposable liners was used to collect a continuous soil core in 4-foot segments. Each 4-foot core interval was screened for contamination using a hand-held photoionization detector (PID) and via visual and olfactory detections. At each boring location, one soil sample was collected from the zone having the highest apparent contamination based on PID readings, odor, or visual staining. In the absence of apparent contamination, the soil sample was collected from a random interval within the vadose (unsaturated) zone.

Soil analyzed for VOCs and TPH gasoline-range organics (GRO) was sampled using a TerraCore sampling kit (EPA Method 5035 [EPA 1996], Appendix A, Paragraph A.7.1.1 – *Subsampling of Cohesive Granular but Uncemented Materials Using Devices Designed to Obtain a Sample Appropriate for Analysis*). Soil to be analyzed for other parameters was removed from the liner, homogenized in a disposable aluminum pie pan, and then transferred to laboratory-supplied containers.

No soil samples were collected at planned sampling locations DPTS-11 (near Building 108 A) and DPTS-46 (near Building 208 B) because refusal of the direct-push technology (DPT) sampling equipment was repeatedly encountered at these locations. At location DPTS-11, four boring attempts met refusal at 3 feet bgs, likely encountering a concrete footer of Building 108 A. Similarly, at location DPTS-46, three boring attempts met refusal in concrete at 1 foot bgs. Further boring attempts in these areas were prevented by buried and overhead utility lines.

3.2.5 Exterior Groundwater Sampling

Exterior groundwater samples were co-located with exterior soil sampling locations where historical building use, tank presence, demolition practices, or analytical data indicated potential for contaminants of concern to volatilize from groundwater to occupied interior spaces, posing an inhalation exposure risk to workers and visitors. Contaminants of concern for analysis were specified building-by-building based on former ordnance plant operations, and included VOCs, SVOCs, TPH, PCBs, pesticides, and herbicides.

Based on currently available information, groundwater sampling was attempted within the footprints or around the perimeters of the following buildings (see Figure 23 in Appendix A and Table 8 in Appendix B). Only at those locations with asterisks was groundwater available for collection of a groundwater sample. Samples were collected for the laboratory analyses specified in Table 8 in Appendix B.

- 103 K
- 104 A/B/C/D*
- 104 N
- 108 A and 111*
- 108 B*
- 115 and USTs*
- 122 B*
- 136 A
- 136 B*
- 136 E*
- 136 F*
- 137 A
- 208 B

No groundwater samples were collected from planned sampling locations DPTGW-43 near Building 103 K, DPTGW-23 and DPTGW-28 near Building 104, DPTGW-41 near Building 104 N, DPTGW-11 near Building 108 A, DPTGW-35 near Building 136 A, DPTGW-38 near Building 137 A , and DPTGW-45, -46, and -47 near Building 208 B. Despite allowance for the temporary wells to recover overnight, groundwater was absent or of insufficient volume for sample collection at these locations. Similarly, insufficient groundwater was present to fill the laboratory-provided sample containers for SVOC and diesel- and oil-range organic TPH analyses at sampling location DPTGW-9 near Building 108 A, and for pesticide and herbicide analyses at sampling location DPTGW-6 near Building 122 B; sample containers were filled for the other planned analyses at these locations.

Tetra Tech collected the exterior groundwater samples in general accordance with EPA ERT SOP 2007, *Groundwater Well Sampling* (EPA 1995). Where ample groundwater was present, groundwater samples were collected from temporary monitoring wells created using a Geoprobe Screen Point 15 sampling apparatus with a disposable 4-foot-long polyvinyl chloride (PVC) screen. Where insufficient groundwater was present, the rods were replaced by disposable, rigid, PVC tubing with a 10-foot screen, and the temporary well was allowed to recover overnight. In either case, the screen was placed at or directly below the water table, and samples were collected through disposable polyethylene tubing using

either a peristaltic pump or a check valve placed at the bottom of the tubing. Where ample groundwater was available, approximately three tubing volumes of groundwater were purged prior to sampling.

Groundwater samples were collected in laboratory-supplied containers, beginning with those parameters with the greatest potential for volatilization. Groundwater samples collected for dissolved metals analysis were filtered in the field using a Nalgene Filter Unit (or equivalent) with a 0.45-micrometer filter. Groundwater samples collected for all other analyses were unfiltered.

3.2.6 Quality Control Sampling

Field QC samples were collected to help evaluate the validity of original field sample data. Table 9 in Appendix B summarizes the types of field QC samples collected, including field duplicates, trip blanks, and equipment blanks. Additionally, extra sample volume was collected at select locations for laboratory matrix spike/matrix spike duplicate (MS/MSD) analysis.

Field Duplicate Samples

Collection and analysis of field duplicates allows evaluation of consistency of the overall sampling and analytical system. Field duplicates are two environmental samples collected at the same time and at the same location for separate submittals to the laboratory for analysis. Field duplicate samples were attempted for 5 percent of groundwater samples; however, insufficient groundwater volumes prevented collection of a second groundwater sample volume at any location. Field duplicate soil, surface dust, or concrete samples were collected but were not considered critical or representative of data quality, given the difficulty of collecting truly homogeneous, co-located samples from these media.

Equipment/Media Blanks

Equipment blank samples permit evaluation of equipment decontamination procedures. These blanks were collected as samples of clean, analyte-free water passed through and over the sampling equipment. One equipment blank was collected on each day that non-disposable, non-dedicated Geoprobe sampling equipment was used to collect subsurface soil or groundwater samples. The equipment blanks were collected by pouring deionized water over or through the decontaminated sampling equipment and collecting it in the appropriate sample containers. The blanks were analyzed for the same parameters as their corresponding environmental samples. In lieu of equipment blanks for surface dust sampling, media blank samples were submitted for analysis.

Trip Blanks

Trip blanks allow estimation of incidental or accidental contamination of the environmental samples during sampling, storage, and transportation to the laboratory. Trip blanks prepared and provided by the analyzing laboratory were stored and shipped with each cooler containing soil or groundwater samples to be analyzed for VOCs or TPH GRO. The trip blanks were analyzed for VOCs.

MS/MSD Samples

MS/MSD samples allow evaluation of the precision and accuracy of an analytical method for a particular environmental sample matrix. Samples for MS/MSD analysis were duplicate and triplicate volumes of environmental samples submitted to the laboratory for analysis. MS/MSD additional volumes were collected at a laboratory-determined frequency at field-determined locations where sufficient sample volume was available.

3.3 EQUIPMENT DECONTAMINATION

Pre-cleaned, disposable (one-time use) sampling equipment was used where possible to minimize equipment decontamination requirements. Reusable monitoring and sampling equipment such as water level indicators and Geoprobe rods and samplers were decontaminated prior to fieldwork and after sampling at each location according to the following steps:

1. Washed with low-phosphate detergent (e.g., Alconox).
2. Rinsed with potable water.
3. Rinsed with distilled and deionized water.
4. Allowed to air dry.

3.4 INVESTIGATION-DERIVED WASTE MANAGEMENT

Field methods were designed to minimize unnecessary generation of investigation-derived waste (IDW). IDW consisted of expendable sampling supplies, personal protective equipment (PPE), soil cuttings, and decontamination fluids. Expendable sampling materials and PPE were disposed of off site as municipal solid waste. Decontamination fluids were discharged to the ground surface on facility property at a location downgradient of the soil and groundwater sampling locations. Soil cuttings either were returned to the boreholes from which they originated or were drummed for off-site disposal. Field activities generated one 55-gallon drum of soil cuttings, which was sealed, labeled, and staged on site. Tetra Tech

subcontractor EMA, Inc., transferred the drum to Illini Environmental, Inc., in Caseyville, Illinois, for disposal as non-Department of Transportation (DOT) / non-Resource Conservation Recovery Act (RCRA) regulated soil cuttings. Documentation of transfer and disposal is provided in Attachment 1.

4.0 DATA VERIFICATION, VALIDATION, AND QUALITY ASSESSMENT

The quality assurance (QA) objective for this project is to provide valid data of known and documented quality. As such, the laboratory data packages from the May 2012 sampling event were verified and validated by a qualified Tetra Tech chemist to identify readily apparent problems and QC deficiencies. The laboratory data packages are provided in Attachment 2, and complete data verification and validation reports are in Appendix G. This section presents significant findings of Tetra Tech's data verification and validation, and discusses overall data quality and usability with respect to the data quality objectives (DQO) established in the Work Plan/QAPP developed by Tetra Tech EM Inc. in 2012. Specific DQOs are discussed in terms of accuracy, precision, completeness, representativeness, and comparability.

Tetra Tech applied the following guidelines, as applicable, in qualifying the data and evaluating its suitability to support project decisions and answer underlying questions:

- Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA Region 7 Guideline 9240.1-48, June 2008)
- Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (EPA Region 7 Guideline 9240.1-51, January 2010)
- Contract Laboratory Program National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins and Chlorinated Dibenzofurans Data Review (USEPA-540-R-05-001, September 2005)
- *Data Verification/Validation Procedures for Asbestos in Air by TEM* (Response Engineering and Analytical Contract [REAC] Standard Operating Procedure 1025)
- Review of Data Packages from Subcontracted Laboratories (Tetra Tech EM Inc., February 2002)
- Other criteria specified in the applicable methods.

4.1 ACCURACY AND PRECISION

Accuracy for this project is defined as the ratio, expressed as a percentage, of a measured value to a true or reference value. The analytical component of accuracy is expressed as percent recovery, based on the analysis of laboratory-prepared spike samples. Accuracy is estimated by calculating the percent recovery of laboratory MS/MSD samples.

Precision for this project is defined as a measure of agreement among individual measurements of laboratory-prepared duplicate samples and field duplicates. Precision is estimated by analyzing duplicate MS samples or laboratory control samples (LCS), comparing results with those from the corresponding

original samples, and calculating the relative percent difference (RPD) between results from each duplicate pair.

Additional details and formulas are provided in the Work Plan/QAPP (Tetra Tech EM Inc. 2012).

4.1.1 Volatile Organic Compounds

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Package 1205224: Recoveries of trichloroethene (TCE) were 73 and 71 percent versus limits of 80 to 121 percent. This may have been due to either matrix interference or to an irregular distribution of the TCE within the sample. The result for TCE in sample DPTS-25 is flagged "J" and qualified as estimated.
- Laboratory Data Package 1205405: In sample DPTS-35, 1,1,2,2-tetrachloroethane yielded recoveries of only 2 and 3 percent, versus limits of 75 to 123 percent. The nondetected result for 1,1,2,2-tetrachloroethane in sample DPTS-35 is flagged "UJ" as estimated.
- Laboratory Data Package 1205487-1205674: The aqueous MS/MSD analyses of sample DPTGW-1 yielded recoveries of 0 and 92 percent, versus limits of 73 to 121 percent, for methyl tertiary butyl ether (MTBE), and 0 and 97 percent, versus limits of 75 to 122 percent, for methylcyclohexane. The reporting limits for the nondetected results for MTBE and methylcyclohexane in sample DPTGW-1 are flagged "UJ" to indicate that they are estimated.

Overall data quality is acceptable, with some qualification. All data are usable as qualified for their intended purposes.

4.1.2 Semivolatile Organic Compounds

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Package 1205224: Almost all results from MS/MSD analyses of sample DPTS-25 were within limits. However, recoveries for 4-nitroaniline were 167 and 43 percent, versus limits of 50 to 127 percent. 4-Nitroaniline is well known as a poor responder to the detector used in the analytical instrument. The nondetected result for 4-nitroaniline in sample DPTS-25 is flagged "UJ" to indicate that the detection and reporting limits are estimated. The same problem may apply to other soil samples.
- Laboratory Data Package 1205405: Almost all results from MS/MSD analyses of sample DPTS-35 were within limits. However, recoveries for 4-nitroaniline were 47 and 45 percent, versus limits of 50 to 127 percent. 4-Nitroaniline is well known as a poor responder to the detector used in the analytical instrument. The nondetected result for 4-nitroaniline in sample DPTS-35 is flagged "UJ" to indicate that the detection and reporting limits are estimated. The same problem may apply to other soil samples. No other qualifications were applied.

- Laboratory Data Package 1205405: Almost all surrogate recoveries from field and laboratory samples were within established control limits. The exceptions were low recoveries of the acidic surrogates from sample DPTS-30. This effect is likely related to the sample matrix, which included relatively high concentrations of polynuclear aromatic hydrocarbons (PAH) and TPH-ORO plus mineral matter. The nondetected results for acidic compounds in sample DPTS-30 are flagged "UJ" to indicate that their reporting limits are estimated.

- Laboratory Data Package 1205487-1205674: For sample DPTS-30, all three acidic surrogates had recoveries below their acceptance limits, indicating matrix interference. Therefore, all nondetected results for acidic analytes in sample DPTS-30 are considered estimated and are flagged "UJ."

- Laboratory Data Package 1205487-1205674: Most results of aqueous MS/MSD analyses of sample DPTGW-1 were within limits. However, recoveries for 2,4-dinitrophenol were 0 and 0 percent, versus limits of 15 to 120 percent, and those of 4,6-dinitro-2-methylphenol were 20 and 26 percent, versus limits of 25 to 121 percent. Both analytes are well known as poor responders to the detector used in the analytical instrument. The nondetected result for 4,6-dinitro-2-methylphenol in sample DPTGW-1 is flagged "UJ" to indicate that the detection and reporting limits are estimated. The nondetected result for 2,4-dinitrophenol is flagged "R" to indicate that it is rejected and that the analyte may or may not be present. (2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol react with a number of organic compounds and may have been consumed by such reactions, resulting in the low recoveries.) The same problem may apply to other aqueous samples.

Overall data quality is acceptable, with some qualification. All data are usable as qualified for their intended purposes.

4.1.3 PCBs

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Package E1200523: PCB 167L in sample 105-C7 yielded recoveries below the acceptance limit in both the original (undiluted) analysis and the diluted re-analysis. Therefore, the result for PCB 167 in sample 105-C7 is qualified as estimated, possibly biased high.

- Laboratory Data Package E1200523: In the diluted re-analysis of sample 110-C1, all of the hexachlorobiphenyl labeled congeners yielded recoveries below their acceptance limits. Most hexachlorobiphenyls (PCB 128 through 169) results were quantitated from the undiluted analysis (with fully satisfactory recoveries), so no qualifications are warranted for them. However, PCBs 153+168 and PCBs 129+138+163 were quantitated from the dilution, so the results for those congeners are qualified as estimated, possibly biased high.

- Laboratory Data Package E1200537-E1200538: In the analysis of sample 103-C3, PCB 1L yielded a recovery of only 9 percent, below acceptance limits. Therefore, the reporting limits for the nondetected results for PCB 1 and PCB 2, which are quantitated against PCB 1L, in sample 103-C3 are considered estimated and are flagged "UJ."

- Laboratory Data Package E1200537- E1200538: Because of matrix interference, a number of congeners in some samples did not elute fully during the expected time in which the associated ions

were monitored. Therefore, these results are considered estimated and probably biased low. Affected results are:

Sample	Estimated Congener Results
103-C1	PCB 144, PCB 187
103-C7	PCBs 147+149
103F-C1	PCB 56, PCBs 147+149, PCB 183
104-C1	PCBs 147+149, PCB 183
104-C2	PCB 56
104-C6	PCBs 147+149, PCB 183
105F-C1	PCB 56, PCBs 147+149
105L-C2	PCB 56, PCBs 147+149
107-C1	PCB 183
107-C2	PCB 56, PCBs 147+149
108A-C1	PCBs 147+149
108A-C2	PCBs 147+149
108A-C4	PCB 56
115-C1	PCB 144
208B-C2	PCB 56, PCBs 147+149
208B-C3	PCB 56, PCBs 147+149

Results are typical of those routinely seen in these extremely sensitive analyses. All data are usable for their intended purposes with the qualifications discussed above.

4.1.4 Metals

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Package 1205224: Some results from the MS/MSD analyses of sample DPTS-20 were acceptable. However, recoveries of barium were negative (the spiked sample contained less barium than the unspiked sample), those of chromium were 90 and 130 percent, and those of lead were 164 and 97 percent—all versus acceptance limits of 75 to 125 percent. In addition, lead had an RPD of 31 percent, versus a limit of 25 percent. In the laboratory duplicate analysis also performed on sample DPTS-20, arsenic yielded an RPD of 26 percent and barium one of 31 percent, versus a limit of 25 percent. These irregularities probably reflect uneven distribution of the metals within the soil. As required by the data validation guidelines, all results for arsenic, barium, chromium, and lead in all of these soil samples are flagged "J" to indicate that they are estimated. No further qualifications were applied.

- Laboratory Data Package 1205405: Recoveries of arsenic were 91 and 61 percent, and those of cadmium were 109 and 135 percent, versus limits of 75 to 125 percent. The average recoveries were acceptable so no qualifications were imposed. The RPDs were 38 percent for barium and 86 percent

for lead, both above the limit of 25 percent. In addition, chromium had recoveries of 129 and 292 percent and an RPD of 29 percent. These irregularities probably reflect uneven distribution of the metals within the soil. As required by the data validation guidelines, all results for barium, chromium, and lead in these soil samples are flagged "J" to indicate that they are estimated.

- Laboratory Data Package 1205487-1205674: Some samples were analyzed with SDG No. 1205405, so the results of the MS/MSD analyses of sample 103E-IS2 apply to them. Specifically, the results for lead in samples 105-IS1, 105-IS2, 105-IS3, 105-IS4, 105-IS5, and 105-IS6 are considered estimated due to uneven distribution of the metal within the soil; therefore, these results are flagged "J." The mercury MS/MSD analyses of sample 103-IS4 yielded recoveries of 89 and 82 percent, versus limits of 85 to 115 percent. The average recovery was within limits, as was the RPD between the results, so no qualifications were applied for this minor irregularity. In the metals MS/MSD analyses of sample 103-IS4, recoveries of barium and lead could not be determined because the unspiked concentrations were much higher than the added spike. The RPDs were acceptable so no qualifications were applied for this data gap. In the same analyses, recoveries of chromium were 133 and 37 percent (versus limits of 75 to 125 percent), and its RPD was 29 percent (versus the limit of 25 percent). These results indicate uneven distribution of chromium within the soil. Therefore all soil chromium concentrations in soil samples analyzed with sample 103-IS4 are flagged "J" to indicate that they are considered estimated.

Overall data quality is acceptable, with qualifications of several metals due to uneven distributions of the metals within the soils. This is a common phenomenon when the metals include contamination that was distributed in particulate form. Decision making on the basis of average concentrations from multiple samples rather than one result from a single sample would minimize the uncertainty. All data are usable as qualified for their intended purposes.

4.2 REPRESENTATIVENESS

Representativeness of collected samples is facilitated by establishing and following criteria and procedures identified in the Work Plan/QAPP (Tetra Tech EM Inc. 2012), which was designed based on the historical site information and objectives therein. Tetra Tech implemented the Work Plan/QAPP as described in Section 3.0. As noted, deviations primarily included inability to collect (1) soil samples because of refusal in the subsurface, and (2) groundwater samples in part or in full because of insufficient subsurface groundwater availability. These deviations do not detract from the representativeness of the data that were acquired.

Representativeness also is assessed using QC samples, including field duplicates and blanks. Additional details and formulas are provided in the Work Plan/QAPP (Tetra Tech EM Inc. 2012). The following subsections discuss this assessment.

4.2.1 Volatile Organic Compounds

Tetra Tech's data verification and validation resulted in no data qualification beyond that applied by the analytical laboratory.

4.2.2 Semivolatile Organic Compounds

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Package E1205224: In the field duplicate pair from location DPTS-8, a large number of PAHs were detected. PAHs are characteristic products of incomplete combustion, found in soot, coal tar, some crude oils, and other mixtures. Concentrations of PAHs in the field duplicate sample were generally much greater than in the primary sample, implying that the PAHs represent environmental contamination unevenly distributed within the soil. Data users should note this when interpreting the results.

Overall data quality is acceptable, with only one qualification applied. All data are usable as qualified for their intended purposes.

4.2.3 PCBs

The following findings of Tetra Tech's data verification and validation resulted in data qualification beyond that applied by the analytical laboratory:

- Laboratory Data Packages E1200509, E1200523, E1200524, E1200537- E1200538, E1200546-E12005467: The laboratory blank used in these analyses contained a number of congeners at concentrations less than their reporting limits. Therefore, a number of congener results in all field samples were flagged "B," indicating that they had been found in the laboratory blank. All congeners flagged "BJ," specifying that they are at concentrations also less than the sample reporting limits, are further qualified as nondetected and flagged "U." Higher concentration results for congeners flagged "B" alone are sufficiently above the blank concentration that these results are not qualified. Total homologue results were calculated taking these data validation results into consideration.

- Laboratory Data Packages E1200509, E1200523, E1200524, E1200537- E1200538, E1200546-E12005467: The laboratory qualified a number of congener results with a "K" flag, often accompanied by other flags (such as "JK" and "BJK"). This "K" flag indicates irregularities in the ratios of the ions used for identifying the peaks as PCB congeners. This means that some, or even all, of the material contributing to the peak consists of non-PCB material. Therefore, all of these K-flagged results for PCB congeners are qualified as non-detected and flagged "U." For those results flagged "K" only, the associated reporting limit has been listed as "result" in sample summaries of the laboratory report. For those flagged "J" as well, the standard reporting limit (listed as "MRL") has been used. Total homologue results were calculated taking these data validation results into consideration.

- Laboratory Data Package E1200509: The field duplicate pairs contained similar mixtures of PCB congeners but yielded different quantitative results. The pair from concrete sample 101-C2 yielded fairly similar numbers, but the primary sample concentrations were consistently about 1.3 times the field duplicate sample concentrations. The pair from soil sample DPTS-8 were more disparate, with field duplicate concentrations 2 to 3 times the primary sample concentrations. Both pairs indicate significantly uneven distribution of the PCB mixture within the media. No qualifications were applied.

- Laboratory Data Package E1200523: The field duplicate pair contained what appears to be the same mixture of PCB congeners, although the primary sample yielded concentrations about 10 percent higher than the field duplicate sample. For measurements such as these, those small differences are irrelevant, and the pair can be considered identical.

Results are typical of those routinely seen in these extremely sensitive analyses. All data are usable for their intended purposes with the qualifications discussed above.

4.2.4 Metals

Tetra Tech's data verification and validation resulted in no data qualification beyond that applied by the analytical laboratory.

4.3 COMPARABILITY

Comparability is the extent to which data can be compared between sample locations or periods of time within the project, or between projects. To ensure project comparability (that data from various phases of the project are comparable), Tetra Tech evaluated historical environmental information compiled for GFC and applied the standardized sampling methods, analytical methods, and units of reporting defined in the Work Plan/QAPP (Tetra Tech EM Inc. 2012). In some cases, introduction of new sampling and analytical methods was necessary to fill data gaps.

Samples were analyzed by a contract laboratory employing methods selected based on past sampling data and historical information acquired for the facility. Laboratory analysis proceeded per the reference methods, as documented or amended by the laboratories' internal SOPs. Calibration procedures and frequencies accorded with the listed EPA methods, and calibration standards were prepared from standard reference materials. Tetra Tech requested laboratory reporting limits that were equal to or less than appropriate screening levels; however, this was infeasible in some cases because of matrix interference, high analyte concentrations requiring dilution, or technological constraints.

4.4 COMPLETENESS

Data completeness is expressed as the percentage of data generated that is considered valid. A completeness goal of 75 percent was applied to this project; however, even if that goal had not been met, site decisions would still be made based on the remaining data. Additional details and formulas are provided in the Work Plan/QAPP (Tetra Tech EM Inc. 2012).

As noted in Sections 3.0 and 4.2, refusal in the subsurface precluded collection of some soil samples, and insufficient subsurface groundwater availability precluded collection (in part or in full) of some groundwater samples. However, more than 75 percent of samples were collected, and because no critical samples have been identified for the project, absence of the uncollected samples does not detract from the validity of the data acquired. All data are usable for their intended purposes with the qualifications discussed above.

5.0 RESULTS

This section presents the verified results of the May 2012 sampling event and compares the results to applicable state and federal screening levels. The laboratory data packages are provided in Attachment 2, and complete data verification and validation reports are in Appendix G. Sampling locations are shown on Figures 3 through 23 in Appendix A. Additional geographic presentation of sampling locations and results compared to state and federal screening levels is available via Flexviewer (https://gis.tetratech.com/viewers/11/).

5.1 INTERIOR CONCRETE

At least one interior concrete core sample collected for PCB analysis in each of all 19 buildings (see Appendix B, Table 5) contained a detectable concentration of PCBs (see Appendix B, Table 9). Total PCB results were compared to the MRBCA Cleanup Level for PCBs in Concrete (10 parts per million [ppm] for destructive core samples). Interior concrete results were not compared to EPA RSLs for industrial or residential soil, given the difference in matrix.

Exceedences of the MRBCA Cleanup Level for PCBs in Concrete were noted in samples from eight locations in five buildings, detailed as follows:

- Building 103 F (formerly 112):

Sample	Total PCBs	Exceedence Factor
103F-C1 (First Floor, B/C, 6/7)	12 milligrams per kilogram (mg/kg) J	1.2

- Building 104 A/B/C/D:

Sample	Total PCBs	Exceedence Factor
104-C3 (Basement, H/J, 39/40)	6,575 mg/kg J	657.5
104-C6 (Basement, H/J, 18/19)	1,955 mg/kg	195.5
104-C1 (Basement, A/B, 18/19)	14 mg/kg J	1.4

- Building 105 A/B/C/D:

Sample	Total PCBs	Exceedence Factor
105-C7 (Basement, A/B, 20/21)	107 mg/kg J	10.7

- Building 107:

Sample	Total PCBs	Exceedence Factor
107-C1 (Basement, D/F, 11/12))	3,429 mg/kg J	342.9

- Building 110:

Sample	Total PCBs	Exceedence Factor
110-C2 (Basement, N/P, 12/13)	15 mg/kg J	1.5
110-C3 (Basement, F/G, 9/10)	15 mg/kg J	1.5

5.2 INTERIOR SURFACE DUST

As noted above, interior surface dust samples were collected from 13 buildings (see Appendix B, Table 6). All of the samples were analyzed for lead; samples from two buildings also were analyzed for mercury.

5.2.1 Lead

Multiple interior surface dust samples collected in each of all 13 buildings contained detectable concentrations of lead (see Appendix B, Table 10). Lead results were compared to EPA RSLs for industrial and residential soil, as well as to the most conservative non-residential and residential MRBCA Tier 1 Risk-Based Target Levels (RBTL) for soil under Soil Type 1 (sandy). Results were compared to MRBCA RBTLs rather than the MRBCA Lowest Default Target Levels (LDTL) because the MRBCA LDTL for lead is based on protection of the domestic groundwater use pathway, which is not directly applicable to interior soil sources without precipitation. By selecting the most conservative MRBCA RBTLs, the relevant occupational exposure pathways are addressed, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential RSLs or residential RBTLs were noted in samples from 23 locations in 10 of the buildings. Of these, samples from 10 locations in eight of the buildings also exceeded non-residential RBTLs or industrial RSLs, as detailed below.

- Building 103 A/B/C:

Sample	Lead	Exceedence Factor
103-ID2 (First Floor, E/F, 20/21)	810 mg/kg	RSL: 1.01, RBTL: 1.23

- Building 103 D:

Sample	Lead	Exceedence Factor
103D-ID2 (Second Floor, N/P, 32/33)	810 mg/kg J	RSL: 1.01, RBTL: 1.23

- Building 103 E:

Sample	Lead	Exceedence Factor
103E-ID5 (Basement, N/P, 23/24)	670 mg/kg	RBTL: 1.02

- Building 104 A/B/C/D:

Sample	Lead	Exceedence Factor
104-ID11 (Second Floor, B, 28/29)	1,100 mg/kg	RSL: 1.38, RBTL: 1.67
104-ID12 (Second Floor, B/C, 1/2)	2,500 mg/kg	RSL: 3.13, RBTL: 3.79

- Building 105 E:

Sample	Lead	Exceedence Factor
105E-ID4 (Second Floor, O/P, 44/45)	1,300 mg/kg J	RSL: 1.63, RBTL: 1.97

- Building 105 F:

Sample	Lead	Exceedence Factor
105F-ID5 (Basement, M/O, 31/32)	1,200 mg/kg	RSL: 1.50, RBTL: 1.82

- Building 110:

Sample	Lead	Exceedence Factor
110-ID7 (Basement, A/B, 20/21)	830 mg/kg	RSL: 1.04, RBTL: 1.26
110-ID8 (Basement, J/K, 16/17)	770 mg/kg	RBTL: 1.17

- Building 115:

Sample	Lead	Exceedence Factor
115-ID3 (Basement, A/B, 1/2)	660 mg/kg	RBTL: 1.00

5.2.2 Mercury

Interior dust samples from both floors of Building 103 A/B/C contained detectable concentrations of mercury; no mercury was detected in interior dust samples from the first floor of Building 103 F (see Table 12). Mercury results were compared to EPA RSLs for industrial and residential soil, as well as to the most conservative non-residential and residential MRBCA Tier 1 RBTLs for Soil Type 1 (sandy). The residential RBTL is equivalent to the MRBCA LDTL. By selecting the most conservative MRBCA RBTL, the relevant occupational exposure pathways are addressed, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential screening levels were noted in two samples from the first floor of Building 103 A/B/C. However, no sample results exceeded industrial RSLs or non-residential RBTLs.

5.3 INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL

As noted above, targeted contaminants of concern for interior surface soil sample analysis were specified building by building, based on former ordnance plant operations within each building. Analytes included SVOCs, lead, and mercury. Interior surface soil samples also were analyzed for asbestos, given the frequent occurrence of asbestos-containing utility wrap and waste burial beneath buildings of this age.

5.3.1 SVOCs

Interior soil samples were collected for SVOC analysis in basements within Building 103 A/B/C and Building 104 E (see Appendix B, Table 7). Samples from both basements contained detectable concentrations of SVOCs (see Appendix B, Table 11). SVOC results were compared to EPA RSLs for

industrial and residential soil, as well as to the most conservative non-residential, construction worker, and residential MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). Results were compared to MRBCA RBTLs rather than MRBCA LDTLs because some MRBCA LDTLs are based on protection of the domestic groundwater use pathway, which is not directly applicable to interior soil sources without precipitation. By selecting the most conservative MRBCA RBTLs, the relevant occupational exposure pathways are addressed, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential screening levels were noted in samples from six locations in the two buildings. Of these, samples from five locations in the two buildings also exceeded industrial RSLs or non-residential or construction worker RBTLs, as detailed below. An asterisk (*) indicates that, although the result exceeds screening levels, it is below metropolitan statistical area (MSA) background levels reported by the Illinois Environmental Protection Agency (IEPA).

- Building 103 A/B/C:

Sample	SVOC	Exceedence Factor
103-IS1 (Basement, D/E, 24/25)	Dibenzo(a,h)anthracene 0.026 mg/kg *	RSL: 1.24
103-IS3 (Basement, D/E, 15/16)	Benz(a)anthracene 3.1 mg/kg	RSL: 1.48, RBTL: 1.53
	Benzo(a)pyrene 3.2 mg/kg	RSL: 15.2, RBTL: 1.52
	Benzo(b)fluoranthene 4.7 mg/kg	RSL: 2.24
	Dibenzo(a,h)anthracene 0.83 mg/kg	RSL: 39.5
	Indeno(1,2,3-cd)pyrene 3.3 mg/kg	RSL: 1.57
103-IS4 (Basement, D/E, 6/7)	Benzo(a)pyrene 1.6 mg/kg *	RBTL: 7.61
	Benzo(b)fluoranthene 2.2 mg/kg	RBTL: 1.05
	Dibenzo(a,h)anthracene 0.25 mg/kg *	RBTL: 11.9
103-IS5 (Basement, A/B, 7/8)	Benzo(a)pyrene 0.58 mg/kg *	RBTL: 2.76
	Dibenzo(a,h)anthracene 0.12 mg/kg *	RBTL: 5.71

- Building 104 E:

Sample	SVOC	Exceedence Factor
104E-IS1 (Basement, N, 48/49)	Benz(a)anthracene 4.5 mg/kg	RSL: 2.14
	Benzo(a)pyrene 5.2 mg/kg	RSL: 24.8, RBLT: 2.46
	Benzo(b)fluoranthene 8.0 mg/kg	RSL: 3.81
	Dibenzo(a,h)anthracene 1.2 mg/kg	RSL: 57.1
	Indeno(1,2,3-cd)pyrene 5.1 mg/kg	RSL: 2.43

5.3.2 Lead

One or more interior surface soil samples collected in each of the 12 buildings contained lead at detectable concentrations (see Appendix B, Tables 7 and 11). Lead results were compared to EPA RSLs for industrial and residential soil, as well as to the most conservative non-residential, construction worker, and residential MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). Results were compared to MRBCA RBTLs rather than the MRBCA LDTL because the MRBCA LDTL for lead is based on protection of the domestic groundwater use pathway, which is not directly applicable to interior soil sources without precipitation. By selecting the most conservative MRBCA RBTLs, the relevant occupational exposure pathways are addressed, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential screening levels were noted in samples from nine locations in seven of the buildings. Of these, samples from five locations in four of the buildings also exceeded industrial RSLs or non-residential or construction worker RBTLs, detailed as follows:

- Building 103 A/B/C:

Sample	Lead	Exceedence Factor
103-IS3 (Basement, D/E, 15/16)	738 mg/kg	RBTL: 1.12
103-IS5 (Basement, A/B, 7/8)	1,010 mg/kg	RSL: 1.26, RBTL: 1.53

- Building 103 E:

Sample	Lead	Exceedence Factor
103E-IS2 (Basement, P/N, 24/25)	681 mg/kg J	RBTL: 1.03

- Building 104 E:

Sample	Lead	Exceedence Factor
104E-IS1 (Basement, N, 48/49)	1,930 mg/kg	RSL: 2.41, RBTL: 2.92

- Building 104 F:

Sample	Lead	Exceedence Factor
104F-IS1 (Basement, M/O, 33/34)	1,080 mg/kg J	RSL: 1.35, RBTL: 1.64

5.3.3 Mercury

Interior soil samples were collected for mercury analysis in the basement of Building 103 A/B/C and in the crawlspace beneath Building 103 F (formerly 112) (see Appendix B, Table 7). Samples from both buildings contained mercury at detectable concentrations (see Appendix B, Table 11). Mercury results were compared to EPA RSLs for industrial and residential soil, as well as to the most conservative non-residential, construction worker, and residential MRBCA Tier 1 RBTLs for soils under Soil Type 1

(sandy). The residential RBTL is equivalent to the MRBCA LDTL. By selecting the most conservative MRBCA RBTLs, the relevant occupational exposure pathways are addressed, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

No exceedences of EPA RSLs or MRBCA RBTLs were noted.

5.3.4 Asbestos

Interior soil samples were collected for asbestos analysis in 11 of the 12 buildings (see Appendix B, Table 7). As detailed below, one or more interior surface soil samples collected in each of these buildings contained detectable concentrations of asbestos (see Appendix B, Table 11). Asbestos concentrations were compared to a screening level of 1% for regulated asbestos-containing material, consistent with National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, Subpart M). Detections of "trace" level asbestos (not exceeding the NESHAP 1% level for management of asbestos-containing material) may still pose a health risk (assuming respiration of the asbestos).

- Building 102 E:

Sample	Total Asbestos	Exceedence Factor
102E-IS1 (Basement, L/N, 22/23)	Trace	Not applicable
102E-IS2 (Basement, L/N, 24/25)	Trace	Not applicable

- Building 103 A/B/C:

Sample	Total Asbestos	Exceedence Factor
103-IS2 (Basement, D/E, 33/34)	Trace	Not applicable
103-IS3 (Basement, D/E, 15/16)	>1≤3 %	>1≤3
103-IS4 (Basement, D/E, 6/7)	Trace	Not applicable
103-IS5 (Basement, A/B, 7/8)	>1≤3 %	>1≤3

- Building 103 D:

Sample	Total Asbestos	Exceedence Factor
103D-IS1 (Basement, N/P, 33/34)	>1≤3 %	>1≤3
103D-IS2 (Basement, L/N, 34/35)	>2≤6 %	>2≤6

- Building 103 E:

Sample	Total Asbestos	Exceedence Factor
103E-IS1 (Basement, P/N, 22/23)	>1≤3 %	>1≤3
103E-IS2 (Basement, P/N, 24/25)	>1≤3 %	>1≤3

- Building 103 F (former 112):

Sample	Total Asbestos	Exceedence Factor
103F-IS1 (Crawlspace, C/D, 9/10)	Trace	Not applicable
103F-IS2 (Crawlspace, C/D, 3/4)	>4≤8 %	>4≤8

- Building 104 A/B/C/D:

Sample	Total Asbestos	Exceedence Factor
104-IS1 (Basement, G/H, 27/28)	>8≤15 %	>8≤15
104-IS2 (Basement, D/E, 39/40)	Trace	Not applicable
104-IS3 (Basement, B/C, 51/52)	Trace	Not applicable
104-IS4 (Basement, B/C, 18/19)	>1≤3 %	>1≤3

- Building 104 E:

Sample	Total Asbestos	Exceedence Factor
104E-IS1 (Basement, N, 48/49)	>1≤3 %	>1≤3

- Building 104 F:

Sample	Total Asbestos	Exceedence Factor
104F-IS1 (Basement, M/O, 33/34)	>2≤6 %	>2≤6

- Building 105 A/B/C/D:

Sample	Total Asbestos	Exceedence Factor
105-IS4 (Basement, G/H, 23/24)	Trace	Not applicable
105-IS5 (Basement, D/E, 12/13)	Trace	Not applicable

- Building 105 E:

Sample	Total Asbestos	Exceedence Factor
105E-IS1 (Basement, M/O, 45/46)	Trace	Not applicable
105E-IS2 (Basement, M/O, 49/50)	Trace	Not applicable

- Building 105 F:

Sample	Total Asbestos	Exceedence Factor
105F-IS1 (Basement, O/P, 33/34)	Trace	Not applicable
105F-IS2 (Basement, L/M, 29/30)	Trace	Not applicable

5.4 EXTERIOR SOIL

As noted above, exterior soil samples were collected within areas where historical building use, tank presence, demolition practices, or analytical data indicated potential for: (1) direct exposure of construction workers, other workers, or visitors to contaminants of concern in soil, or (2) inhalation by indoor workers or visitors of contaminants of concern volatilized from exterior soil to occupied interior spaces. Contaminants of concern for analysis were specified building-by-building based on former ordnance plant operations, and included VOCs, SVOCs, TPH, PCBs, pesticides, herbicides, metals, and asbestos.

Soil samples were collected successfully from 45 planned sampling locations (see Appendix B, Table 8). As previously noted, no soil samples were collected at planned sampling locations DPTS-11 (near Building 108 A) and DPTS-46 (near Building 208 B) because of refusal of the DPT sampling equipment at these locations.

5.4.1 VOCs

Soil samples from 35 locations were analyzed for VOCs; of these, soil samples from 23 locations contained detectable concentrations of VOCs, primarily acetone (see Appendix B, Tables 8 and 12). VOC results were compared to EPA RSLs for industrial and residential soil, as well as to MRBCA LDTLs and the most conservative non-residential and construction worker MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). These standards address the relevant occupational exposure pathways, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

No exceedences of these screening levels were noted.

5.4.2 SVOCs

Soil samples from 35 locations were analyzed for SVOCs; of these, soil samples from 33 locations contained detectable concentrations of SVOCs (see Appendix B, Tables 8 and 12). SVOC results were compared to EPA RSLs for industrial and residential soil, as well as to MRBCA LDTLs and the most conservative non-residential and construction worker MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). These standards address the relevant occupational exposure pathways, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential screening levels were noted in exterior soils samples from nine locations. Of these, exterior soil samples from five locations also exceeded industrial RSLs or non-residential or construction worker RBTLs, as detailed below. An asterisk (*) indicates that, although the result exceeds screening levels, it is below MSA background levels reported by IEPA.

- Northwest Quadrant:

Sample	SVOC	Exceedence Factor
DPTS-39 (Near 110)	Benzo(a)pyrene 0.44 mg/kg*	RSL: 2.10
	Dibenzo(a,h)anthracene 0.087 mg/kg*	RSL: 4.14

- Northeast Quadrant:

Sample	SVOC	Exceedence Factor
DPTS-2 (Near 102 & 102 E)	Benz(a)anthracene 4.0 mg/kg	RSL: 1.90
	Benzo(a)pyrene 2.9 mg/kg	RSL: 13.8, RBTL: 1.37
	Benzo(b)fluoranthene 5.5 mg/kg	RSL: 2.62
	Dibenzo(a,h)anthracene 0.82 mg/kg	RSL: 39.0
	Indeno(1,2,3-c,d)pyrene 3.0 mg/kg	RSL: 1.43
DPTS-3 (Near 102 & 102 D)	Dibenzo(a,h)anthracene 0.024 mg/kg*	RSL: 1.14

- Southeast Quadrant:

Sample	SVOC	Exceedence Factor
DPTS-32	Benzo(a)pyrene 0.24 mg/kg*	RSL: 1.14
(Near 105 F & 105 N)	Dibenzo(a,h)anthracene 0.048 mg/kg*	RSL: 2.29

- Southwest Quadrant:

Sample	SVOC	Exceedence Factor
DPTS-9	Benzo(a)pyrene 0.31 mg/kg*	RSL: 1.48
(Near 108 A & 111)	Dibenzo(a,h)anthracene 0.054 mg/kg*	RSL: 2.57

5.4.3 TPH

Soil samples from 35 locations were analyzed for TPH; of these, soil samples from 30 locations contained detectable concentrations of TPH, primarily GRO and oil-range organics (see Appendix B, Tables 8 and 12). No EPA RSLs have been established for TPH. TPH results were compared to MRBCA LDTLs and the most conservative non-residential and construction worker MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). These standards address the relevant occupational exposure pathways, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

No exceedences of these screening levels were noted.

5.4.4 PCBs

Soil samples from seven locations were analyzed for PCBs; of these, soil samples from six locations contained detectable concentrations of PCBs (see Appendix B, Tables 8 and 12). PCB results were compared to EPA RSLs for industrial and residential soil, as well as to MRBCA LDTLs and the most conservative non-residential and construction worker MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). These standards address the relevant occupational exposure pathways, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

No exceedences of these screening levels were noted.

5.4.5 Pesticides and Herbicides

Soil samples from four locations were analyzed for pesticides and herbicides. No pesticides or herbicides were detected (see Appendix B, Tables 8 and 12).

5.4.6 Metals

Soil samples from four locations were analyzed for metals; of these, all contained detectable concentrations of metals (see Appendix B, Tables 8 and 12). Metals results were compared to EPA RSLs

for industrial and residential soil, as well as to MRBCA LDTLs and the most conservative non-residential and construction worker MRBCA Tier 1 RBTLs for soils under Soil Type 1 (sandy). These standards address the relevant occupational exposure pathways, including dermal contact, ingestion, and inhalation of vapor emissions and particulates.

Exceedences of residential screening levels were noted in the four exterior soils samples. Of these, three also exceeded industrial RSLs or non-residential or construction worker RBTLs, as detailed below. An asterisk (*) indicates that, although the result exceeds screening levels, it is below MSA background levels reported by IEPA.

- Northwest Quadrant:

Sample	Metal	Exceedence Factor
DPTS-34 (Near 102F,G,H)	Arsenic 2.20 mg/kg *	RSL: 1.38

- Southwest Quadrant:

Sample	Metal	Exceedence Factor
DPTS-20 (Near 104G,H,I)	Arsenic 2.67 mg/kg J*	RSL: 1.67
DPTS-21 (Near 104G,H,I)	Arsenic 2.49 mg/kg J*	RSL: 1.56

5.4.7 Asbestos

Soil samples from 21 locations were analyzed for asbestos; of these, soil samples from one location contained a detectable concentration of asbestos (see Appendix B, Tables 8 and 12). Asbestos concentrations were compared to a screening level of 1% for regulated asbestos-containing material, consistent with NESHAP (40 CFR Part 61, Subpart M). Detections of trace level asbestos (not exceeding the NESHAP 1% level for management of asbestos-containing material) may still pose a health risk (assuming respiration of the asbestos).

- Southwest Quadrant:

Sample	Total Asbestos	Exceedence Factor
DPTS-21 (Near 104G,H,I)	Trace	Not applicable

5.5 EXTERIOR GROUNDWATER

As noted above, exterior groundwater sampling locations were co-located with exterior soil sampling locations where historical building use, tank presence, demolition practices, or analytical data indicated

potential for contaminants of concern to volatilize from groundwater to occupied interior spaces, posing an inhalation exposure risk to workers and visitors. Contaminants of concern for analysis were specified building-by-building based on former ordnance plant operations, and included VOCs, SVOCs, TPH, PCBs, pesticides, and herbicides.

Groundwater samples were collected successfully from nine planned sampling locations (see Appendix B, Table 8). Absence of groundwater or insufficient groundwater volume precluded collection of groundwater samples at planned sampling locations DPTGW-11, -23, -28, -35, -38, -41, -43, -45, -46, and -47. Additionally, insufficient groundwater was present to fill the laboratory-provided sample containers for SVOC and diesel- and oil-range organic TPH analyses at sampling location DPTGW-9 near Building 108 A, and sample containers for pesticide and herbicide analyses at sampling location DPTGW-6 near Building 122 B; sample containers were filled for the other planned analyses at these locations.

Groundwater results were compared to EPA tapwater RSLs, EPA MCLs, and MRBCA LDTLs (residential screening levels), as well as the most conservative MRBCA non-residential and construction worker RBTLs. These standards address relevant occupational exposure pathways, including inhalation of vapor emissions and dermal contact. Because City of St. Louis Ordinance 66777 prohibits the use or attempted use of groundwater within City limits as a potable water supply, the ingestion pathway is excluded and the dermal contact pathway is limited to construction workers and environmental samplers.

5.5.1 VOCs

Groundwater samples from nine locations were analyzed for VOCs; of these, a groundwater sample from one location contained detectable concentrations of VOCs (see Appendix B, Tables 8 and 13). The groundwater sample with detectable VOC concentrations had an exceedence of a residential screening level, but not of an MRBCA non-residential or construction worker RBTL.

VOCs detections in groundwater were compared against EPA's list of chemicals of potential concern for vapor intrusion. Because TCE, detected at a maximum concentration in sample DPTGW-1, is a chemical of potential concern for vapor intrusion, the detection was assessed using the EPA OSWER Groundwater Concentration to Indoor Air Concentration Calculator (Version 3.0, November 2012 RSLs). Assuming a commercial exposure scenario, the calculated indoor air concentration did not exceed the target risk for carcinogens (1.00E-06) or the target hazard quotient for non-carcinogens (1.0).

5.5.2 SVOCs

Groundwater samples from eight locations were analyzed for SVOCs; of these, groundwater samples from five locations contained detectable concentrations of SVOCs (see Appendix B, Tables 8 and 13). Each of the groundwater samples containing detectable SVOC concentrations had an exceedence of a residential screening level, but none had an exceedence of an MRBCA non-residential or construction worker RBTL.

SVOCs detections in groundwater were compared against EPA's list of chemicals of potential concern for vapor intrusion. No detected SVOCs are listed as chemicals of potential concern for vapor intrusion.

5.5.3 TPH

Groundwater samples from eight locations were analyzed for TPH; of these, groundwater samples from two locations contained detectable concentrations of TPH (see Appendix B, Tables 8 and 13). No exceedences of MRBCA non-residential or construction worker RBTLs were noted. No EPA RSL or MCL is established for TPH.

TPH detections in groundwater were compared against EPA's list of chemicals of potential concern for vapor intrusion. TPH is not listed as a chemical of potential concern for vapor intrusion.

5.5.4 PCBs

Groundwater samples from two locations were analyzed for PCBs; groundwater samples from both locations contained detectable concentrations of PCBs (see Appendix B, Tables 8 and 13). A groundwater sample from one location exceeded residential screening levels and also exceeded the MRBCA non-residential RBTL.

- Southwest Quadrant:

Sample	**Total PCBs**	**Exceedence Factor**
DPTGW-9 (Near 108A and 111)	2.60 J micrograms per liter (µg/L)	RBTL: 11.3

PCB detections in groundwater were compared against EPA's list of chemicals of potential concern for vapor intrusion; the PCB blends Aroclor 1221 and Aroclor 1232 are listed as chemicals of potential concern for vapor intrusion. The maximum PCB concentration (detected in sample DPTGW-9) was assessed using the EPA OSWER Groundwater Concentration to Indoor Air Concentration Calculator

(Version 3.0, November 2012 RSLs). Assuming a commercial exposure scenario, the calculated indoor air concentration did not exceed the target risk for carcinogens (1.00E-06).

5.5.5 Pesticides and Herbicides

A groundwater sample from one location was analyzed for pesticides and herbicides. No pesticides or herbicides were detected (see Appendix B, Tables 8 and 13).

6.0 CONCLUSIONS AND RECOMMENDATIONS

Location-specific conclusions and recommendations based on this investigation are provided in Table 14 in Appendix B, and summarized by analyte in the following sections.

6.1 VOCs/SVOCs/TPHs

Crawlspace and basement soil samples from Buildings 103 A/B/C and 104 E identified multiple PAHs at concentrations exceeding EPA RSLs for industrial soil, MRBCA RBTLs for non-residential soil, and the IEPA background levels for MSAs. Although crawlspaces and basement areas without flooring are not regularly occupied, workers may occasionally enter these areas to address utility or other building maintenance issues.

Recommendation is to implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.

GSA postponed recommended interior soil sampling at Building 102 A/B/C because the building was mothballed at the time of the Occupational Exposure Evaluation. Past basement/crawlspace samples had concentrations of PAHs above EPA RSLs for industrial soil.

Recommendation is to develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, basement/crawlspace contamination in the mothballed building. Prior to demolition, renovation, or reoccupation of Building 102 A/B/C, recommendation is to conduct the recommended sampling (interior soil for PAHs on the western half of the building) and implement controls as necessary.

No exterior soil sample had a VOC concentration that exceeded an EPA industrial RSL or a MRBCA non-residential or construction worker RBTL. No exterior groundwater sample had a VOC concentration that exceeded an EPA MCL or a MRBCA non-residential or construction worker RBTL. However, TCE was detected at a concentration approaching the MCL of 5.0 µg/L in groundwater sample DPTGW-1 (4.9 µg/L). TCE also was detected in corresponding soil sample DPTS-1 (0.021 mg/kg). DPTGW-1 and DPTS-1 were collected between unoccupied Buildings 102 A/B/C and 107, near former Building 136 F.

To verify that no higher TCE concentrations are present in the vicinity of DPTGW-1/DPTS-1, recommendation is to further delineate the lateral and vertical extent of this TCE contamination in soil and groundwater as part of a Remedial Investigation.

TCE, a chemical of potential concern for vapor intrusion, was detected in one groundwater sample (DPTGW-1,). The calculated indoor air concentration, assuming the maximum detected TCE concentration in groundwater and a commercial scenario, did not exceed the target risk for carcinogens (1.00E-06) or the target hazard quotient for non-carcinogens (1.0).

If future delineation of soil and groundwater contamination reveals higher concentrations of TCE, recommendation is to re-evaluate indoor air concentrations prior to reoccupation of Buildings 102 A/B/C and 107.

Five exterior soil samples had SVOC (PAH) concentrations that exceeded EPA industrial RSLs or RBCA non-residential or construction worker RBTLs. Of these, only exterior soil sample DPTS-2 had SVOC concentrations that also exceeded IEPA MSA background levels. DPTS-2 was collected between Buildings 102 A/B/C and 102 E, and between former Buildings 102 J and 102 K.

Recommendation is to further delineate the lateral and vertical extent of this SVOC (PAH) contamination in soil as part of a Remedial Investigation.

No exterior groundwater sample had an SVOC concentration that exceeded an EPA MCL or a MRBCA non-residential or construction worker RBTL. No SVOCs detected in groundwater are listed as chemicals of potential concern for vapor intrusion.

No exterior soil or groundwater sample had a TPH concentration that exceeded a MRBCA non-residential or construction worker RBTL. No EPA RSL or MCL is established for TPH.

6.2 PESTICIDES AND HERBICIDES

No pesticides or herbicides were detected in soil or groundwater samples.

6.3 POLYCHLORINATED BIPHENYLS

In Buildings 103 F (previous 112), 104 A/B/C/D, 105 A/B/C/D, 107, and 110, PCBs were detected in concrete core samples at concentrations exceeding the MRBCA Cleanup Level of 10 ppm. Exceedence factors were significant at Building 104 A/B/C (up to 657.5 times) and Building107 (up to 342.9 times).

Recommendation is to manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, recommendation is to follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces.

Given the significance of the cleanup level exceedences at Buildings 104 A/B/C and 107, recommendation is to delineate the lateral and vertical extent of potential PCB contamination in surrounding soil and groundwater as part of a Remedial Investigation.

In Buildings 108 A and 108 B, PCBs were detected in concrete core samples at concentrations below the MRBCA Cleanup Level of 10 ppm. This finding is consistent with past wipe sample results, which indicated that Aroclor 1260 was present at concentrations below the MRBCA Cleanup Level of 10 ppm. Reportedly, all PCB-containing transformers have been removed from these buildings.

GSA postponed recommended destructive concrete core sampling at Building 102 A/B/C because the building was mothballed at the time of the Occupational Exposure Evaluation.

Prior to demolition, renovation, or reoccupation of Building 102 A/B/C, recommendation is to conduct the recommended sampling (destructive concrete core sampling for PCB analysis) and implement controls as necessary.

Past detections of Aroclor 1260 in Buildings 108 B crawlspace soil have exceeded the industrial RSL and MRBCA DTL

Recommendation is to implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.

No exterior soil sample had a PCB detection that exceeded an EPA industrial RSL or a MRBCA non-residential or construction worker RBTL. However, Aroclor 1260 historically has been detected in exterior soil borings near Building 108 A, Building 108 B, and former Building 111 at concentrations exceeding the EPA industrial RSL and MRBCA non-residential / construction RBTL. One exterior groundwater sample, DPTGW-9 near Building 108A and former Building 111, had a PCB detection that

exceeded the EPA MCL and the MRBCA non-residential RBTL (type 1). This result is consistent with Aroclor 1260 detected in a past groundwater sample collected near Building 108 A; Aroclor 1260 detected in a past groundwater sample collected near Building 108 B exceeded the MRBCA DTL but not the EPA MCL or MRBCA non-residential RBTL.

Recommendation is to further delineate the lateral and vertical extent of this PCB contamination in soil and groundwater as part of a Remedial Investigation.

The PCB blends Aroclor 1221 and Aroclor 1232 are listed as chemicals of potential concern for vapor intrusion. The calculated indoor air concentration, assuming the maximum detected PCB concentration in groundwater and a commercial scenario, did not exceed the target risk for carcinogens (1.00E-06).

If future delineation of soil and groundwater contamination reveals higher concentrations of PCBs, recommendation is to re-evaluate indoor air concentrations and the need for indoor air sampling.

6.4 METALS

In Buildings 103 A/B/C, 103 D, 103E, 104 A/B/C/D, 105F, 110, and 115, lead in bulk dust samples exceeded EPA RSLs for industrial soil and MRBCA RBTLs for non-residential soil.

Recommendations are to (1) ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations, (2) clean areas impacted by lead in dust and conduct verification sampling, and (3) implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.

In Buildings 103 A/B/C, 103 E, 104 E, and 104 F, lead in crawlspace or basement soil samples exceeded EPA RSLs for industrial soil and MRBCA RBTLs for non-residential soil. In Building 105 A/B/C/D, arsenic in crawlspace or basement soil samples exceeded EPA RSLs for industrial soil, MRBCA RBTLs for non-residential soil, and USGS-reported background levels for St. Louis County.

Recommendation is to implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.

Past indoor air samples collected from Buildings 103 F, 104 A/B/C/D, and 105 A/B/C/D indicated the presence of mercury in air at concentrations below the OSHA PEL but above MRBCA and RSL target levels.

Recommendation is to verify historical detections of mercury in indoor air by conducting additional indoor air sampling for mercury analysis.

GSA postponed recommended interior soil and dust sampling at Building 102 A/B/C and Building 102 D because the buildings were mothballed at the time of the Occupational Exposure Evaluation.

Recommendation is to develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, basement/crawlspace contamination in the mothballed buildings. Prior to demolition, renovation, or reoccupation of Building 102 A/B/C or Building 102 D, recommendation is to conduct the recommended sampling (lead in dust and metals in interior soil at Building 102 A/B/C, and lead and mercury in dust at Building 102 D) and implement controls as necessary.

6.5 ASBESTOS

Buildings 101, 102 A/B/C, 102 D, 102 E, 103 A/B/C, 103 D, 103 F (former 112), 104 A/B/C/D, 105 A/B/C/D, 105 E, 105 F, 105 L, 106, 107, 110, and 122 B have asbestos management plans in place to address asbestos-containing building materials (ACBM) identified during building-wide surveys completed prior to this investigation.

Recommendation is to implement and document the ACBM operations and maintenance (O&M) and response actions identified in the asbestos management plans. Additionally, consistent with AHERA, have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate the ACBM inventory.

During the Occupational Exposure Evaluation of Buildings 102 E, 103 A/B/C, 103 D, 103 F (former 112), 104 A/B/C/D, 105 A/B/C/D, 105 E, and 105 F, asbestos was detected in basement or crawlspace soil.

Recommendation is to implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Also recommended is revision of the asbestos management plans for these buildings to address asbestos in soil, and to implement and document containment, O&M, and response actions accordingly.

GSA postponed recommended basement or crawlspace soil sampling at Building 102 A/B/C and Building 102 D because the buildings were mothballed at the time of the Occupational Exposure Evaluation.

Prior to demolition, renovation, or reoccupation of Building 102 A/B/C or Building 102 D, recommendation is to conduct the recommended sampling (asbestos in interior soil) and implement controls as necessary.

Note that sampling of basement or crawlspace soil beneath Buildings 102 A/B/C and 102 D was not conducted during the Occupational Exposure Evaluation, as these buildings were mothballed at the time of the evaluation.

No building-specific asbestos inspection and management plans are included in the records for Buildings 103 E, 104 E, 104 F, 108 A, 108 B, and 115.

Before commencing a renovation or construction project in any of these buildings, recommendation is to conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan. Consistent with AHERA, have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of the effective date of the management plan. Before commencing renovation or construction projects, validate the ACBM inventory.

During the Occupational Exposure Evaluation of Buildings 103 E, 104 E, and 104 F, asbestos was detected in basement or crawlspace soil.

Recommendation is to implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Develop asbestos management plans to address asbestos in soil at these buildings, and to implement and document associated containment, O&M, and response actions accordingly.

6.6 EXPLOSIVES/PHOSPHORUS

GSA postponed recommended interior soil and dust sampling at Building 102 A/B/C because the building was mothballed at the time of the Occupational Exposure Evaluation. Past detections of 2,4-dinitrotoluene in Building 102 A/B/C crawlspace soil samples exceeded the MRBCA DTL and industrial RSL; detections of 2,6-dinitrotoluene, 2-amino-4,6-dinitrotoluene, nitrobenzene, and 4-nitrotoluene exceeded the MRBCA DTL.

Recommendation is to develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, crawlspace contamination in the mothballed building. Prior to demolition, renovation,

or reoccupation of Building 102 A/B/C, recommendation is to conduct the recommended sampling (explosives in interior soil) and implement controls as necessary.

Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.

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APPENDIX A

FIGURES

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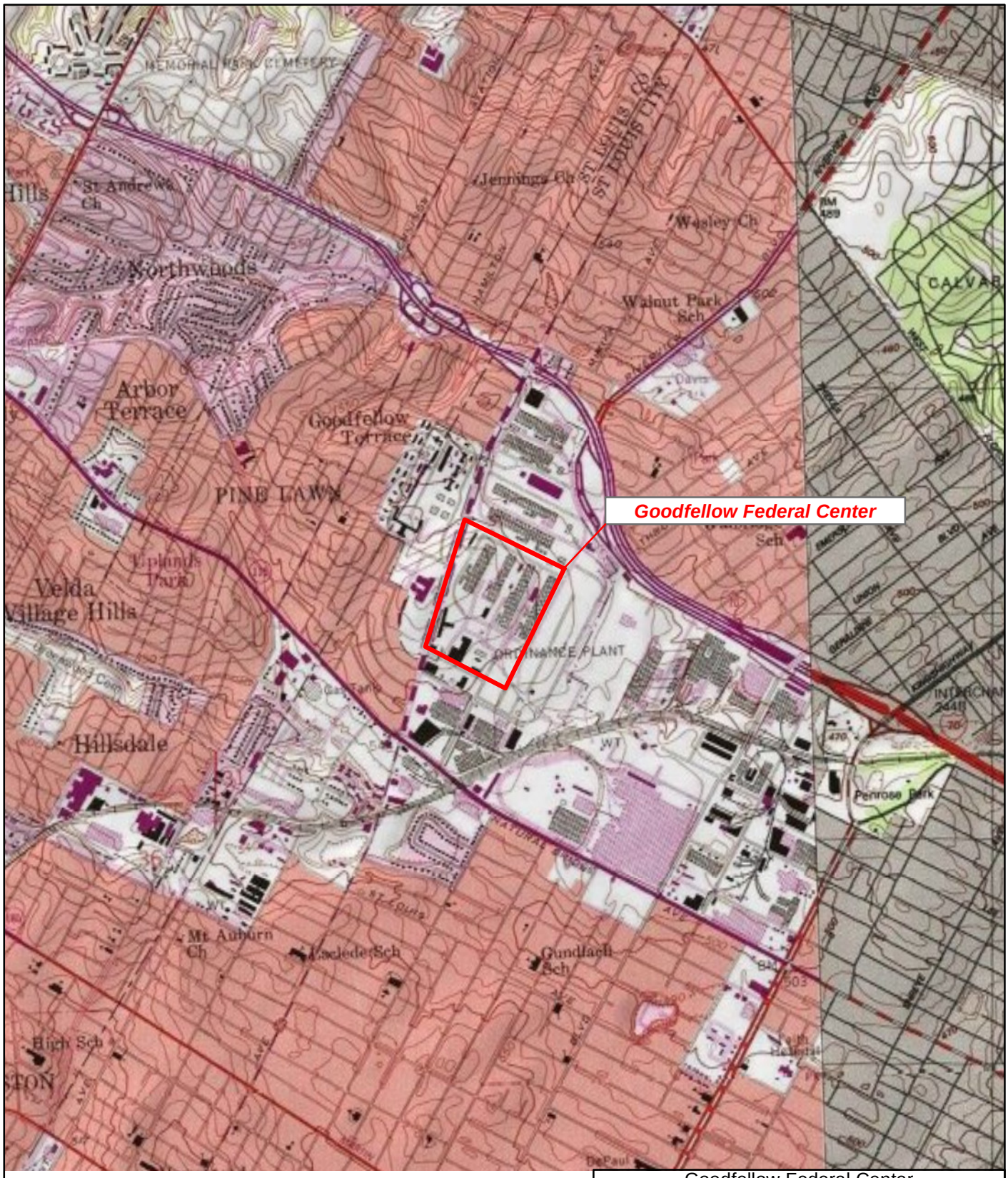

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Feet

Source: USGS Clayton, MO 7.5 Minute Topo Quad, 1993;
USGS Granite City, IL 7.5 Minute Topo Quad, 1998

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 1
Facility Location Map

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Not to Scale

Source: SCS Engineers, Figure 2 - Site Plan, March, 2007.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 2
Facility Layout Map with Historical Information

TETRA TECH

Date: 6/3/2013 | Drawn By: Nick Wiederholt | Project No: S1058.232.001

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Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 3A
Sample Location Map, Building 101 - Basement 1

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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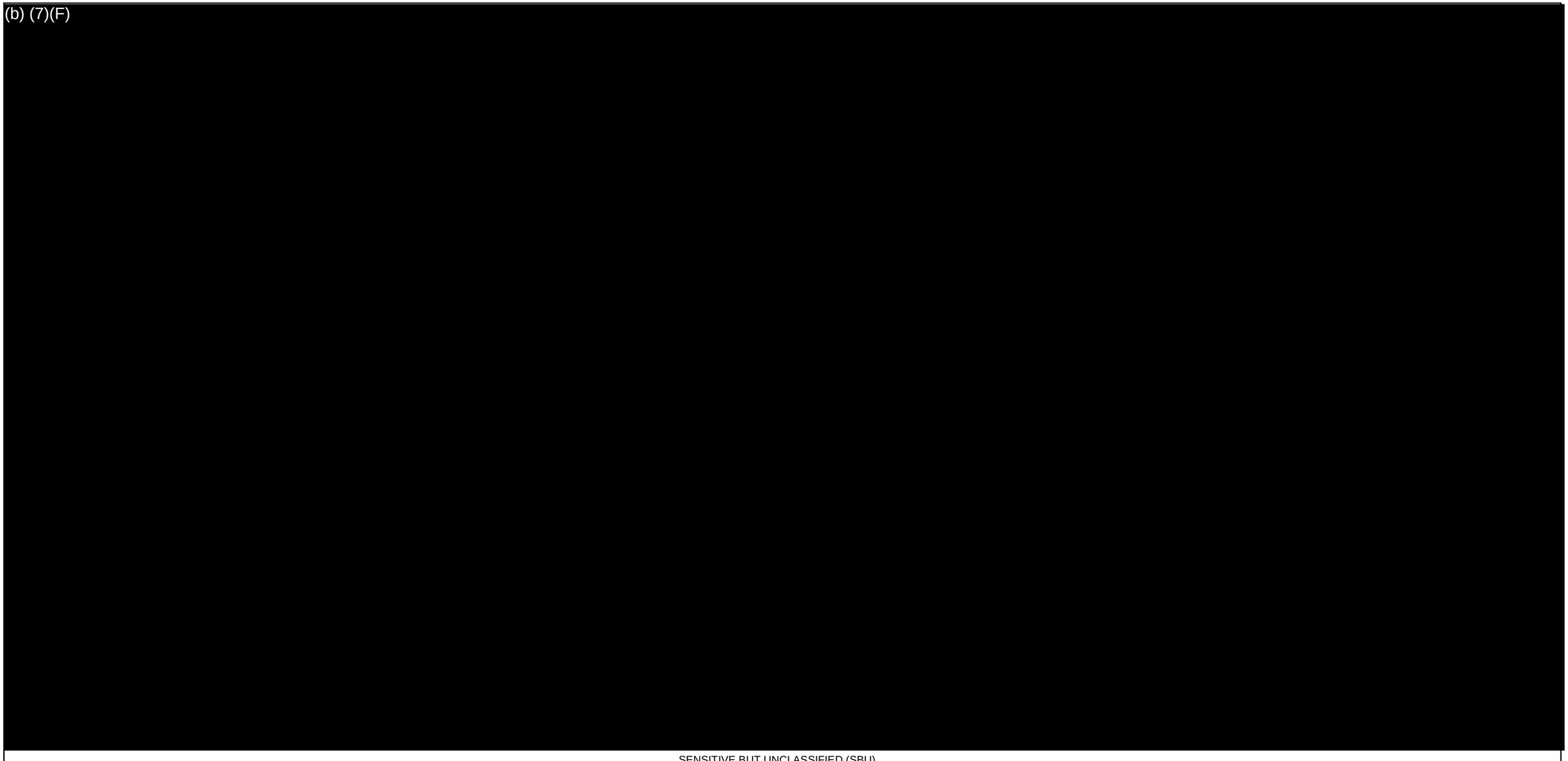

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Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 3B

Sample Location Map, Building 101 - Basement 2

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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△ Dust sample location (Lead)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 4A
Sample Location Map, Building 102 E - Second Floor

TETRA TECH

Date: 6/5/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

△ Dust sample location (Lead)

(b) (7)(F)

[redacted]

Source: General Services Administration, CAD Files, Received November 2011.

N

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 4B

Sample Location Map, Building 102 E - First Floor

TETRA TECH

Date: 6/4/2013 | Drawn By: Nick Wiederholt | Project No: S1058.232.001

(b) (7)(F)

SENSITIVE BUT UNCLASSIFIED (SBU)
PROPERTY OF THE UNITED STATES GOVERNMENT
FOR OFFICIAL USE ONLY
Do not remove this notice
Properly destroy documents when no longer needed

Legend

- Surface soil sample location (Lead, Asbestos)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 4C
Sample Location Map, Building 102 E - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_102_E\Figure4C_Basement_Final.mxd

(b) (7)(F)

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Legend

▲ Dust sample location (Lead, Mercury)

(b) (7)(F)

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 5A

Sample Location Map, Building 103 ABC - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_103_ABC\Figure5A_SecondFloor_Final.mxd

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Legend

- Core sample location (PCB)
- Dust sample location (Lead, Mercury)
- (b) (7)(F)
- PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 5B

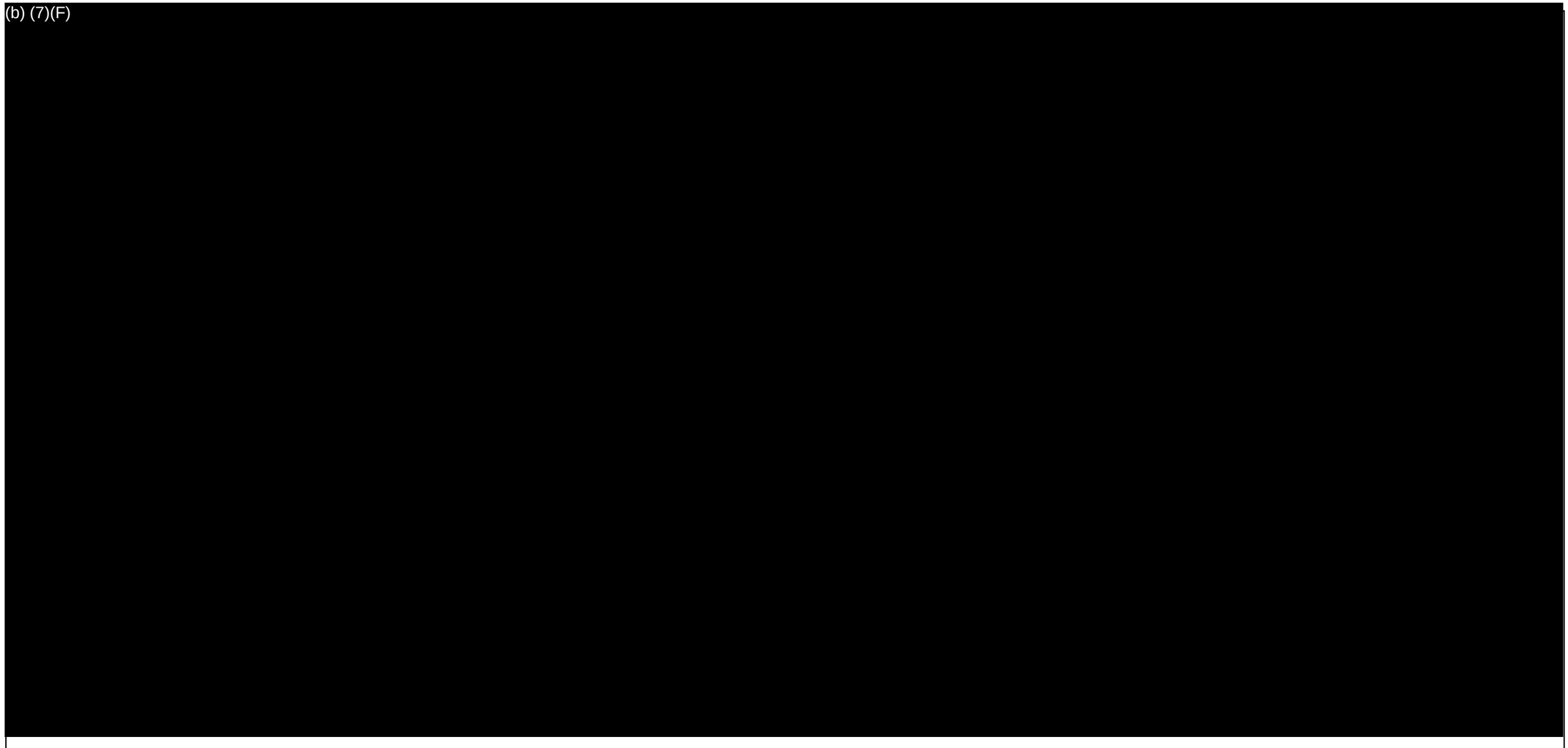
Sample Location Map, Building 103 ABC - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Data\mxd\Building_103_ABC\Figure5B_FirstFloor_Final.mxd

(b) (7)(F)



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Legend

- Core sample location (PCB)
- Surface soil sample location (Lead, Mercury, Asbestos, SVOC)

PCB Polychlorinated biphenyl
SVOC Semi-volatile organic compounds

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
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4300 Goodfellow Boulevard
St. Louis, Missouri

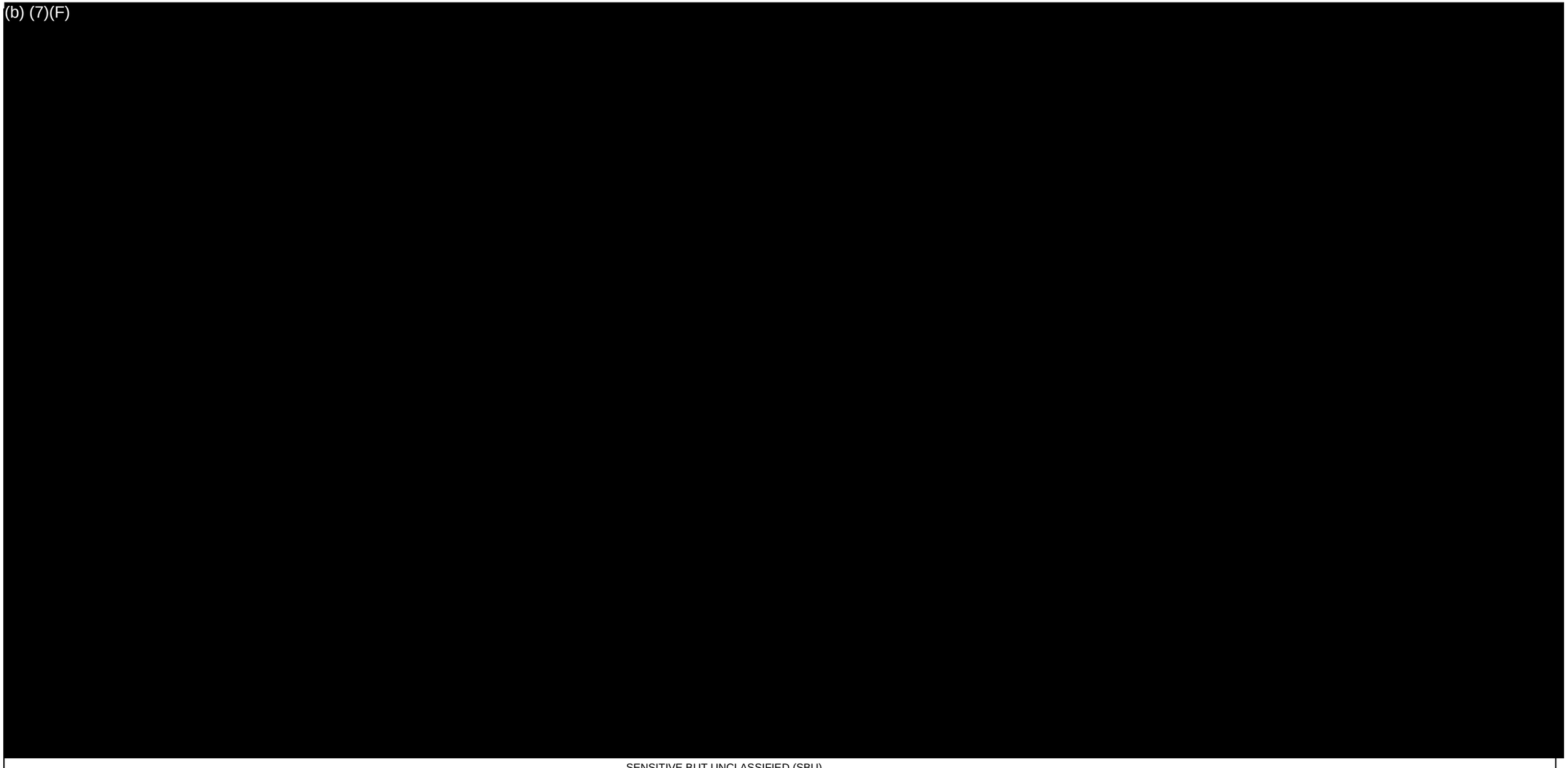
Figure 5C
Sample Location Map, Building 103 ABC - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\0001\Projects\mxd\Building_103_ABC\Figure5C_Basement_Final.mxd

(b) (7)(F)



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Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

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St. Louis, Missouri

Figure 6A
Sample Location Map, Building 103 D - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend
- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 6B
Sample Location Map, Building 103 D - First Floor

TETRA TECH

Date: 6/5/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Surface soil sample location (Lead, Asbestos)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

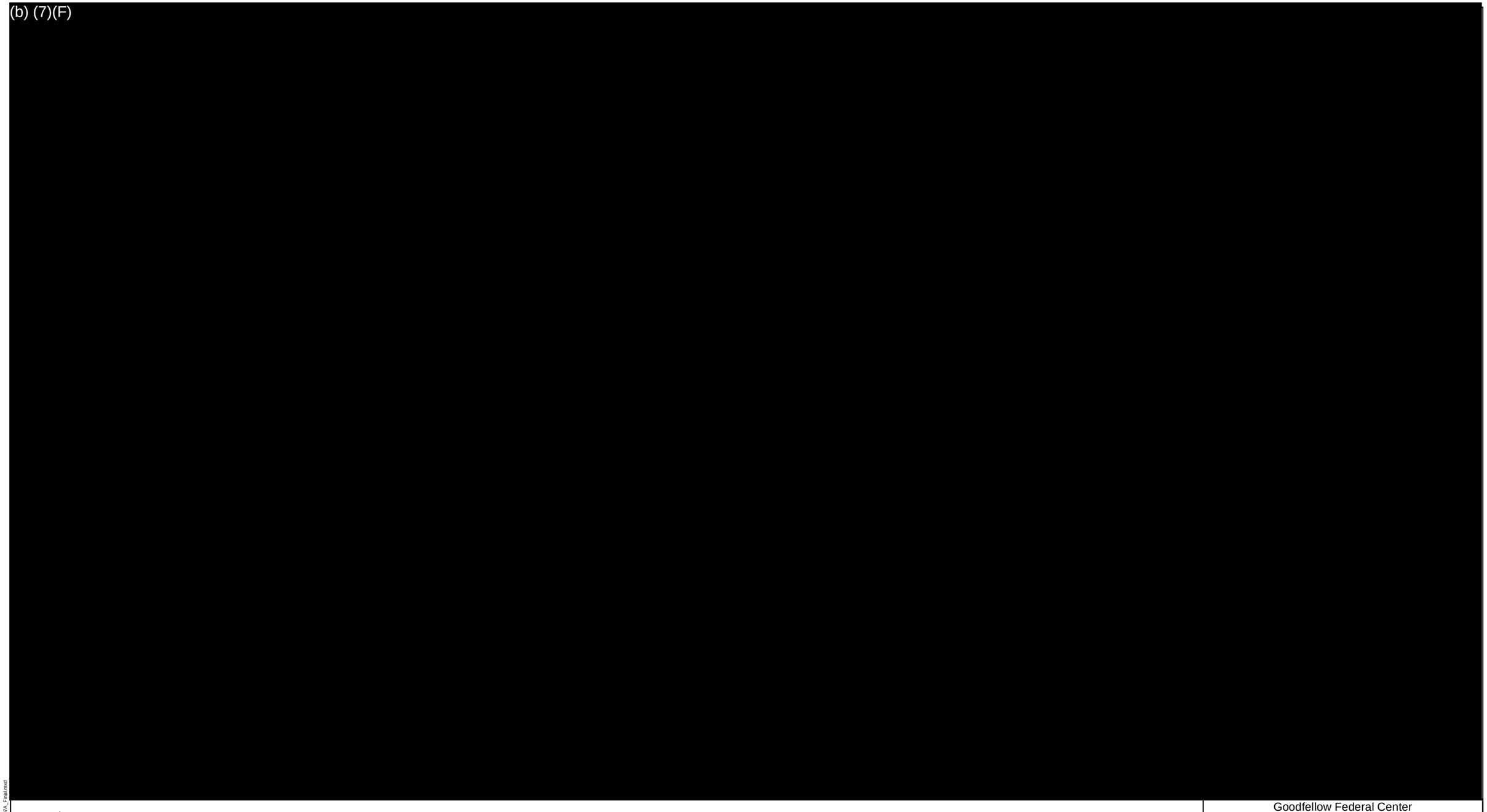
Figure 6C
Sample Location Map, Building 103 D - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_103_D\Figure6C_Basement_Final.mxd

(b) (7)(F)



Legend

△ Dust sample location (Lead)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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Figure 7A

Sample Location Map, Building 103 E - Second Floor

TETRA TECH

Date: 6/5/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

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St. Louis, Missouri

Figure 7B

Sample Location Map, Building 103 E - First Floor

TETRA TECH

Date: 6/5/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Core sample location (PCB)
- Dust sample location (Lead)
- Surface soil sample location (Lead, Asbestos)

PPE Personal protective equipment

PCB Polychlorinated biphenyl

Note: Crawlspace typically very damp;
PPE needed includes boot covers,
hard hat, eye protection, gloves

N

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 7C

Sample Location Map, Building 103 E - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

Source: General Services Administration, CAD Files, Received November 2011.

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(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead, Mercury)
- Crawl space surface soil sample location (Lead, Asbestos, Mercury)

PPE Personal protective equipment

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

Note: Crawlspace typically very damp;
PPE needed includes boot covers,
hard hat, eye protection, gloves

N

NOT TO SCALE

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4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 8

Sample Location Map, Building 103 F - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

△ Dust sample location (Lead)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 9A (1 of 2)

Sample Location Map, Building 104 ABCD - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\0001\Projects\mxd\Building_104_ABCD\Figure9A_SecondFloor_1of2_Final.mxd

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Legend

△ Dust sample location (Lead)

Note: Relocate samples as necessary in server "clean zones"

N

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 9A (2 of 2)

Sample Location Map, Building 104 ABCD - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

△ Dust sample location (Lead)

Note: No Photographs

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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Figure 9B (1 of 2)

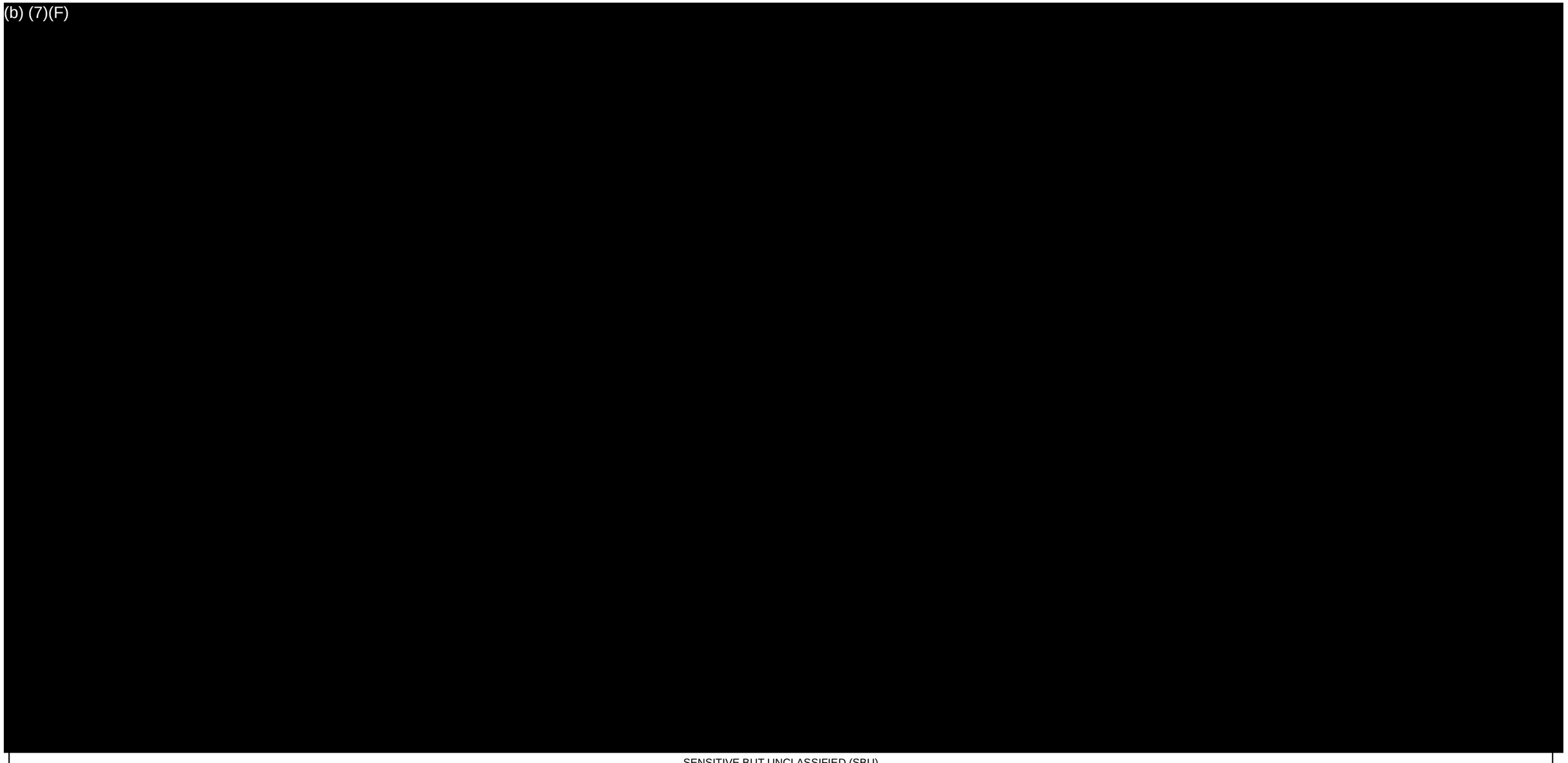
Sample Location Map, Building 104 ABCD - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\0001\Projects\mxd\Building_104_ABCD\Figure9b_FirstFloor_1of2_Final.mxd

(b) (7)(F)



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Legend

△ Dust sample location (Lead)

Note: No Photographs

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
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St. Louis, Missouri

Figure 9B (2 of 2)

Sample Location Map, Building 104 ABCD - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Core sample location (PCB)
- Surface soil sample location (Lead, Asbestos)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

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Figure 9C (1 of 2)

Sample Location Map, Building 104 ABCD - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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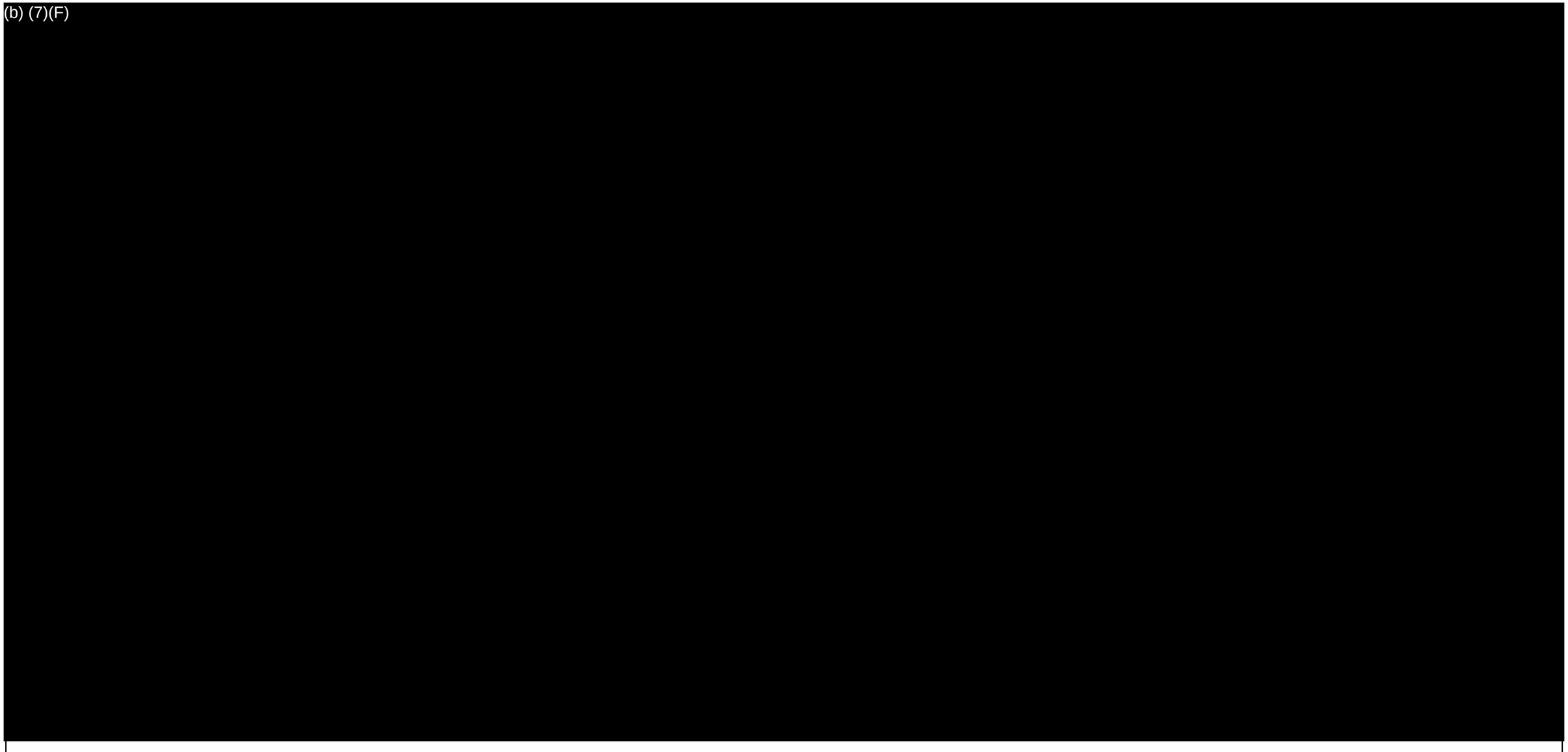

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Legend

- Core sample location (PCB)
- Surface soil sample location (Lead, Asbestos)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 9C (2 of 2)

Sample Location Map, Building 104 ABCD - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_104_ABCD\Figure9C_Basement_2of2_Final.mxd

(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

(b) (7)(F)

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

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Figure 10A
Sample Location Map, Building 104 E - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

△ Dust sample location (Lead)

Note: No Photographs

NOT TO SCALE

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St. Louis, Missouri

Figure 10B
Sample Location Map, Building 104 E - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

Surface soil sample location (Lead, Asbestos,SVOC)

SVOC Semi-volatile organic compounds

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Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 10C

Sample Location Map, Building 104 E - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Core sample location (PCB)
- Dust sample location (Lead)

(b) (7)(F)

PCB Polychlorinated biphenyl

(b) (7)(F)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 11A

Sample Location Map, Building 104 F - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

△ Dust sample location (Lead)

(b) (7)(F)

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Figure 11B
Sample Location Map, Building 104 F - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

- Surface soil sample location (Lead, Asbestos)

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Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
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4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 11C
Sample Location Map, Building 104 F - Basement

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

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Legend

△ Dust sample location (Lead)

(b) (7)(F)

[redacted]

NOT TO SCALE

Goodfellow Federal Center
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St. Louis, Missouri

Figure 12A (1 of 2)

Sample Location Map, Building 105 ABCD - Second Floor

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

Source: General Services Administration, CAD Files, Received November 2011.

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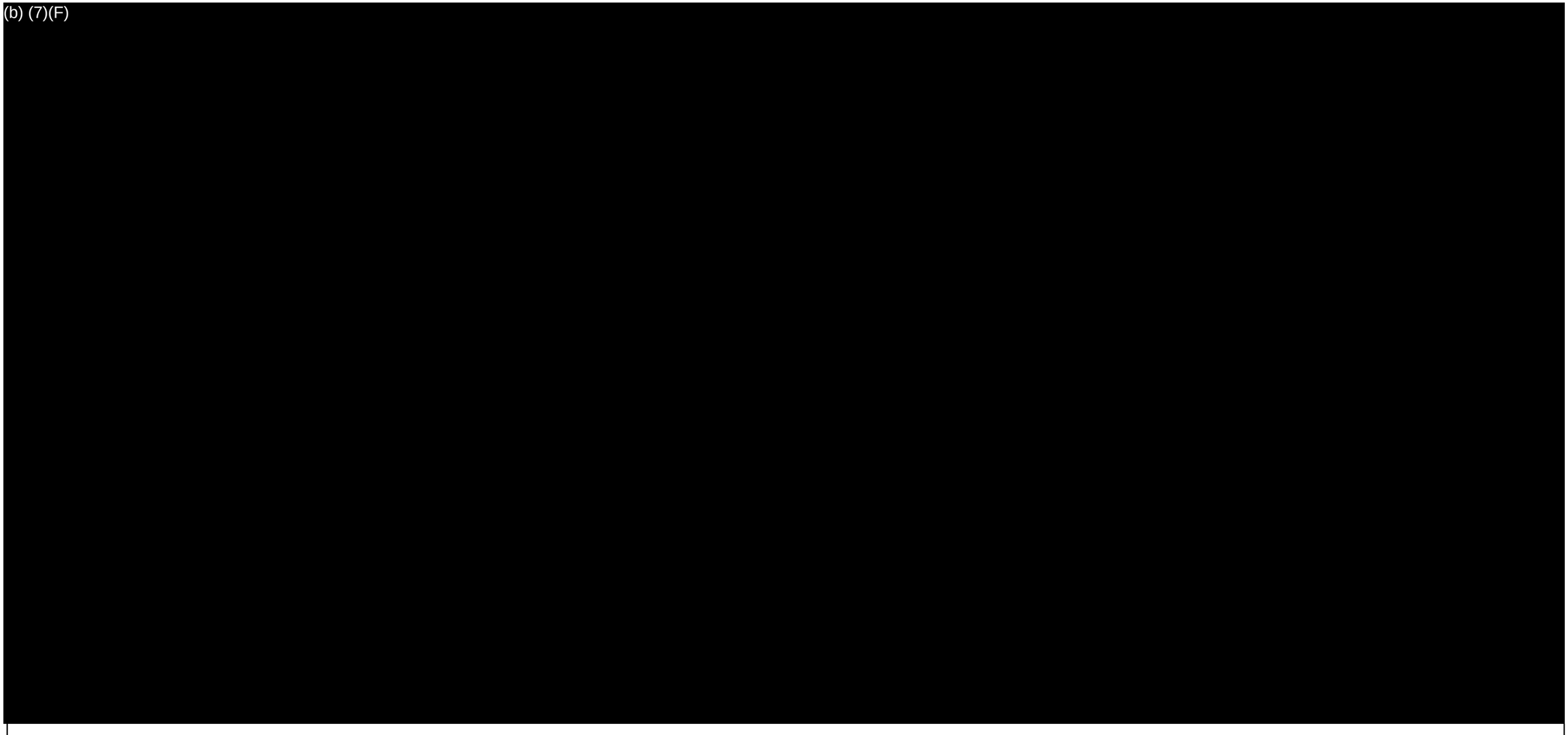
(b) (7)(F)



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Legend

△ Dust sample location (Lead)

(b) (7)(F)

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Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 12A (2 of 2)

Sample Location Map, Building 105 ABCD - Second Floor

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

△ Dust sample location (Lead)

(b) (7)(F)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 12B (1 of 2)

Sample Location Map, Building 105 ABCD - First Floor

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

(b) (7)(F)

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
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St. Louis, Missouri

Figure 12B (2 of 2)

Sample Location Map, Building 105 ABCD - First Floor

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Surface soil sample location (Lead, Asbestos)
- Core sample location (PCB)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 12C (1 of 2)

Sample Location Map, Building 105 ABCD - Basement

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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Legend

- Surface soil sample location (Lead, Asbestos)
- Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 12C (2 of 2)

Sample Location Map, Building 105 ABCD - Basement

TETRA TECH

Date: 6/3/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

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St. Louis, Missouri

Figure 13A

Sample Location Map, Building 105 E - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 13B
Sample Location Map, Building 105 E - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_105_E\Figure 13B_FirstFloor_Final.mxd

(b) (7)(F)

Legend

- Surface soil sample location (Lead, Asbestos)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

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St. Louis, Missouri

Figure 13C
Sample Location Map, Building 105 E - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

(b) (7)(F)

Source: General Services Administration, CAD Files, Received November 2011.

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Figure 14A
Sample Location Map, Building 105 F - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

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(b) (7)(F)

Legend

△ Dust sample location (Lead)

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Source: General Services Administration, CAD Files, Received November 2011.

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Figure 14B
Sample Location Map, Building 105 F - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_105_F\Figure14B_FirstFloor_Final.mxd

(b) (7)(F)

Legend

- Surface soil sample location (Lead, Asbestos)
- Dust sample location (Lead)

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 14C
Sample Location Map, Building 105 F - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_105_F\Figure 14C_Basement_Final.mxd

(b) (7)(F)

Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 15
Sample Location Map, Building 105 L - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_105_L\Figure 15_First_Floor_Final.mxd

(b) (7)(F)

Legend

- Core sample location (PCB)
- Surface soil sample location (Asbestos)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

N

NOT TO SCALE

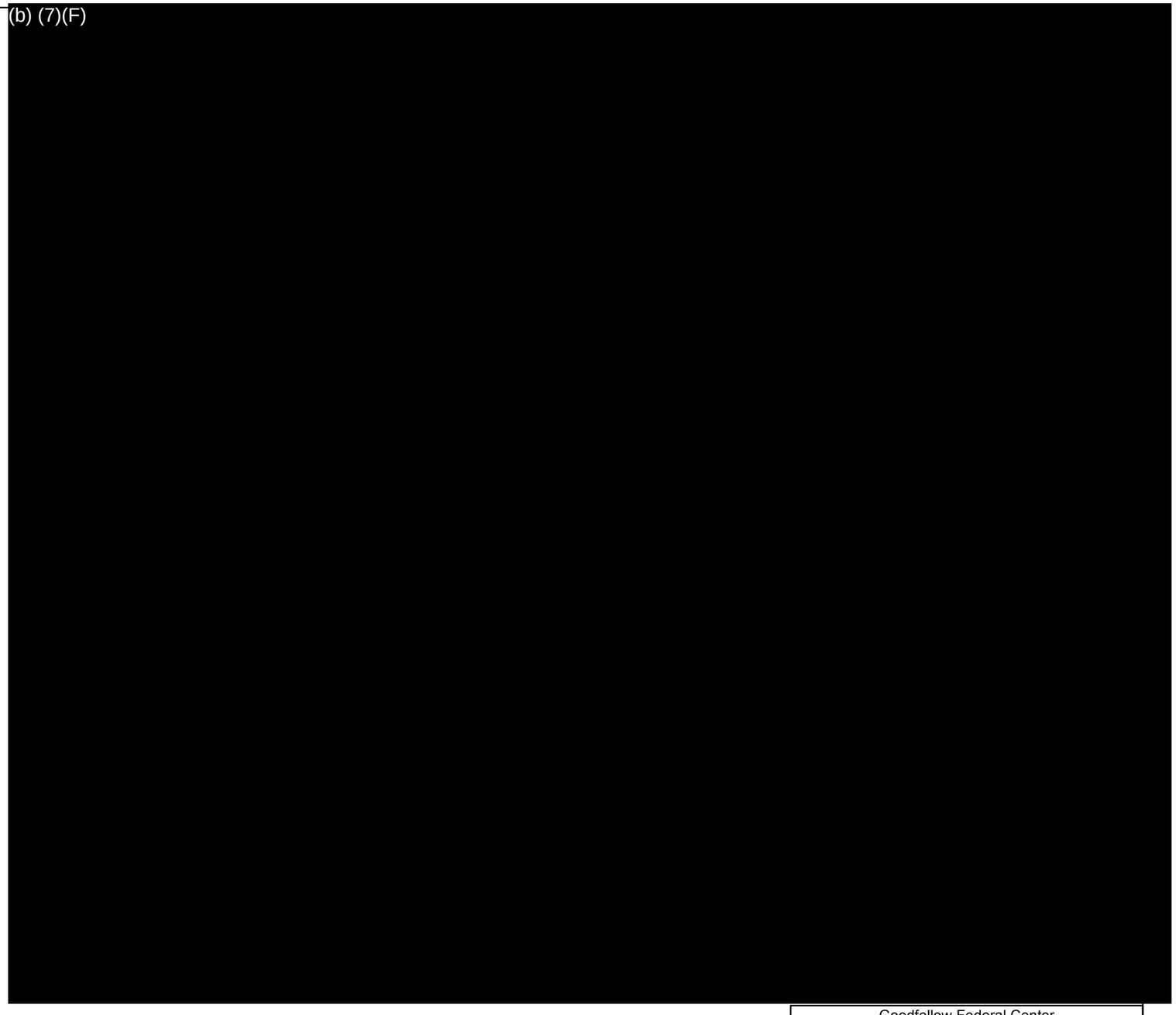
Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 16
Sample Location Map, Building 107 - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_107\Figure16_Basement_Final.mxd



Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 17
Sample Location Map, Building 108 A - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

Source: General Services Administration, CAD Files, Received November 2011.

X:\S1058\232\001\Projects\mxd\Building_108_A\Figure 17_FirstFloor_Final.mxd

(b) (7)(F)

Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

N

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
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4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 18

Sample Location Map, Building 108 B - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_108_B\Figure 18_FirstFloor_Final.mxd

(b) (7)(F)

[redacted]

Legend

△ Dust sample location (Lead)

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Properly destroy documents when no longer needed

Note: Completely Renovated

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 19A
Sample Location Map, Building 110 - Second Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S\1058\232\001\Projects\mxd\Building_110\Figure19A_SecondFloor_Final.mxd

(b) (7)(F)

Legend

△ Dust sample location (Lead)

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Note: Completely Renovated

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 19B
Sample Location Map, Building 110 - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_110\Figure19B_FirstFloor_First.mxd

(b) (7)(F)

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Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 19C

Sample Location Map, Building 110 - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_110\Figure19C_Basement_Final.mxd

(b) (7)(F)

Legend

- Core sample location (PCB)
- Dust sample location (Lead)

PCB Polychlorinated biphenyl

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 20A

Sample Location Map, Building 115 - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_115\Figure20A_FirstFloor_Final.mxd

(b) (7)(F)

Legend

△ Dust sample location (Lead)

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NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
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St. Louis, Missouri

Figure 20B
Sample Location Map, Building 115 - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_115\Figure20B_Basement_Final.mxd

(b) (7)(F)

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Properly destroy documents when no longer needed

Legend

Core sample location (PCB)

PCB Polychlorinated biphenyl

NOT TO SCALE

Source: General Services Administration, CAD Files, Received November 2011.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 21
Sample Location Map, Building 122 B - Basement

TETRA TECH

Date: 6/4/2013 Drawn By: Nick Wiederholt Project No: S1058.232.001

X:\S1058\232\001\Projects\mxd\Building_122_B\Figure21_Basement_Final.mxd

(b) (7)(F)

[redacted]

SAMPLE KEY TABLE

Sample IDs	Sample Depth (ft bgs)	Refusal Depth (ft bgs)
DPTS-45	12-16	32 [a]
DPTGW-45	Dry	32 [a]
DPTS-46	Refusal	1
DPTGW-46	Dry	1
DPTS-47	12-16	24
DPTGW-47	Dry	24

Legend

- Core sample location (PCB)
- Soil sample location (Metals, PCB, TPH, VOC, SVOC)

DPTGW Direct push technology groundwater
DPTS Direct push technology soil

PCB Polychlorinated biphenyl
SVOC Semi-volatile organic compounds
TPH Total petroleum hydrocarbon
VOC Volatile organic compounds

a No refusal encountered
ft bgs Feet below ground surface

Source: General Services Administration, CAD Files, Received November 2011.

NOT TO SCALE

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 22
Sample Location Map, Building 208 B - First Floor

TETRA TECH

Date: 6/4/2013 Drawn By: Gustavo Orozco Project No: S1058.232.001

X:\S1058\232\001P\projects\mxd\Building_208_B\Figure22_FirstFloor_Final.mxd

SAMPLE KEY TABLE

Sample IDs	Sample Depth (ft bgs)	Refusal Depth (ft bgs)
DPTS-1	8-12	32 [a]
DPTGW-1	8.5-18.5	32 [a]
DPTGW-1-DUP	8.5-18.5	32 [a]
DPTS-2	4-8	20
DPTS-3	0-4	32 [a]
DPTS-4	12-16	24
DPTS-5	8-12	24
DPTS-6	4-8	28
DPTGW-6 [b]	8.5-18.5	28
DPTS-7	8-12	28
DPTS-8	4-8	28
DPTS-8-FD	4-8	28
DPTS-9	0-4	28
DPTGW-9 [b]	18-28	28
DPTS-10	16-20	28
DPTGW-10	18-28	28
DPTS-11	Refusal	3
DPTGW-11	Dry	3
DPTS-12	4-8	24
DPTS-12-FD	4-8	24
DPTS-13	8-12	24
DPTS-14	12-16	32 [a]
DPTS-15	8-12	32 [a]
DPTS-16	12-16	28
DPTGW-16	18-28	28
DPTS-17	4-8	28
DPTS-18	12-16	20
DPTS-19	4-8	20
DPTS-20	4-8	24
DPTS-20-DUP	4-8	24
DPTS-21	0-4	20
DPTS-22	4-8	24
DPTS-23	4-8	20
DPTGW-23	Dry	20
DPTS-24	12-16	27.5
DPTGW-24	17-27	27.5
DPTS-25	16-20	20
DPTGW-25	10-20	20
DPTS-26	0-4	8
DPTS-27	8-12	27
DPTGW-27	17-27	27
DPTS-28	3-7	16
DPTGW-28	Dry	16
DPTS-29	8-12	16
DPTS-30	12-16	24
DPTS-31	8-12	24
DPTS-32	4-8	24
DPTS-33	0-4	20
DPTS-34	0-4	4
DPTS-35	16-20	20
DPTGW-35	Dry	20
DPTS-36	4-8	20
DPTS-36-FD	4-8	20
DPTS-37	8-12	24
DPTGW-37	14-24	24
DPTS-38	4-8	24
DPTGW-38	Dry	24
DPTS-39	12-16	28
DPTS-40	12-16	28
DPTS-40-FD	12-16	28
DPTS-41	0-4	4
DPTGW-41	Dry	4
DPTS-42	4-8	20
DPTS-42-DUP	4-8	20
DPTS-43	8-12	16
DPTGW-43	Dry	16
DPTS-44	20-24	28

(b) (7)(F)

Legend

Matrix Type

- Soil boring sample location
- Soil boring and groundwater sample location

Analyte Type

- Asbestos (not included as a groundwater analyte)
- Asbestos, metals
- Asbestos, SVOC, TPH, VOC
- PCB
- PCB, SVOC, TPH, VOC
- PCB, pesticides / herbicides, SVOC, TPH, VOC
- Pesticides / herbicides, SVOC, TPH, VOC
- SVOC, TPH, VOC

DPTGW Direct push technology groundwater
DPTS Direct push technology soil
PCB Polychlorinated biphenyl
SVOC Semi-volatile organic compounds
TPH Total petroleum hydrocarbons
VOC Volatile organic compounds
a No refusal encountered
b Insufficient groundwater volume to collect all planned analyses
ft bgs Feet below ground surface

Not to Scale

Source: SCS Engineers, Figure 2 - Site Plan, March, 2007.

Goodfellow Federal Center
Former St. Louis Ordnance Plant
4300 Goodfellow Boulevard
St. Louis, Missouri

Figure 23
Exterior Sample Location Map

TETRA TECH

Date: 6/4/2013 Drawn By: Gustavo Orozco Project No: S1058.232.001

X:\S1058\232\001\PH10\Figure23_FinalLPH10

APPENDIX B

TABLES

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TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
101	Administrative building for St. Louis Ordnance Plant (SLOP) Plant No. 1; Thurgood Marshall Academy (charter school)	(b) (7)(F)	Two-story, structural steel columns, cast-in-place concrete floors, masonry exterior walls, flat tar and rock roof system, full basement, partial sub-basement	Rehabilitation (1990s), lead abatement (2000)
102 A/B/C	SLOP production of 0.30 caliber ammunition, including brass cartridge annealing and shaping, powder and primer packaging, lead core insertion, and sorting, packaging, and shipping		Two-story structure, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, three freight elevators	Modernization (1971), renovation (1973), toilet renovation (1978), space alterations (1980, 1981), floor replacement (1982), dock and bridge (1984), carpet tile replacement (1985), electrical improvements (1991); currently decommissioned
102 D	SLOP powder packing; warehouse; Department of Defense photo processing (1st floor); office space (2nd floor)		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	Renovated (1981)
102 E	SLOP primer packing; warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	Completely renovated (2007-2008)
Former 102 F/G/H	SLOP powder canning and storage, inside blast proof bunkers (F/H) or south of the production buildings (G)		Removed in 1980; cast-in-place concrete barricade structure (H) surrounding two small (~400 square feet [ft^2]) wood frame buildings (F/G)	N/A
Former 102 J/K	SLOP lubricating oil storage		Removed sometime after World War II; one-story, small (~150 ft^2), masonry	N/A

TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
103 A/B/C	SLOP brass cartridge annealing and shaping, powder and primer packaging, lead core insertion, and sorting, packaging, and shipping; warehouse; office space	(b) (7)(F)	Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, three freight elevators servicing the main floor levels, backup generator fueled by three diesel fuel underground storage tanks (UST)	Renovated (1995-1999), USDA-FSA (2005), DISA carpet and paint (2010), lay concrete path in crawlspace for utility workers (2010), General Services Administration (GSA)-Public Buildings Service (PBS) first floor scheduled for renovation
103 D	SLOP powder packing; warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	Renovated (1981-1982); no current renovation plans
103 E	SLOP primer packing		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	Renovated (1981); no current renovation plans
103 F (former 112)	SLOP lead core processing (melting, shaping, forming) through at least February 1957		One-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, unfinished basement level	Renovated (2002, 2004); dining room scheduled (2011)
Former 103 F/G/H	SLOP powder canning and storage, inside blast proof bunkers (F/H) or south of the production buildings (G); storage		Removed in 1980; cast-in-place concrete barricade structure (H) surrounding two small (~400 ft^2) wood frame buildings (F/G)	N/A
Former 103 J/K	SLOP lubricating oil storage		Removed sometime after World War II; one-story, small (~150 ft^2), masonry	N/A

TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
104 A/B/C/D	SLOP brass cartridge annealing and shaping, powder and primer packaging, lead core insertion, and sorting, packaging, and shipping; warehouse; office space	(b) (7)(F)	Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, four freight elevators servicing the main floor levels	Veterans Administration (VA) (1990), USDA-Rural Development (RD) (2002, 2006); completely renovated in last 5 years
104 E	SLOP powder packing; warehouse; Uncle Sam's Kids daycare; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	USDA-FSA (1995), VA (1990, 2010); part of first floor (vacant daycare) abated and renovated for VA
104 F	SLOP primer packing; warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	USDA-OIG (1996), OSDA-OCIO (2009); renovation scheduled for common spaces and stairwells
Former 104 G/H/J	SLOP powder canning and storage, inside blast proof bunkers (G/J) or south of the production buildings (H)		Removed in 1980; cast-in-place concrete barricade structure (H) surrounding two small (~400 ft^2) wood frame buildings (F/G)	N/A
Former 104 K	SLOP water softener plant servicing Plant No. 1; salt storage; equipment room; general storage		Removed in 1980; Free-standing, ~2,000 ft^2, basement level	N/A
Former 104 L	SLOP chemical storage building servicing Plant No. 1; basement tank storage (aboveground storage tank [AST]) for acids and caustics; truck and work rooms; general storage		Removed in 1980; Free-standing, ~1,000 ft^2, basement level, adjacent rail spur	N/A

TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
Former 104 M/N	SLOP lubricating oil storage	(b) (7)(F)	Removed sometime after World War II; one-story, small (~150 ft^2), masonry	N/A
105 A/B/C/D	SLOP brass cartridge annealing and shaping, powder and primer packaging, lead core insertion, and sorting, packaging, and shipping; basement small arms firing range; warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, four freight elevators servicing the main floor levels	USDA-RD (2002-2006), USDA-Food Safety and Inspection Service (2009-2010); completely renovated in last 5 years
105 E	SLOP powder packing; warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	Army Audit Agency (1996), USDA-RD (2009); no current renovation plans
105 F	SLOP primer packing; warehouse; kitchen/cafeteria		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, utility crawlspace level, one freight elevator servicing the main floor levels	USDA-RD and snack shop (2009); no current renovation plans
Former 105 G/H/J	SLOP powder canning and storage, inside blast proof bunkers (G/J) or south of the production buildings (H); general storage		Removed in 1980; cast-in-place concrete barricade structure (H) surrounding two small (~400 ft^2) wood frame buildings (F/G)	N/A
105 L	SLOP warehouse and kitchen for Plant No. 1; storage		One-story, structural steel columns, cast-in-place concrete floors, masonry walls, arched tar and rubber membrane roof system, no basement or utility crawlspace level	Fire destroyed warehouse on north half (1964); renovated (1970); upgraded (2010-2012)

TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
Former 105 M/N	SLOP lubricating oil storage	(b) (7)(F)	Removed sometime after World War II; one-story, small (~150 ft^2), masonry	N/A
106	Guard shack		One-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, more recent construction than other facility buildings, no basement or utility crawlspace level	No renovation records or plans
107	SLOP personnel building during Plant No. 1 operation; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, partial basement and a utility crawlspace	Building (1979), entry (1981), elevator and lobby (1982), first floor (2011)
108 A	South electrical substation		One-story, structural steel columns, cast-in-place concrete floor, masonry walls, flat tar and rock roof system, utility crawlspace level accessible by a series of man ways set into the main floor slab	Renovated (1995), transformer repaired (2001); no current renovation plans
108 B	North electrical substation		One-story, structural steel columns, cast-in-place concrete floor, masonry walls, flat tar and rock roof system, utility crawlspace level accessible by a series of man ways set into the main floor slab	Renovated (2005); no current renovation plans
110	SLOP tool and gauge shop (forge shop, production, oil extraction, oil/battery/chemical storage); warehouse; office space		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, and a flat tar and rock roof system, full basement level, two freight elevators servicing all floors	Renovated (2010)

TABLE 1
BUILDING HISTORICAL AND CURRENT USE

Building	Historical Use	Current Use	Construction	Renovation
Former 111	SLOP boiler house for Plant No. 1	(b) (7)(F)	Removed in the 1970s; operated using natural gas	N/A
115	SLOP truck garage for Plant No. 1; former fueling area north of building		One-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, small basement level mechanical equipment room and utility crawlspace; fuel pump island and USTs reportedly removed and covered by asphalt	Renovated (1988)
122 B	SLOP service building for Plant No. 1; maintenance area for building and grounds crews		Two-story, structural steel columns, cast-in-place concrete floors, masonry walls, flat tar and rock roof system, small basement level mechanical equipment room and utility crawlspace (east end), open work bay area with two large overhead doors (west end)	No renovation records or plans
Former 136 A/B/E/F	SLOP fire equipment storage buildings during operation of Plant No. 1		Demolished in 1970s; free-standing, ~400 ft^2 each	N/A
Former 137 A	SLOP building and grounds workshop during operation of Plant No. 1		Demolished in 1970s; free-standing, ~400 ft^2	N/A
141 C	SLOP pump house and mechanical equipment for Plant No. 1		Free-standing, ~400 ft^2	None noted

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
8/7/1981	General Services Administration (GSA)	Polychlorinated biphenyls (PCB) Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending July 1981. Multiple transformers were noted to have oil appearing around gaskets, fins, and test valves, but oil had coagulated. GSA planned contract for these minor repairs.
11/10/1981	GSA	Memorandum re: PCB Transformer Repairs	This document contains a proposal from the Hervey Company (electrical contractor) to perform repairs for selected transformers identified as requiring repairs due to minor leaks.
2/10/1983	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending December 1982. Multiple leaking transformers were identified. No transformer repair or cleanup is reported. The leaks were described as extremely small except for the 450 KTA in Building 104, Vault #4. The report defines a leak as oil of any quantity leaving the transformer and notes confusion in the past on what was to be reported.
4/7/1983	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending March 1983. Multiple leaking transformers were identified. Service notes are unclear as to whether all leaks were repaired and cleanup was completed.
6/30/1983	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending June 1983. Multiple leaking transformers were identified. Service notes are unclear as to whether all leaks were repaired and cleanup was completed. A handwritten report is attached identifying the cause of repeated leakage from two 7500 KVA oil-filled transformers at Substation 108 B, and providing recommendations for a more lasting solution.
9/30/1983	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending September 1983. Multiple minor leaks were identified. A contract for repairs is scheduled to be awarded in April 1984.
10/26/1983	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending September 1983. Multiple leaks were identified. Contract award for repair work was anticipated in April 1994.
3/22/1984	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for quarter ending March 1985. Monitored possible moisture at multiple locations; addressed possible leaks at Building 104 Vault 5 and Building 104 E Steam Station. Transformers formerly associated with Sub-station 108 B were moved to the Building 111 storage area.
3/31/1984	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending March 1984. Leaking transformers were identified in all buildings inspected. A contract for repairs had been awarded, and the notice to proceed was scheduled for issuance in April 1984.
3/21/1985	GSA	PCB Notes	Handwritten note documenting a leaking transformer in Building 104, Vault 5. The leak was completely contained, and the contractor was scheduled for cleanup and repair that day.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
7/12/1985	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending June 1985. Multiple leaking transformers were identified. No information is provided as to whether all leaks were repaired and cleanup was completed.
9/20/1985	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for September 1985. Multiple transformers were identified as having minor leaks (1 drop per week to 1 drop per month). Repairs appear to have been made on or within a day of the inspection date. The quarterly inspection procedure was increased to monthly. The definition of a leak was changed to any sign of wetness.
10/31/1985	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for October 1985. A minor leak was identified in Building 104, Vault 2, (estimated 1 drop per month) and was cleaned and repaired at time of inspection.
11/27/1985	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for November 1985. No leaking transformers were observed.
12/31/1985	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending December 1985. No leaking transformers were identified.
1/2/1986	GSA	Environmental Evaluation of PCBs	This document presents the analytical results of limited wipe sampling from vault floors in Buildings 102, 103, 104, 105, and 108 B, and limited soil and water sampling from the vault floor in Building 108 B. Wipe analyses are in micrograms (µg)/sample, and it is unclear if the sample is 100 square centimeters (cm^2); if so, wipe results exceeded Missouri Risk-based Corrective Action (MRBCA) cleanup criteria (10 µg/100 cm^2). No destructive core samples were collected of concrete. The PCB level in the water sample from the vault floor in Building 108 B (210,000 µg/liter [L]) significantly exceeded the U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) (0.5 µg/L).
1/28/1986	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for January 1986. A minor leak was identified in Building 104, Vault 2. Flange bolts were tightened, and the unit was cleaned.
2/28/1986	GSA	PCB Inspection Report on Work Under Contract	This document is a PCB transformer inspection report for February 1986. Minor leaks were identified in Buildings 103 F, 104, and 105. No oil left transformers or drain valves. All were repaired upon inspection or within 24 hours.
4/29/1986	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for April 1986. Minor leaks (less than one drop per month) were identified in Buildings 103 and 104; transformers were cleaned and repaired at time of inspection.
6/6/1986	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for May 1986. Multiple leaking transformers (minor) were identified. Repair actions are described.
6/25/1986	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for June 1986. One leaking transformer was identified in Building 104. The leak was repaired at time of inspection, and no oil left the transformer surface.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
7/29/1986	GSA	PCB Leaking Transformer Report	This document is a PCB transformer inspection report for July 1986. A minor leak identified in Building 104. No oil left the transformer surface. The leak was repaired at the time of inspection.
4/30/1987	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for April 1987. A minor leak from a transformer in Building 104 E was identified. No oil left the transformer surface, and the transformer was cleaned and repaired at the time of inspection.
5/29/1987	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for May 1987. One leaking transformer was identified in Building 104 E. The leak was repaired at time of inspection, and no oil left the transformer surface.
9/17/1987	GSA	PCB Transformer Inspection Report	This document is an inventory of existing and removed transformers. The list identifies numerous destruction documents and manifests; however, these documents are not attached or provided in the record except for selected transformers in Buildings 102 and 105.
10/29/1987	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for October 1987. No leaking transformers are reported, and a total of 25 transformers have been removed under contract. No original manifests or records of destruction are provided.
11/30/1987	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for November 1987. No leaking transformers are identified. A total of 33 transformers have been removed. No original manifests or records of destruction are provided.
12/30/1987	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for the quarter ending December 1987. No leaking transformers are identified, and a total of 35 transformers have been removed. No original manifests or records of disposal are provided.
2/29/1988	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for February 1988. No leaking transformers are identified, and a total of 50 transformers have been removed. No original manifests or records of destruction were provided.
3/31/1988	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for March 1988. No leaking transformers are identified, and a total of 55 transformers have been removed. No original manifests or records of destruction were provided.
4/27/1988	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for April 1988. No leaking transformers are identified, and a total of 60 transformers have been removed. No original manifests or records of destruction were provided.
7/31/1988	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for July 1988. All transformers are listed as "removed." No original manifests or records of destruction are provided.
8/18/1988	GSA	PCB Transformer Inventory	This document contains limited documentation (manifests and certificates of destruction) for disposal of five transformers from Building 102 (6356947, 695898, 695939, 695940, 696701), two transformers from Building 105 (686830, 691714), and three breakers from unidentified locations (304580, 304829, 304832).

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
9/8/1988	GSA	PCB Transformer Inspection Report	This document is a PCB transformer inspection report for August 1988. All transformers in Buildings 101, 102, 103, 103 F, 104, 104 E, 105, 107, 108 A, 108 B, 110, 111, and 211 are identified as "removed under contract." The report states, "All transformers have now been removed from service by the construction contractor." No original disposal documents or manifests are provided in the record, except for limited documentation for Buildings 102 and 105.
5/9/1990	GSA	PCB Concern Letter from EPA to Department of the Army	This letter to the Army Engineering and Housing Division expresses EPA's concerns about proposed renovation of a PCB-contaminated area for file storage. Neither the building nor the facility is identified. This letter may be related to a 10/29/1990 letter from the Department of the Army to the Veterans Administration regarding cleanup of PCB-contaminated wood block flooring in a file storage area off site (4800 Goodfellow Blvd).
10/29/1990	GSA	Letter re: PCB Cleanup in File Storage Area	This document is not relevant. The subject building is not part of the 4300 Goodfellow complex based on building number and address. This document may be related to an EPA Letter of Concern (5/9/1990) to the Department of the Army regarding PCB contamination in a proposed file storage space.
10/24/1991	GSA	Memorandum on Analysis of Asphalt Sealer for Disposal	This memorandum requests disposal information for six 5-gallon containers of sealant used by GSA force account employees to repair asphalt parking lot. Two samples were analyzed—one sample as petroleum product and the other as floor finish. Petroleum product results were 3,925 British Thermal Units per pound (BTU/lb), 75,600 µg/L kerosene (C9-C18), and 116,000 µg/L miscellaneous extractable hydrocarbons (C20-C28). No information is provided on the ultimate disposal of the containers.
10/24/1991	GSA	Memorandum on Analysis of Oil Drum Contents for Disposal	This document includes analytical results, one-time generator permit applications (MO, IL), and material profile sheets for disposal of two 55-gallon containers of oil or other fuel (D001) for the industrial boiler in Building 111. These containers were removed prior to the building's demolition. Analytical results indicated the wastes were ignitable but not corrosive (2>pH>12.5), water reactive, or PCB-containing.
4/13/1992	GSA	Occupational Safety and Health Administration (OSHA) Reports, Record of Contact re: St. Louis Testing Lab Report, Child Care Center	This document is a record of contact with attached documentation, including a facility layout map and analytical results. Analytical results are largely illegible but appear to exceed the EPA target level of 0.015 milligrams per liter (mg/L) in some locations. The record indicates the source is likely lead in fixtures and recommends removing one for testing. No analysis of fixtures is apparent in the record.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
5/22/1995	GSA	Budgetary Offer for PCB Contaminated Equipment Spill/Leak Cleanup	This document is a proposal from Westinghouse to GSA to conduct PCB cleanup of contaminated equipment, including wipe sampling for confirmation. It does not discuss the location where the proposed work is to be conducted. No other documentation as to whether the work was completed is included in the PCB files provided by GSA.
8/5/1996	Pace Analytical	Analytical Results, Child Care Center--Pace Analytical	This analytical report is for mini blinds in the former child care center. The toxicity characteristic leaching procedure (TCLP) lead level does not exceed the Maximum Concentration of Contaminants for Toxicity Characteristic (5.0 mg/L).
8/26/1997	Richard Smith	OSHA Reports, Pace Analytical Chain of Custody, Daycare Soil	This document is a chain of custody for 14 tap water samples collected from Building 104 E and six soil samples collected on the west side of Building 104 E. A hand-drawn map identifies soil sampling locations. No analytical results appear to be provided in the record. This document appears to correspond with an undated note from Richard Smith.
10/8/1997	GSA	Request for Oil-Containing Electrical Equipment	This document is a Safety Office survey, with response, to determine the location of GSA-owned, oil-containing electrical equipment. The response identified a total of 17 transformers at the 4300 Goodfellow Blvd facility as of October 1997.
1/2/1998	GSA	Email re: Meeting Attendance	This document is an email chain establishing a meeting to discuss a U.S. Army Corps of Engineers (USACE) claim that subsurface contamination is present at the 4300 Goodfellow complex.
3/30/1998	Missouri Department of Natural Resources (MDNR)	UST Closure Notice	This document is a MDNR-approved closure notice (ST0002934) for removal of two underground storage tanks (UST): an 8,000-gallon fiberglass UST for diesel fuel, and a 300-gallon fiberglass UST for waste oil. The final closure report is not included in the record; however, a 4/13/1999 MDNR No Further Action (NFA) letter is provided for ST0002934.
4/13/1999	MDNR	Closure on One 8,000-Gallon Diesel UST and One 550-Gallon Waste Oil UST (NFA)	This document is an MDNR NFA letter for an 8,000-gallon diesel UST and a 550-gallon waste oil UST. The associated closure notice (GSA, 3/30/1998) was for an 8,000-gallon diesel UST and a 300-gallon waste oil UST. The final closure report does not appear to be included in the record.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
3/19/2002	SCS Engineers	Site Investigation (SI) Work Plan	This work plan is for a SI and was initiated following a Preliminary Assessment (PA) of the facility. The PA report is not included in the record. Concerns regarding the shooting range in the basement of Building 105 are addressed separately. Plan activities include 45 subsurface soil samples with location-specific analyses including volatile organic compounds (VOC), semivolatile organic compounds (SVOC), total metals, explosives, PCBs, total petroleum hydrocarbons (TPH), and corrosivity; 25 crawl space soil samples with location-specific analyses including VOCs, SVOCs, metals, cyanide, phosphorus, explosives, and PCBs; 100 main floor and crawl space wipe samples for location-specific analyses including explosives, metals, and PCBs; up to 15 basement sump samples for analyses including VOCs, SVOCs, total metals, explosives, and PCBs; tunnel standing water samples for analyses including VOCs, SVOCs, total metals, explosives, and PCBs; up to 12 stormwater inlet sediment samples for VOCs, SVOCs, metals, PCBs, and explosives; and eight waste trench sump, machine vault, and re-melt pit sludge samples for location-specific analyses including VOCs, SVOCs, total metals, explosives, and PCBs.
3/18/2003	SCS Engineers	Small Arms Firing Range Remediation Report, Building 105	This report documents the demolition and remediation of an abandoned small arms firing range in the basement of Building 105. Activities reported included pre-remediation wipe sampling, demolition and removal, cleaning, waste management and disposal, and post-remediation wipe sampling. However, tables and attached analytical data are provided only for pre-remediation sampling.
4/11/2003	GSA	Letter re: Relocation of U.S. Department of Agriculture (USDA) Rural Development (RD) to Goodfellow Complex	In light of a pending relocation of USDA-RD to 4300 Goodfellow Buildings 104 & 105, this letter indicates that analytical results for surface and subsurface samples collected during a recent Site Investigation were within the limitations of Benchmark Standards established by MDNR, Department of Housing and Urban Development (HUD), and Toxic Substances Control Act (TSCA). GSA states that it is in the process of contracting a company to extensively investigate Building 103 for PCBs, metals, explosives, and beryllium; however, no later report specific to Building 103 is included in the file.
11/15/2003	Erio Consulting	OSHA Reports, Report of Sampling for Lead and Mercury, Child Care Center (Building 104 E)	The report indicates that, after a contractor discovered peeling paint above the drop ceiling, analysis of the paint chips showed both lead and mercury. Although direct reading instruments showed no immediate health hazards from mercury vapor or particulates, GSA requested air, bulk dust, and wipe samples to evaluate any risk from paint dust that might have migrated into childcare areas. The space above the ceiling tiles served as a return air plenum. No lead-based or mercury-based painted surfaces were identified within the occupied spaces. Mercury wipe and dust results were below detection limits; air samples were not collected. Lead wipe and air results were below detection limits. Lead was detected in carpet dust at levels below EPA and HUD guidelines for surface dust.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
3/1/2006	SCS Engineers	Environmental Site Investigation Interim Report, Building Series 104	This interim report summarizes the results of the SI conducted at Building Series 104 to date. Activities reported included (1) wipe sampling of main floors and crawl spaces for analyses for explosives, metals, and PCBs; (2) shallow soil and sediment sampling of basement levels for analyses for location-specific parameters; (3) subsurface soil sampling around the buildings for analyses for location-specific parameters; (4) basement sump sampling for explosives, mercury, and metals; (5) air monitoring/sampling in Building 104 for analysis for mercury vapor or particulates; and (6) paint chip sampling in Building 104 E for lead analysis. Lead in wipe samples exceeded HUD (40 $\mu g/ft^2$) and MRBCA (200 $\mu g/ft^2$) cleanup criteria in Building 104 E; lead-based paint was not identified. Mercury concentrations exceeded MDNR Cleanup Levels for Missouri (CALM) soil target concentration (STARC) Scenario A screening levels in soil samples collected near former Building 104 L. Duplicate Data. Data from this report have been incorporated and evaluated in the Combined PA/SI Report (SCS Engineers, 8/1/2008).
11/1/2006	SCS Engineers	Interim Site Inspection Report, Buildings 101 & 110	At Buildings 101 and 110, soil, sediment, and wipe samples were collected for PCB, TPH, metals, and explosives laboratory analyses. Field screening of ambient air samples was also completed for particulate lead, particulate mercury, and mercury vapor quantification. No environmental concerns were identified. Concentrations of arsenic in subsurface soil at Building 101, and of both arsenic and beryllium in subsurface soil at Building 110 exceeded MRBCA default target levels; however, these concentrations were characterized as consistent with area or state background levels.
11/21/2006	Geo-technology	Phase I ESA	This Phase I Environmental Site Assessment identified the following recognized environmental conditions (REC) associated with the subject property: (1) The property is listed in the SPILLS database for a leaking tank line/valve in 1998. An Environmental Data Resources, Inc. (EDR) report noted removal of three diesel USTs. MDNR issued an NFA letter for two USTs (8,000-gallon diesel and 550-gallon waste oil) on 4/13/99. One 20,000-gallon UST remains in use approximately 200 feet northeast of Building 102. (2) Former use as the SLOP beginning in 1941 may have released contaminants including heavy metals such as lead, VOCs, solvents, petroleum hydrocarbons, and PCBs. Identified areas of concern included historical use of Building 102 D as a photo lab (1970s to 1988), absence of off-site disposal records for potentially-impacted soil removed during demolition of propellant storage buildings and in parking lot / street construction (late 1970s), and use of on-site rail lines for transporting metal shavings potentially contaminated with lubricating oils or PCB-containing oils. Non-REC conditions identified include: (1) historical use of transformers containing PCB oils, (2) neighboring facilities with environmental issues or industrial activities that could impact soil and groundwater, and (3) chemical containers in the Building 110 maintenance shop (without associated staining).
6/11/2008	Occu-Tec	Analytical Results, Building 103 F	This analytical report relates that one lead wipe sample collected above a ceiling tile indicated presence of lead above clearance levels.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
8/1/2008	SCS Engineers	Combined PA/SI Report (2008)	On the basis of the sampling results and the pathway assessments, the primary contaminants and areas of concern are PCBs in subsurface soil and groundwater near Buildings 108 A and 108B; polynuclear aromatic hydrocarbons (PAH) and metals, particularly lead and arsenic, in abandoned process piping and nearby soil and sediment in Buildings 102, 103 F, and 105; and potential for high lead concentrations in dust identified within Buildings 102, 102 D, 102 E, 103, 103 D, 103 E, 103 F, 104, 104 E, 104 F, 105, 105 E, 105 F, 110, 115, and the utility tunnel complex.
8/1/2008	SCS Engineers	PA/SI Addendum 1: Interim Lead Wipe Sampling and Assessment Report, Buildings 102, 103 E, 103 F, 104, & 104 F	This report presents the results of 21 wipe samples collected in worker-occupied spaces in Buildings 104 and 104 F, as well as five sets of two wipe samples collected at steel, wood, and concrete in the crawl space levels of Buildings 102, 103 E, 103 F, and 104. No results from occupied areas of Buildings 104 and 104 F were above the EPA threshold value of 40 µg/ft^2 for floor surfaces or the MRBCA post-abatement clearance level for non-residential standards of 200 µg/ft^2. However, all results from crawl spaces beneath Buildings 102, 103 E, 103 F, and 104 exceeded these standards. GSA subsequently conducted air monitoring for particulate lead within worker-occupied spaces. Subsequently, 10 air samples were collected from the second floor of Building 104; results were below laboratory detection limits in all samples.
12/17/2008	Occu-Tec	Analytical Results, Child Care Center--Occu-Tec	This analytical report shows 11 tap water results ranging from non-detect (<0.0030 mg/L) to 0.018 µg/L. One result (0.018 µg/L) exceeded the EPA target level (0.015 µg/L). X-ray fluorescence (XRF) results for 52 painted surfaces showed no lead-based paint using the HUD lead standard of 1.0 milligram per square centimeter (1.0 mg/cm2).
2/16/2009	Occu-Tec	Analytical Results, Buildings 102, 103, 103 D, 104, 104 E, 105, 105 E, 105 F, and 110	The analytical report shows that 0 of 34 air samples had detectable concentrations of lead. Laboratory reporting limits (13-17 micrograms per cubic meter [µg/m^3]) were below the OSHA Permissible Explosive Limit (PEL) (50 µg/m^3). However, 29 of 108 wipe samples had detectable concentrations of lead. All of the 29 detected concentrations were above EPA/HUD clearance standards applicable to the locations where they were collected (beginning at 40 µg/ft^2). Additionally, five of these lead results—obtained in Buildings 102, 103 D, and 110—exceeded the MRBCA non-residential clearance criterion (200 µg/ft^2).
3/5/2009	EMSL	Analytical Results, Child Care Center—EMSL	This analytical report presents four tap water samples with non-detect (<0.0030 mg/L) lead. Reporting limits are below the EPA target level (0.015 mg/L).

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
4/7/2009	GSA	Surface Lead Assessment Follow Up for Selected Areas at the Federal Center	This report presents the analytical results of wipe samples collected from five areas to follow up on previous lead surveys (see Occu-Tec 2/16/2009). Lead wipe samples exceeding the MRBCA non-residential cleanup criterion of 200 µg/ft^2 included four of 12 samples collected in Building 103 D, Floor 1 Mechanical Room; six of 12 samples collected in Building 105 F, Basement Compressor Area; and six of 13 samples collected in Building 110, Basement Storage Room. One sample collected in Building 102, Column G-2 Office, exceeded the criterion, but the report attributes the contamination to the composition of the office cove molding, not dust. A historical lead wipe exceedence in this area was not collected from the cove molding (see Occu-test, 02/16/2009). No samples collected from Building 103 D Floor 2 exceeded the criterion.
6/2/2010	Bureau Veritas	Analytical Results, Daycare	The analytical report is for three lead wipe samples (12-130 µg/ft^2) collected from the Child Care Center. One sample (130 µg/ft^2 from the elevator door/floor) exceeds the MRBCA residential lead cleanup level for uncarpeted floors (40 µg/ft^2) but not the equivalent nonresidential level.
6/2/2010	Not identified	Figures, Lead Wipe Sample Locations, Building 104 E	These figures present the locations of lead wipe samples collected in Building 104 E. No date is provided, but the figures appear to correspond with Bureau Veritas, 6/2/2010, Analytical Results, Daycare.
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 103	This report details asbestos containing building materials (ACBM) inspection and inventory results, preventative measures and response actions, re-inspection and operation and maintenance (O&M) plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 103 D	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 105 E	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 105 F	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 105 L	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/4/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 106	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/9/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 102 E	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/14/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 101	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/14/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 102 D	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/25/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 122 B	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
6/25/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 141 C	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
7/15/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 107	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
7/28/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 110	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
8/18/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 102	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
9/14/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 105	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
9/22/2010	Terracon	Limited Site Investigation (LSI), Federal Complex	This report documents LSI activities to evaluate subsurface conditions between Buildings 102 and 103 where a solar collector system containing ethylene glycol is known to have overheated, resulting in releases of ethylene glycol and/or acid to the ground in the area. Ethylene glycol was not detected in the soil samples; however, the laboratory's reporting limit at times exceeded the MRBCA default target level (DTL), which is based on groundwater protection (60 milligrams per kilogram [mg/kg]) rather protection of human health (44,800 mg/kg). The soil in the areas tested does not appear to be contaminated above levels protective of construction workers, and conditions do not appear to be a concern for workers engaged in the proposed activities. However, because some reporting limits exceeded MRBCA default target levels, ethylene glycol, benzo(a)pyrene, and lead could be present above background (lead only) and/or above concentrations intended to protect the health of occupants and/or above the benchmarks for potable use of groundwater, particularly near the surface.
10/6/2010	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 104	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
11/5/2010	Terracon	Limited Subsurface Investigation, Sewer Improvements Project	This report documents LSI activities to evaluate subsurface conditions in areas planned for excavation as part of storm sewer upgrades. Based on depth of construction, 28 borings were advanced to depths of approximately 16 feet below ground surface (bgs). From each boring, a surface (0-2 feet bgs) and subsurface (2-16 feet bgs) soil sample was submitted for RCRA metals and PAH analyses. Analytical results did not exceed levels protective of construction workers. However, PAHs, arsenic, and/or lead are present in some surface soil samples above background and/or concentrations intended to protect the health of occupants and/or potable use of groundwater.

TABLE 2
ENVIRONMENTAL REPORTS REVIEWED

Date	Author	Title	Summary
11/9/2010	Terracon	Building 110 Water Testing	This report presents the analytical results for Liquid infiltrating a pit inside Building 110. The report states that fluoride and fecal coliform results imply the water may be leaking from a sanitary sewer system at the facility.
12/20/2010	Terracon	File Review and Summary of Site Conditions	No areas immediately dangerous to life or health were identified during the site visit and review of historical documents.
1/12/2011	Occu-Tec	Asbestos Inspection and Management Plan Report, Building 103 F	This report details ACBM inspection and inventory results, preventative measures and response actions, re-inspection and O&M plans, an ACBM hazard assessment description, ACBM remaining, and a worker/occupant information program. ACBM is present. The survey was building-wide, but not all areas were accessible, and destructive testing was not conducted in all cases.
Not identified	Richard Smith	OSHA Reports, Note from Rick re: Sampling Sites and Playground Maps	This document is an undated, handwritten note indicating that samples have been collected at five sampling sites. No sites are identified, and no maps are provided. This note appears to correspond to the Pace Analytical chain of custody and hand-drawn sampling location map dated 8/26/1997. No corresponding analytical results are apparent in the record.
Not identified	Not identified	Site Layout Map	This document is identified as Figure 2, Outlease Map of St. Louis Ordnance Plant, from Volume 1 of a June 1982 report (not identified or included in the record). The figure presents the layout of the St. Louis Ordnance Plant and adjacent properties.
Not identified	Not identified	New Detention Pond Location Map	This map highlights the proposed location of the new detention pond. No date is identified, but the map is likely associated with the Goodfellow Limited Site Inspection Report (Terracon 9/22/2010). The record contains no information regarding the purpose or completion of the proposed detention pond.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
101	Asbestos	A building-wide survey indicated asbestos-containing building material (ACBM) was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in surface and subsurface exterior soil borings exceeded Missouri Risk-Based Corrective Action (MRBCA) default target levels (DTL) but not MRBCA type 3 non-residential values.	No additional recommendations
	Other Metals	Arsenic in surface and subsurface exterior soil borings exceeded MRBCA DTLs but was within or below the range of U.S. Geological Survey (USGS) reported background concentrations for St. Louis County. Mercury in subsurface soil samples was below MRBCA DTLs, and indoor air monitoring detected no mercury vapor.	No additional recommendations
	Polychlorinated Biphenyls (PCB)	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Subsurface soil sampling identified no PCB concentrations above MRBCA DTLs.	Conduct additional records review as necessary to verify that all PCB-containing equipment was properly removed and disposed of, and that cleanup was conducted where needed. If records review is insufficient for verification and the building is to be occupied, collect clearance samples for PCB analysis. Missouri Department of Natural Resources (MDNR) requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	Volatile/ Semivolatile Organic Compounds (VOC/SVOC)	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 A/B/C	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM operations and maintenance (O&M) and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSL) values, but appear low enough that no further action is warranted. The explosives 2,6-dinitrotoluene, 2-amino-4,6-dinitrotoluene, nitrobenzene, and 4-nitrotoluene in crawlspace shallow soil/sediment samples exceeded MRBCA DTLs but not industrial RSLs or MRBCA type 3 non-residential/construction values. 2,4-Dinitrotoluene (polycyclic aromatic hydrocarbons [PAH] analysis) exceeded the MRBCA DTL and industrial RSL.	On the western half of the building, conduct additional interior soil sampling for explosives. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion. Follow-up lead wipe samples collected in crawlspaces also exceeded the criterion. Additionally, lead in crawlspace shallow soil samples exceeded the MRBCA type 3 non-residential value and industrial RSL. Some samples were collected directly from process lines/equipment. Lead in nearby exterior soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential values.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk. Collect additional interior soil samples at the western half of the building.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102A/B/C	Other	Sample collection on the western half of the building was limited.	At the western half of the building, conduct additional interior soil sampling for metals, explosives, 1,4-dioxane, and PAHs. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination. Conduct additional exterior soil borings for analyses including 1,4-dioxane and ethylene glycol (with appropriate reporting limits).
	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) in building air monitoring / sampling. Antimony, mercury, and zinc in basement / crawlspace soil / sediment and beryllium in exterior soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Arsenic and copper in basement / crawlspace soil/sediment and arsenic in exterior soil borings exceeded both MRBCA type 3 non-residential/construction values and industrial RSLs. However, the exterior arsenic exceedence was below the mean USGS-reported background concentrations for St. Louis County. Some crawlspace samples were collected directly from process piping / equipment. Sample collection on the western half of the building was limited.	On the western half of the building, conduct additional interior soil sampling for metals. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 A/B/C	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 on one wipe sample exceeded the Toxic Substances Control Act (TSCA)/MRBCA cleanup criterion for impervious surfaces. Aroclor 1242 and 1260 in crawlspace soil/sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Aroclor 1260 in crawlspace soil/sediment exceeded the industrial RSL and EPA's remediation goal for soils (1 part per million [ppm]).	On the western half of the building, conduct additional interior soil sampling and clearance sampling for PCB analysis. MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene in basement/crawlspace soil/sediment exceeded industrial RSLs and MRBCA type 3 non-residential/construction values. 2,4-Dinitrotoluene exceeded the industrial RSL and MRBCA DTL. And the PAHs benzo(k)fluoranthene, chrysene, 2,6-dinitrotoluene, and naphthalene and the VOCs acetone and 2-hexanone exceeded the MRBCA DTL only. Some crawlspace samples were collected directly from process piping/equipment. Subsequent investigation of an ethylene glycol release identified benzo(a)pyrene in soil in exceedence of the MRBCA DTL but not the MRBCA type 3 non-residential value. Ethylene glycol also may be present at concentrations above the MRBCA DTL, but laboratory reporting limits exceeded this value.	At the western half of the building, conduct additional interior soil sampling for metals, explosives, 1,4-dioxane, and PAHs. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination. Conduct additional exterior soil borings for analyses including 1,4-dioxane and ethylene glycol (with appropriate reporting limits).
102 D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 D	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in four wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 micrograms per square foot [µg/ft^2]). Lead in crawlspace shallow soil/sediment and in nearby exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Some crawlspace samples were collected from or adjacent to process piping and equipment. Lead was in a tunnel water sample at a concentration exceeding the MCL and MRBCA tap water value. Lead in shallow and deep exterior soil borings exceeded the MRBCA DTL but not the MRBCA tier 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but one mercury wipe result (33,000 µg/ft^2) suggests additional action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Copper, mercury, and zinc in crawlspace soil/sediment samples and arsenic and beryllium in nearby soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values. Arsenic also exceeded industrial RSLs but concentrations were comparable to USGS reported background concentrations for St. Louis County. Some crawlspace samples were collected directly from process piping / equipment.	In areas where contamination is identified and occupational exposure is anticipated, conduct dust sampling for mercury analysis.
102 D	PCBs	No transformers were noted in inspections. No PCBs were detected in wipe samples.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
	VOCs/SVOCs	The PAH dibenzo(a,h)anthracene in basement shallow soil/sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential/construction value. Some crawlspace samples were collected directly from process piping/equipment.	In areas where contamination is identified and occupational exposure is anticipated, conduct dust sampling for mercury analysis.
102 E	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations
	Inorganics	Phosphorous was detected in a shallow soil sample from the crawlspace; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in one lead wipe sample collected from crawlspace concrete exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/crawlspace shallow soil/sediment and in a nearby exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 E	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic and beryllium in basement/crawlspace soil/sediment and in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value. Arsenic in basement/crawlspace soil/sediment also exceeded the industrial RSL.	No additional recommendations
	PCBs	No transformers were noted in inspections. No PCBs were detected in one wipe sample.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
102 F/G/H	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in two soil samples and a stormwater inlet sample exceeded the MRBCA DTL but not MRBCA type 3 non-residential value. No lead in exterior subsurface soil samples exceeded the MRBCA non-residential value.	No additional recommendations
	Other Metals	Arsenic in exterior soil borings exceeded the MRBCA DTL and industrial RSL but not the MRBCA type 3 non-residential / construction value.	Collect exterior soil boring samples for metals analysis.
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 J/K	Asbestos	No information on the ACBM content or nature of building demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead in an exterior subsurface soil sample exceeded MRBCA non-residential value.	No additional recommendations
	Other Metals	No mercury or metals in an exterior subsurface soil sample exceeded MRBCA construction worker and/or non-residential levels.	No additional recommendations
	PCBs	No PCBs in an exterior subsurface soil sample exceeded MRBCA construction worker and/or non-residential levels.	No additional recommendations
	VOCs/SVOCs	Subsurface samples were not analyzed for VOCs or SVOCs.	Collect exterior soil boring samples for total petroleum hydrocarbons (TPH), SVOC, and VOC analyses, including 1,4-dioxane.
103 A/B/C	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 A/B/C	Lead	Six wipe samples collected from crawlspaces and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/crawlspace soil/sediment and in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other	Sample collection was limited as compared to Building 102.	See additional samples proposed for this building.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but one mercury wipe result (9,100 µg/ft^2) suggests additional action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in basement/crawlspace soil/sediment exceeded the MRBCA DTL and industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium and copper in basement/crawlspace soil/sediment and beryllium in an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	In areas where contamination is identified and occupational exposure is anticipated, conduct dust sampling for mercury analysis. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in five wipe samples, but at concentrations below the TSCA/MRBCA cleanup criterion for impervious surfaces.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Benzo(a)pyrene in basement/crawlspace soil exceeded the industrial RSL.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. 2,4-Dinitrotoluene (SVOC analysis) in crawlspace soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Four lead wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/crawlspace soil/sediment, exterior soil borings, and a storm sewer inlet exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in basement/crawlspace soil/sediment, exterior soil borings, and a storm sewer inlet exceeded the MRBCA DTL and industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium in an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 D	PCBs	No PCBs were detected in wipe samples.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	2,4-Dinitrotoluene in crawlspace soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	No additional recommendations
103 E	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples and follow-up wipe samples collected from crawlspaces exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 E	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in crawlspace sediment and exterior soil borings exceeded the MRBCA DTL and/or industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium in crawlspace soil/sediment and an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations
	PCBs	No PCBs were detected in wipe samples.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
103 F (previous 112)	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 F (previous 112)	Lead	Lead wipe samples and follow-up lead wipe samples collected from crawlspaces exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead concentrations did not exceed the PEL in building air based on ambient and personnel monitoring samples. Lead in basement / crawlspace / tunnel soil/sediment exceeded the industrial RSL and MRBCA type 3 non-residential value. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	No mercury or metals wipe samples were collected. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Mercury, antimony, and arsenic were detected in basement / crawlspace soil / sediment samples at concentrations exceeding industrial RSLs and MRBCA type 3 non-residential/construction values. Some samples were collected within or adjacent to process piping and equipment. Beryllium, silver, and thallium in basement / crawlspace soil / sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Mercury concentrations in indoor air were below the PEL but exceeded MRBCA and RSL values.	In areas where contamination is identified and occupational exposure is anticipated, conduct dust sampling for mercury analysis. Collected additional indoor air sampling for mercury analysis. Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. Aroclor 1260 also was detected in basement / crawlspace soil at concentrations exceeding the EPA industrial RSL and remediation goal for soils (1 ppm), and MRBCA DTLs.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 F (previous 112)	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene in basement / crawlspace soil / sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Some crawlspace samples were collected directly from process piping/equipment.	No additional recommendations
103 F/G/H	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings and a storm sewer inlet exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic in exterior soil borings and a storm sewer inlet exceeded the industrial RSL, but concentrations were below the mean USGS-reported background concentrations for St. Louis County.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
103 J/K	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 J/K	Explosives	Explosives were not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead was not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	Other Metals	Other metals were not identified as contaminants of concern. See also 103D and 103E.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	VOCs/SVOCs	Samples specific to these buildings were not collected for VOC or SVOC analysis. However, in a crawlspace soil / sediment sample in adjacent Building 103D, the SVOC and explosives compound 2,4-dinitrotoluene exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	Collect exterior soil boring samples for TPH, SVOC, and VOC analyses, including 1,4-dioxane.
104 A/B/C/D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 A/B/C/D	Lead	Lead wipe samples collected from crawlspaces, an elevator shaft, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Follow-up wipe samples exceeded the EPA threshold for floor surfaces (40 µg/ft^2) and the MRBCA non-residential cleanup criterion (200 µg/ft) in crawl spaces but not regularly occupied areas. No particulate lead was detected during air monitoring /sampling on the second floor. Lead in a crawlspace soil, sump sediment, railroad track subgrade soil, and exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other	Sample collection was limited as compared to Building 102.	See additional samples proposed for this building.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations in indoor air were below the PEL but exceeded MRBCA and RSL values. Arsenic in crawlspace soil, sump sediment, railroad track subgrade soil, and shallow soil boring soil exceeded the MRBCA DTL and industrial RSL, but concentrations were within the range of USGS-reported background level for St. Louis County. Antimony in sump sediment, copper in crawlspace soil and sump sediment, and zinc in crawlspace soil exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	Conduct verification indoor air sampling for mercury analysis.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment at concentrations exceeding MRBCA DTLs or industrial RSLs. No PCBs were detected in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 A/B/C/D	VOCs/SVOCs	No SVOCs were detected in basement / crawlspace shallow soil and sediment. The PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene in a shallow soil boring exceeded MRBCA DTLs and industrial RSLs; the PAH naphthalene exceeded the MRBCA DTL but not the industrial RSL. Samples were not analyzed for VOCs.	Sample exterior soil borings for VOC analysis, including 1,4-dioxane.
104 E	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples collected from crawl spaces and above suspended ceilings exceeded the HUD interim dust lead sample for floor services (40 µg/ft^2). A paint chip sample contained lead below the HUD threshold level for lead-based paint. Lead in water from the multipurpose room exceeded the MCL and the MRBCA tap water value. Lead in a storm sewer inlet and in crawlspace soil and piping exceeded the MRBCA type 3 non-residential value and the industrial RSL. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 E	Other Metals	Mercury was detected in wipe samples and a paint chip sample; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Arsenic in crawlspace soil, a storm sewer inlet, and exterior soil borings exceeded the MRBCA DTL and/or industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Mercury and beryllium in crawlspace soil exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 $\mu g/cm^2$) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment at concentrations exceeding MRBCA DTLs or industrial RSLs. No PCBs were detected in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Basement / crawlspace soil / sediment and exterior soil borings were not analyzed for VOCs or SVOCs.	Collect interior surface soil samples for SVOCs.
104 F	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 F	Lead	A lead wipe sample from a crawlspace area exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Follow-up wipe samples in regularly occupied areas did not exceed the EPA threshold for floor surfaces (40 µg/ft^2) or the MRBCA non-residential cleanup criterion (200 µg/ft). Lead in a crawlspace soil and exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Arsenic in exterior soil borings exceeded the industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Thallium in an exterior soil boring exceeded the MRBCA DTL and industrial RSL. Beryllium in a crawlspace soil and an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	PCBs	No PCBs were detected in wipe samples, basement / crawlspace soil / sediment samples, or exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Benzo(a)pyrene in a shallow exterior soil boring exceeded the MRBCA DTL but not the industrial RSL.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 G/H/J	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in a tunnel soil / sediment sample exceeded the industrial RSL and MRBCA non-residential level. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Arsenic in exterior soil borings and tunnel soil / sediment samples exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 K	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 K	Lead	No lead was detected in exterior soil borings at concentrations exceeding the industrial RSL or MRBCA DTL. See also 104L.	No additional recommendations
	Other Metals	No other metals were detected in exterior soil borings at concentrations exceeding industrial RSLs or MRBCA DTLs. See also 104L.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. No PCBs were detected in one exterior soil boring.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 L	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in an exterior soil boring exceeded the MRBCA DTL. Lead in tunnel sump sediment exceeded the industrial RSL and the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Mercury in exterior soil borings exceeded the industrial RSL and the MRBCA type 3 non-residential / construction values. Arsenic in an exterior soil boring and tunnel sump sediment exceeded the industrial RSL and MRBCA DTL; arsenic in the tunnel sump sediment sample also exceeded the range of USGS-reported background levels for St. Louis County. Barium and copper in tunnel sump sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential values.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. No PCBs were detected in one exterior soil boring.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 L	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 M/N	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in a tunnel sample exceeded the industrial RSL and the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern.	No additional recommendations
	VOCs/SVOCs	Samples specific to these buildings were not collected for VOC or SVOC analysis. No SVOCs were detected in exterior soil borings. Samples for VOC analysis do not appear to have been collected.	Collect exterior soil borings for VOC analysis including 1,4-dioxane.
105 A/B/C/D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. No explosives were detected in basement / crawlspace soil / sediment or exterior soil borings.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 A/B/C/D	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples collected from crawlspaces, above suspended ceilings, the floor, and a masonry wall exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil / sediment exceeded the industrial RSL and MRBCA type 3 non-residential value. Additionally, lead in sump water exceeded the MCL. Lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL.	Conduct interior dust/surface soil sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other	Sample collection was limited as compared to Building 102.	See additional samples proposed for this building.
	Other Metals	Mercury in building air monitoring / sampling did not exceed the PEL but did exceed MRBCA and RSL values. Arsenic in basement / crawlspace soil / sediment samples exceeded the industrial RSL and MRBCA type 3 non-residential value. Arsenic in one interior surface soil sample also exceeded the range of USGS-reported background levels for St. Louis County. Copper in surface soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination. Conduct verification indoor air samples for mercury analysis.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 A/B/C/D	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene exceeded industrial RSLs and MRBCA type 3 non-residential/construction values. The PAHs bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, 3,3-dichlorobenzidine, and indeno(1,2,3-cd)pyrene in basement / crawlspace soil and sump sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. The PAH benzo(k)fluoranthene in basement / crawlspace soil exceeded the industrial RSL but not the MRBCA value. Some crawlspace samples were collected directly from process piping/equipment.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
105 E	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. 2,4- and 2,6-Dinitrotoluene (SVOC analysis) in shallow soil exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 E	Lead	Lead wipe samples collected from crawlspaces and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. No lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Arsenic in basement / crawlspace soil / sediment samples exceeded the industrial RSL and MRBCA type 3 non-residential value. Arsenic in one surface soil sample also exceeded the range of USGS-reported background levels for St. Louis County. Beryllium and silver in surface soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Benzo(a)pyrene in shallow soil exceeded the industrial RSL. 2,4-Dinitrotoluene, and 2,6-dinitrotoluene in shallow soil exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
105 F	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 F	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples collected from above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Lead in exterior soil borings exceeded the MRBCA DTL or industrial RSL.	Conduct interior dust/surface soil sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	Arsenic in exterior soil borings and tunnel soil / sediment samples exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Benzo(a)pyrene in shallow soil exceeded the industrial RSL.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 G/H/J	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	No explosives were detected in exterior soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL.	No additional recommendations
	Other Metals	No other metals were detected in exterior soil borings at concentrations exceeding industrial RSLs or MRBCA DTLs.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
105 L	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 L	PCBs	No PCBs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
105 M/N	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	No PCBs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs.	No additional recommendations
	VOCs/SVOCs	No TPH-DRO or TPH-GRO were detected. No other VOCs or SVOCs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs.	No additional recommendations
106	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
106	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
107	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in shallow and deep exterior soil borings exceeded the MRBCA DTL but not the MRBCA tier 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic in a shallow exterior soil boring exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 $\mu g/cm^2$) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. If core samples indicate elevated PCBs in areas where occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
108 A	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 $\mu g/cm^2$) for impervious surfaces. No shallow soil samples were collected in basement or crawlspace areas. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA non-residential / construction values. Aroclor 1260 in groundwater (one of five samples) also exceeded the MRBCA DTL, tap water RSL, and MCL.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. Where core samples indicate elevated PCBs and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Analysis was limited to TPH-DRO. TPH-DRO was detected in exterior soil borings and groundwater, but at concentrations below the MRBCA DTL.	Conduct additional exterior soil boring and groundwater sampling for analyses for VOCs and PCBs to determine the extent of contamination in soil and groundwater and to evaluate the potential for that contamination to migrate to indoor air.
108 B	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
108 B	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. Aroclor 1260 in crawlspace soil exceeded the industrial RSL and MRBCA DTL. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA DTL. Aroclor 1260 in groundwater (one of five samples) also exceeded the MRBCA DTL.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. Where core samples indicate elevated PCBs and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Analysis was limited to TPH-DRO. TPH-DRO was detected in crawlspace soil and exterior soil borings but at concentrations below the MRBCA DTL.	Conduct additional exterior soil boring and groundwater sampling for analyses for VOCs and PCBs to determine the extent of contamination in soil and groundwater and to evaluate the potential for that contamination to migrate to indoor air.
110	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern. Liquid infiltrating an interior pit contains fluoride and fecal coliform, indicating a possible sanitary sewer system leak.	No additional recommendations
	Lead	Lead wipe samples collected from tank saddles and a wall and column exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). No shallow soil samples were collected from basement / crawlspace areas for lead analysis. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Lead in tap water exceeded the MRBCA DTL and MCL.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
110	Other	No groundwater sampling was conducted in vicinity of ASTs.	Sample crawlspace soil and exterior soil borings for analyses for SVOCs and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
	Other Metals	No shallow soil samples were collected from basement / crawlspace areas for metals analysis. Arsenic in exterior soil borings exceeded the industrial RSL and MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Collect crawlspace soil samples for metals analysis.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. No PCBs were detected in wipe samples. No shallow soil samples were collected from basement / crawlspace areas for PCB analysis. No PCBs were detected in exterior soil borings.	MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. Where core samples indicate elevated PCBs and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Analysis was limited to TPH. TPH DRO was detected in crawlspace soil and exterior soil borings but at concentrations below the MRBCA DTL.	Sample crawlspace soil and exterior soil borings for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
111	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
111	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead in exterior soil borings exceeded the industrial RSL or MRBCA DTL.	No additional recommendations
	Other Metals	No metals in exterior soil borings exceeded the industrial RSL or MRBCA DTL.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA DTL.	Conduct removal assessment for PCB-contaminated soil
115	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	One lead wipe sample collected in the crawlspace exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). No shallow soil samples were collected from basement / crawlspace areas for lead analysis. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Conduct dust sampling for lead analysis in portions of the building where occupational exposures are expected in order to verify wipe sample results and more directly evaluate risk.
	Other Metals	No shallow soil samples were collected from basement / crawlspace areas for metals analysis. Arsenic in exterior soil borings exceeded the industrial RSL and MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Collect crawlspace soil samples for metals analysis.

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
115	PCBs	No PCBs were detected in wipe samples. No basement / crawlspace soil samples were collected for PCB analysis. No PCBs were detected in exterior soil borings.	Collect additional clearance samples for PCB analysis. MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	No basement / crawlspace shallow soil samples were collected for VOC/SVOC analysis. No TPH DRO or TPH GRO in exterior soil borings exceeded the industrial RSL or MRBCA DTL. Analysis included VOCs but not SVOCs. Groundwater sampling was limited to TPH analysis.	Conduct additional exterior soil boring and groundwater sampling for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH to determine the extent of contamination in soil and groundwater, and to evaluate the potential for that contamination to migrate to indoor air.
122 B	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in the shallow and deep portions of an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other	Grounds crews may have handled pesticides or herbicides. No groundwater sampling was conducted in the vicinity of the maintenance/service shop.	Conduct interviews and a records review to determine if grounds crews handled pesticides or herbicides at this location. If spills or excessive application is reported, sampling of soil borings may be necessary for these analyses as well.
	Other Metals	Arsenic in the shallow and deep portions of an exterior soil boring exceeded the MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
122 B	PCBs	Samples specific to this building do not appear to have been collected for PCB analysis. The nearest buildings are Buildings 108A and 110.	Conduct interviews and additional records review as necessary to determine if PCB-containing equipment was managed in the building. If so, determine whether that equipment was properly removed and disposed of, and whether cleanup was conducted where needed. If records review and interviews are insufficient for verification and the building is to be occupied, collect clearance samples for PCB analysis. MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	Samples specific to this building do not appear to have been collected for VOC or SVOC analysis. The nearest buildings are Buildings 108A and 110.	Sample exterior soil borings for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
136 A/B/E/F	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
136 A/B/E/F	Other	No groundwater sampling was conducted in vicinity of fuel tanks.	Sample exterior soil borings for analyses for 1,4-dioxane, SVOCs, and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
	Other Metals	Arsenic and beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Arsenic concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations
	VOCs/SVOCs	No VOCs were detected in exterior soil borings. Analysis did not include SVOCs or TPH.	Sample exterior soil borings for analyses for 1,4-dioxane, SVOCs, and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
137 A	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic and beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Arsenic concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
137 A	VOCs/SVOCs	No VOCs in exterior soil borings exceeded the industrial RSL or MRBCA DTL. Analysis did not include SVOCs or TPH.	Sample exterior soil borings for analyses for 1,4-dioxane, SVOCs, and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
	VOCs/SVOCs	Grounds crews may have handled pesticides or herbicides. No groundwater sampling was conducted in the vicinity of fuel tanks.	Conduct interviews and records review to determine if grounds crews handled pesticides or herbicides at this location. If spills or excessive application is reported, soil borings may be necessary for these analyses as well.
141 C	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	The lead concentration in an exterior soil boring was below the MRBCA DTL and industrial RSL.	No additional recommendations
	Other Metals	Arsenic and beryllium in an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. The arsenic concentration was below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations

TABLE 3
INITIAL BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
141 C	PCBs	No PCBs were detected in an exterior soil boring.	Conduct interviews and additional records review as necessary to determine if PCB-containing equipment was managed in the building. If so, determine whether that equipment was properly removed and disposed of, and whether cleanup was conducted where needed. If records review and interviews are insufficient for verification and the building is to be occupied, collect clearance samples for PCB analysis. MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 4
APPLIED SAMPLING METHODS, ANALYTICAL FIELD INSTRUMENTS, AND CALIBRATION

Matrix	Description of Sampling Method	Method or Standard Operating Procedure (SOP)	Analytical Field Instruments and Required Calibration
Interior concrete	To evaluate polychlorinated biphenyls (PCB)-contaminated concrete in a manner consistent with Missouri Risk-based Correction Action (MRBCA) requirements, a drill will be used to collect targeted destructive core or equivalent samples.	40 *Code of Federal Regulations* 761.123 EPA *Polychlorinated Biphenyl Inspection Manual*	*No field analytical instruments required*
Interior surface dust	Surface dust will be collected by micro-vacuum sampling into micro-vac cartridges for determination of metals on a mass concentration basis (i.e., mass of metal per unit mass of sampled collected). To achieve acceptable detection limits, at least 1 gram of dust will be collected per sample.	ASTM D7144-05a – *Standard Practice for Collection of Surface Dust by Micro-vacuum Sampling for Subsequent Metals Determination*	Micro-vacuum [-]
Interior surface soil	Surface soil samples will be collected from 0 to 6 inches below ground surface (bgs) using a disposable stainless steel spoon, homogenized in a disposable aluminum pie pan, and placed in a laboratory-supplied container.	EPA ERT SOP #2012 – *Soil Sampling*	*No field analytical instruments required*
Exterior soil	Subsurface soil samples will be collected in disposable polyvinyl chloride (PVC) or acetate sleeves inserted into Geoprobe® Macro-Core samplers, which will be manually or mechanically driven to desired sampling depths. For volatile organic compounds (VOC) and total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) analyses, a subsample of soil will be collected from the soil core using a TerraCore™ (or equivalent device) and placed into the sample container. Soil subsamples collected for all other analyses will be collected from the sleeves using disposable stainless steel spoons, homogenized in a disposable aluminum pie pan, and transferred to appropriate sample containers.	EPA ERT SOP #2012 – *Soil Sampling* EPA SW-846 Method 5035A (TerraCore™ or equivalent device)	Photoionization detector [C1]
Exterior groundwater	Groundwater samples will be collected from Geoprobe® temporary monitoring wells. These groundwater samples will be collected through Geoprobe® rods via disposable polyethylene tubing and a check valve.	EPA ERT SOP #2007 – *Groundwater Well Sampling*	Water level indicator [C1]

Notes:

[C1] Indicates the field sampler calibrated (or performed a function test of) the instrument at the beginning of the day, or as often as required to ensure that the accuracy and reproducibility of results were consistent with the manufacturer's specifications.

[-] Indicates no calibration required.

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TABLE 5
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE COLLECTION INFORMATION

Building	Floor	Sample ID	Sample Location[1]	Depth (in bgs)	Analysis
101	Basement 2	101-C1	H/J, 12/13	0-0.5	PCBs
	Basement 1	101-C2, 101-C2-FD	C, 9/10	0-0.5	PCBs
		101-C3	B/C, 10	0-0.5	PCBs
103 A/B/C	First Floor	103-C1	A/B, 8/9	0-0.5	PCBs
		103-C2	A/B, 3/4	0-0.5	PCBs
		103-C3	A/B, 2	0-0.5	PCBs
	Basement	103-C4	A/B, 19/20	0-0.5	PCBs
		103-C5	J/K, 19/20	0-0.5	PCBs
		103-C6	A/B, 14/15	0-0.5	PCBs
		103-C7	J/K, 14/15	0-0.5	PCBs
103 D	Second Floor	103D-C1	N/P, 31/32	0-0.5	PCBs
	First Floor	103D-C2	L/N, 31/32	0-0.5	PCBs
103 E	First Floor	103E-C1, 103E-C1-FD	N/P, 27/28	0-0.5	PCBs
		103E-C2	L/N, 28/-	0-0.5	PCBs
	Basement	103E-C3	N/P, 23/24	0-0.5	PCBs
103 F (former 112)	First Floor	103F-C1	B/C, 6/7	0-0.5	PCBs
104 A/B/C/D	Basement	104-C1	A/B, 18/19	0-0.5	PCBs
		104-C2	A/B, 32/33	0-0.5	PCBs
		104-C3	H/J, 39/40	0-0.5	PCBs
		104-C4	G/H, 26/27	0-0.5	PCBs
		104-C5	A/B, 26/27	0-0.5	PCBs
		104-C6	H/J, 18/19	0-0.5	PCBs
104 E	Second Floor	104E-C1	L/M, 48/49	0-0.5	PCBs
104 F	Second Floor	104F-C1	M/O, 35/36	0-0.5	PCBs
105 A/B/C/D	First Floor	105-C1	B/C, 2	0-0.5	PCBs
		105-C2	A/B, 2/3	0-0.5	PCBs
	Basement	105-C3	H/J, 26/27	0-0.5	PCBs
		105-C4	B/C, 26/27	0-0.5	PCBs
		105-C5	H/J, 39/40	0-0.5	PCBs
		105-C6	A/B, 40	0-0.5	PCBs
		105-C7	A/B, 20/21	0-0.5	PCBs
		105-C8	H/J, 30/31	0-0.5	PCBs
105 E	Second Floor	105E-C2	O, 43	0-0.5	PCBs
	First Floor	105E-C1	M, 43/44	0-0.5	PCBs
105 F	Second Floor	105F-C1	M/O, 33/ 34	0-0.5	PCBs
105 L	First Floor	105L-C1	A/B, 14/-	0-0.5	PCBs
		105L-C2	-/A, 5/6	0-0.5	PCBs
107	Basement	107-C1	D/F, 11/12	0-0.5	PCBs
		107-C2	A/C, 11/12	0-0.5	PCBs
108 A	First Floor	108A-C1	Fuse Room	0-0.5	PCBs
		108A-C2	Distributors	0-0.5	PCBs
		108A-C3	Transformers	0-0.5	PCBs
		108A-C4	Control/Battery Backup	0-0.5	PCBs

TABLE 5
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE COLLECTION INFORMATION

Building	Floor	Sample ID	Sample Location[1]	Depth (in bgs)	Analysis
108 B	First Floor	108B-C1	Control/Battery Backup	PCBs	PCBs
		108B-C2	Transformers	PCBs	PCBs
		108B-C3	Distributors	PCBs	PCBs
110	Basement	110-C1	N/P, 14/15	PCBs	PCBs
		110-C2	N/P, 12/13	PCBs	PCBs
		110-C3	F/G, 9/10	PCBs	PCBs
		110-C4	B/C, 6/7	PCBs	PCBs
115	First Floor	115-C1	B/C, 2/3	PCBs	PCBs
122 B	Basement	122B-C1	C/D, 6/7	PCBs	PCBs
208 B	First Floor	208B-C1	Southeast	PCBs	PCBs
		208B-C2	Central	PCBs	PCBs
		208B-C3	Northwest	PCBs	PCBs

Notes:

Purpose: Clearance sampling to evaluate the potential health threat posed by likely releases from historical PCB-containing transformers and electrical equipment, and to meet the MRBCA requirement for destructive core sampling to evaluate concrete

[1] Numbers and letters indicate location within pillar grid system.

in bgs Inches below ground surface
MRBCA Missouri Risk-Based Corrective Action
PCB Polychlorinated biphenyl

TABLE 6
INTERIOR BULK SURFACE DUST SAMPLE COLLECTION INFORMATION

Building	Floor	Sample ID	Sample Location[1]	Requested Analyses
102 E	Second Floor	102E-ID1	N/P, 27/28	Lead
		102E-ID2	L/N, 21/22	Lead
	First Floor	102E-ID3	N/P, 22/23	Lead
		102E-ID4	N, 26/27	Lead
		102E-ID5	L/N, 25/26	Lead
103 A/B/C	Second Floor	103-ID5	B/C, 1/2	Lead, Mercury
		103-ID6	C/D, 20/21	Lead, Mercury
		103-ID7	H/J, 15/16	Lead, Mercury
		103-ID8	E/F, 28/29	Lead, Mercury
		103-ID10	B/C, 38/39	Lead, Mercury
	First Floor	103-ID1	B/C, 9/10	Lead, Mercury
		103-ID2	E/F, 20/21	Lead, Mercury
		103-ID3	H/J, 27/28	Lead, Mercury
		103-ID4	H/J, 3/4	Lead, Mercury
		103-ID9	E/F, 34/35	Lead, Mercury
103 D	Second Floor	103D-ID1	L/N, 35/36	Lead
		103D-ID2	N/P, 32/33	Lead
	First Floor	103D-ID3	L/N, 31/32	Lead
		103D-ID4	L, 36/37	Lead
103 E	Second Floor	103E-ID3	L/N, 23/24	Lead
		103E-ID4	L/N, 27/28	Lead
	First Floor	103E-ID1	N/P, 22	Lead
		103E-ID2	N/P, 26/27	Lead
	Basement	103E-ID5	N/P, 23/24	Lead
103 F (former 112)	First Floor	103F-ID1	A/B, 10	Lead, Mercury
		103F-ID2	E/F, 1/2	Lead, Mercury
104 A/B/C/D	Second Floor	104-ID7	H, 52	Lead
		104-ID8	F, 45	Lead
		104-ID9	H/J, 7/8	Lead
		104-ID10	E/F, 17/18	Lead
		104-ID11	B, 28/29	Lead
		104-ID12	B/C, 1/2	Lead
	First Floor	104-ID1	H/J, 6/7	Lead
		104-ID2	B, 15	Lead
		104-ID3	G/H, 29/30	Lead
		104-ID4	A, 33	Lead
		104-ID5	H/J, 42/43	Lead
		104-ID6	A/B, 52/53	Lead
104 E	Second Floor	104E-ID3	L/M, 50/51	Lead
		104E-ID4	O/P, 44/45	Lead
	First Floor	104E-ID1	L/M, 51/52	Lead
		104E-ID2	L/M, 44/45	Lead

TABLE 6
INTERIOR BULK SURFACE DUST SAMPLE COLLECTION INFORMATION

Building	Floor	Sample ID	Sample Location[1]	Requested Analyses
104 F	Second Floor	104F-ID1	M/O, 29/30	Lead
		104F-ID2	O/P, 33/34	Lead
	First Floor	104F-ID3	L/M, 28/29	Lead
		104F-ID4	O/P, 34/35	Lead
105 A/B/C/D	Second Floor	105-ID1	H/J, 1/2	Lead
		105-ID2	B/C, 16	Lead
		105-ID3	F/G, 24/25	Lead
		105-ID4	B/C, 29/30	Lead
		105-ID5	F/G, 36/37	Lead
	First Floor	105-ID6	H/J, 48/49	Lead
		105-ID7	G/H, 35/36	Lead
		105-ID8	B/C, 25/26	Lead
		105-ID9	G/H, 20	Lead
		105-ID10	H, 10	Lead
		105-ID11	E, 3	Lead
105 E	Second Floor	105E-ID3	M/O, 51/52	Lead
		105E-ID4	O/P, 44/45	Lead
	First Floor	105E-ID1	O/P, 43/44	Lead
		105E-D2	O/P, 52/53	Lead
105 F	Second Floor	105F-ID1	L/M, 32/33	Lead
		105F-ID2	L/M, 32/33	Lead
	First Floor	105F-ID3	L/M, 33/34	Lead
		105F-ID4	L/M, 28/29	Lead
	Basement	105F-ID5	M/O, 31/32	Lead
110	Second Floor	110-ID1	L/K, 11/12	Lead
		110-ID2	D, 14/15	Lead
	First Floor	110-ID3	H/J, 3/4	Lead
		110-ID4	C/D, 8	Lead
		110-ID5	L/M, 20/21	Lead
	Basement	110-ID6	J/K, 1/2	Lead
		110-ID7	A/B, 20/21	Lead
		110-ID8	J/K, 16/17	Lead
115	First Floor	115-ID1	A/B, 4/5	Lead
		115-ID2	D/E, 7/8	Lead
	Basement	115-ID3	A/B, 1/2	Lead

Notes:

Purpose Verification and data gap sampling to evaluate potential health threats on a mass concentration basis, allowing direct human health risk assessment

[1] Numbers and letters indicate location within pillar grid system.

TABLE 7
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL
SAMPLE COLLECTION INFORMATION

Building	Floor	Sample ID	Sample Location[1,2]	Requested Analyses
102 E	Basement	102E-IS1	L/N, 22/23	Asbestos, Lead
		1023-IS2	L/N, 24/25	Asbestos, Lead
103 A/B/C	Basement	103-IS1	D/E, 24/25	Asbestos, Lead, Mercury, SVOCs
		103-IS2	D/E, 33/34	Asbestos, Lead, Mercury, SVOCs
		103-IS3	D/E, 15/16	Asbestos, Lead, Mercury, SVOCs
		103-IS4	D/E, 6/7	Asbestos, Lead, Mercury, SVOCs
		103-IS5	A/B, 7/8	Asbestos, Lead, Mercury, SVOCs
103 D	Basement	103D-IS1, 103D-IS1-FD	N/P, 33/34	Asbestos, Lead
		103D-IS2	L/N, 34/35	Asbestos, Lead
103 E	Basement	103E-IS1	N/P, 22/23	Asbestos, Lead
		103E-IS2	N/P, 24/25	Asbestos, Lead
103 F (former 112)	Crawlspace	103F-IS1	C/D, 9/10	Asbestos, Lead, Mercury
		103F-IS2	C/D, 3/4	Asbestos, Lead, Mercury
104 A/B/C/D	Basement	104-IS1	G/H, 27/28	Asbestos, Lead
		104-IS2	D/E, 39/40	Asbestos, Lead
		104-IS3	B/C, 51/52	Asbestos, Lead
		104-IS4	B/C, 18/19	Asbestos, Lead
		104-IS5	E/F, 10/11	Asbestos, Lead
		104-IS6	G/H, 2/3	Asbestos, Lead
104 E	Basement	104E-IS1	N, 48/49	Asbestos, Lead, SVOCs
		104E-IS2	N, 44/45	Asbestos, Lead, SVOCs
104 F	Basement	104F-IS1	M/O, 33/34	Asbestos, Lead
		104F-IS2	M/O, 31/32	Asbestos, Lead
105 A/B/C/D	Basement	105-IS1	B/C, 29/30	Asbestos, Lead
		105-IS2	G/H, 51/52	Asbestos, Lead
		105-IS3	E/F, 40/41	Asbestos, Lead
		105-IS4	G/H, 23/24	Asbestos, Lead
		105-IS5	D/E, 12/13	Asbestos, Lead
		105-IS6	B/C, 3/4	Asbestos, Lead
105 E	Basement	105E-IS1	M/O, 45/46	Asbestos, Lead
		105E-IS2	M/O, 49/50	Asbestos, Lead
105 F	Basement	105F-IS1	O/P, 33/34	Asbestos, Lead
		105F-IS2	L/M, 29/30	Asbestos, Lead
107	Basement	107-IS1	C/D, 9/10	Asbestos

Notes:

Purpose	Data gap sampling to evaluate potential health threats on a mass concentration basis, allowing direct human health risk assessment
[1]	Numbers and letters indicate location within pillar grid system.
[2]	Concrete prevented the collection of surface soil samples in tunnel locations.
FD	Field duplicate
SVOC	Semivolatile organic compound

TABLE 8
EXTERIOR SOIL AND GROUNDWATER SAMPLE COLLECTION INFORMATION

Building	Sample Location	Sample Matrix	Sample IDs	Sample Depth (ft bgs)	Refusal Depth (ft bgs)	Requested Analyses
102 F/G/H	Footprint	Soil	DPTS-33	0-4	20	Asbestos, Metals
			DPTS-34	0-4	4	Asbestos, Metals
102 J	Footprint	Soil	DPTS-3	0-4	32[a]	Asbestos, VOCs/SVOCs/TPH
102 K	Footprint	Soil	DPTS-2	4-8	20	Asbestos, VOCs/SVOCs/TPH
103 F/G/H	Footprint	Soil	DPTS-12	4-8	24	Asbestos
			DPTS-12-FD	4-8	24	Asbestos
			DPTS-13	8-12	24	Asbestos
103 J	Footprint	Soil	DPTS-42	4-8	20	Asbestos, VOCs/SVOCs/TPH
			DPTS-42-DUP	4-8	20	Asbestos, VOCs/SVOCs/TPH
103 K	Footprint	Soil	DPTS-43	8-12	16	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-43	Dry	16	Dry
104 A/B/C/D	Perimeter	Soil	DPTS-22	4-8	24	VOCs/SVOCs/TPH
			DPTS-23	4-8	20	VOCs/SVOCs/TPH
			DPTS-25	16-20	20	VOCs/SVOCs/TPH
			DPTS-28	3-7	16	VOCs/SVOCs/TPH
		GW	DPTGW-23	Dry	20	Dry
			DPTGW-25	10-20	20	VOCs/SVOCs/TPH
			DPTGW-28	Dry	16	Dry
104 G/H/J	Footprint	Soil	DPTS-20	4-8	24	Asbestos, Metals
			DPTS-20-DUPDPTS-21	4-8	24	Asbestos, Metals
				0-4	20	Asbestos, Metals
104 K	Footprint	Soil	DPTS-26	0-4	8	Asbestos
104 L	Footprint	Soil	DPTS-19	4-8	20	Asbestos
104 M	Footprint	Soil	DPTS-40	12-16	28	Asbestos, VOCs/SVOCs/TPH
			DPTS-40-FD	12-16	28	Asbestos, VOCs/SVOCs/TPH
104 N	Footprint	Soil	DPTS-41	0-4	4	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-41	Dry	4	Dry
105 M	Footprint	Soil	DPTS-36	4-8	20	Asbestos
			DPTS-36-FD	4-8	20	Asbestos
105 N	Footprint	Soil	DPTS-32	4-8	24	Asbestos
108 A	Perimeter	Soil	DPTS-9	0-4	28	PCBs, VOCs/SVOCs/TPH
			DPTS-11	Refusal	3	Refusal
		GW	DPTGW-9[b]	18-28	28	PCBs, VOCs/TPH-GRO
			DPTGW-11	Dry	3	Dry
108 B	Perimeter	Soil	DPTS-27	8-12	27	PCBs, VOCs/SVOCs/TPH
			DPTS-30	12-16	24	PCBs, VOCs/SVOCs/TPH
			DPTS-31	8-12	24	PCBs, VOCs/SVOCs/TPH
		GW	DPTGW-27	17-27	27	PCBs, VOCs/SVOCs/TPH
110	Perimeter	Soil	DPTS-4	12-16	24	VOCs/SVOCs/TPH
			DPTS-5	8-12	24	VOCs/SVOCs/TPH
			DPTS-39	12-16	28	VOCs/SVOCs/TPH
			DPTS-44	20-24	28	VOCs/SVOCs/TPH

TABLE 8
EXTERIOR SOIL AND GROUNDWATER SAMPLE COLLECTION INFORMATION

Building	Sample Location	Sample Matrix	Sample IDs	Sample Depth (ft bgs)	Refusal Depth (ft bgs)	Requested Analyses
115 / USTs	Perimeter	Soil	DPTS-14	12-16	32 [a]	VOCs/SVOCs/TPH
			DPTS-15	8-12	32 [a]	VOCs/SVOCs/TPH
			DPTS-16	12-16	28	VOCs/SVOCs/TPH
			DPTS-17	4-8	28	VOCs/SVOCs/TPH
			DPTS-18	12-16	20	VOCs/SVOCs/TPH
			DPTS-29	8-12	16	VOCs/SVOCs/TPH
115 / USTs	Perimeter	GW	DPTGW-16	18-28	28	VOCs/SVOCs/TPH
122 B	Perimeter	Soil	DPTS-6	4-8	28	Pest/Herb, VOCs/SVOCs/TPH
			DPTS-7	8-12	28	Pest/Herb, VOCs/SVOCs/TPH
			DPTS-10	16-20	28	Pest/Herb, VOCs/SVOCs/TPH
		Soil	DPTS-8	4-8	28	Pesticides/Herbicides, VOCs/SVOCs/TPH, PCBs
			DPTS-8-FD	4-8	28	Pesticides/Herbicides, VOCs/SVOCs/TPH, PCBs
		GW	DPTGW-6 [b]	8.5-18.5	28	VOCs/SVOCs/TPH
			DPTGW-10	18-28	28	Pest/Herb, VOCs/SVOCs/TPH
136 A	Footprint	Soil	DPTS-35	16-20	20	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-35	Dry	20	Dry
136 B	Footprint	Soil	DPTS-37	8-12	24	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-37	14-24	24	VOCs/SVOCs/TPH
136 E	Footprint	Soil	DPTS-24	12-16	27.5	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-24	17-27	27.5	VOCs/SVOCs/TPH
136 F	Footprint	Soil	DPTS-1	8-12	32 [a]	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-1	8.5-18.5	32 [a]	VOCs/SVOCs/TPH
			DPTGW-1-DUP	8.5-18.5	32 [a]	VOCs/SVOCs/TPH
137 A	Footprint	Soil	DPTS-38	4-8	24	Asbestos, VOCs/SVOCs/TPH
		GW	DPTGW-38	Dry	24	Dry
208 B	Footprint	Soil	DPTS-45	12-16	32 [a]	Metals, PCBs, VOCs/SVOCs/TPH
			DPTS-46	Refusal	1	Refusal
			DPTS-47	12-16	24	Metals, PCBs, VOCs/SVOCs/TPH
		GW	DPTGW-45	Dry	32 [a]	Dry
			DPTGW-46	Dry	1	Dry
			DPTGW-47	Dry	24	Dry

Notes:

Purpose: Data gap sampling to evaluate potential health threats from interior vapor intrusion of or exterior direct contact with contaminants of concern

[a] No refusal encountered.
[b] Insufficient groundwater volume to collect all planned analyses.

DPTGW Direct-push technology groundwater sample
DPTS Direct-push technology soil sample
DUP Duplicate

GW	Groundwater
FD	Field duplicate
PCB	Polychlorinated biphenyl
Pest/Herb	Pesticides/herbicides
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
VOC	Volatile organic compound

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TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
101	Basement1	101-C2	5/3/2012	**PCBs, Total**	0.14	J
101	Basement1	101-C2	5/3/2012	Dichlorobiphenyls, Total	0.000069	J
101	Basement1	101-C2	5/3/2012	Heptachlorobiphenyls, Total	0.060	J
101	Basement1	101-C2	5/3/2012	Hexachlorobiphenyls, Total	0.056	J
101	Basement1	101-C2	5/3/2012	Monochlorobiphenyls, Total	0.0000059	J
101	Basement1	101-C2	5/3/2012	Nonachlorobiphenyls, Total	0.00058	J
101	Basement1	101-C2	5/3/2012	Octachlorobiphenyls, Total	0.011	J
101	Basement1	101-C2	5/3/2012	Pentachlorobiphenyls, Total	0.0083	J
101	Basement1	101-C2	5/3/2012	Tetrachlorobiphenyls, Total	0.000072	J
101	Basement1	101-C2	5/3/2012	Trichlorobiphenyls, Total	0.00013	J
101	Basement1	101-C3	5/3/2012	**PCBs, Total**	0.036	J
101	Basement1	101-C3	5/3/2012	Heptachlorobiphenyls, Total	0.020	J
101	Basement1	101-C3	5/3/2012	Hexachlorobiphenyls, Total	0.013	J
101	Basement1	101-C3	5/3/2012	Monochlorobiphenyls, Total	0.000010	J
101	Basement1	101-C3	5/3/2012	Nonachlorobiphenyls, Total	0.00020	J
101	Basement1	101-C3	5/3/2012	Octachlorobiphenyls, Total	0.0025	J
101	Basement1	101-C3	5/3/2012	Pentachlorobiphenyls, Total	0.00055	J
101	Basement1	101-C3	5/3/2012	Tetrachlorobiphenyls, Total	0.0000024	J
101	Basement1	101-C3	5/3/2012	Trichlorobiphenyls, Total	0.000100	J
101	Basement2	101-C1	5/3/2012	**PCBs, Total**	0.058	J
101	Basement2	101-C1	5/3/2012	Decachlorobiphenyl	0.0028	
101	Basement2	101-C1	5/3/2012	Dichlorobiphenyls, Total	0.00049	J
101	Basement2	101-C1	5/3/2012	Heptachlorobiphenyls, Total	0.018	J
101	Basement2	101-C1	5/3/2012	Hexachlorobiphenyls, Total	0.013	J
101	Basement2	101-C1	5/3/2012	Monochlorobiphenyls, Total	0.0000082	J
101	Basement2	101-C1	5/3/2012	Nonachlorobiphenyls, Total	0.0023	J
101	Basement2	101-C1	5/3/2012	Octachlorobiphenyls, Total	0.0081	J
101	Basement2	101-C1	5/3/2012	Pentachlorobiphenyls, Total	0.0094	J
101	Basement2	101-C1	5/3/2012	Tetrachlorobiphenyls, Total	0.0022	J
101	Basement2	101-C1	5/3/2012	Trichlorobiphenyls, Total	0.0017	J
103 A/B/C	Basement	103-C4	5/10/2012	**PCBs, Total**	0.34	J
103 A/B/C	Basement	103-C4	5/10/2012	Decachlorobiphenyl	0.00046	J
103 A/B/C	Basement	103-C4	5/10/2012	Dichlorobiphenyls, Total	0.00042	J
103 A/B/C	Basement	103-C4	5/10/2012	Heptachlorobiphenyls, Total	0.10	J
103 A/B/C	Basement	103-C4	5/10/2012	Hexachlorobiphenyls, Total	0.17	J
103 A/B/C	Basement	103-C4	5/10/2012	Monochlorobiphenyls, Total	0.000091	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
103 A/B/C	Basement	103-C4	5/10/2012	Nonachlorobiphenyls, Total	0.0016	J
103 A/B/C	Basement	103-C4	5/10/2012	Octachlorobiphenyls, Total	0.019	J
103 A/B/C	Basement	103-C4	5/10/2012	Pentachlorobiphenyls, Total	0.038	J
103 A/B/C	Basement	103-C4	5/10/2012	Tetrachlorobiphenyls, Total	0.0047	J
103 A/B/C	Basement	103-C4	5/10/2012	Trichlorobiphenyls, Total	0.0020	J
103 A/B/C	Basement	103-C5	5/10/2012	**PCBs, Total**	0.084	J
103 A/B/C	Basement	103-C5	5/10/2012	Decachlorobiphenyl	0.0015	
103 A/B/C	Basement	103-C5	5/10/2012	Dichlorobiphenyls, Total	0.00060	J
103 A/B/C	Basement	103-C5	5/10/2012	Heptachlorobiphenyls, Total	0.025	J
103 A/B/C	Basement	103-C5	5/10/2012	Hexachlorobiphenyls, Total	0.033	J
103 A/B/C	Basement	103-C5	5/10/2012	Monochlorobiphenyls, Total	0.000095	J
103 A/B/C	Basement	103-C5	5/10/2012	Nonachlorobiphenyls, Total	0.00067	J
103 A/B/C	Basement	103-C5	5/10/2012	Octachlorobiphenyls, Total	0.0034	J
103 A/B/C	Basement	103-C5	5/10/2012	Pentachlorobiphenyls, Total	0.014	J
103 A/B/C	Basement	103-C5	5/10/2012	Tetrachlorobiphenyls, Total	0.0028	J
103 A/B/C	Basement	103-C5	5/10/2012	Trichlorobiphenyls, Total	0.0015	J
103 A/B/C	Basement	103-C6	5/10/2012	**PCBs, Total**	0.48	J
103 A/B/C	Basement	103-C6	5/10/2012	Decachlorobiphenyl	0.0016	
103 A/B/C	Basement	103-C6	5/10/2012	Heptachlorobiphenyls, Total	0.25	J
103 A/B/C	Basement	103-C6	5/10/2012	Hexachlorobiphenyls, Total	0.14	J
103 A/B/C	Basement	103-C6	5/10/2012	Monochlorobiphenyls, Total	0.0000083	J
103 A/B/C	Basement	103-C6	5/10/2012	Nonachlorobiphenyls, Total	0.0048	J
103 A/B/C	Basement	103-C6	5/10/2012	Octachlorobiphenyls, Total	0.066	J
103 A/B/C	Basement	103-C6	5/10/2012	Pentachlorobiphenyls, Total	0.014	J
103 A/B/C	Basement	103-C6	5/10/2012	Tetrachlorobiphenyls, Total	0.00055	J
103 A/B/C	Basement	103-C6	5/10/2012	Trichlorobiphenyls, Total	0.00026	J
103 A/B/C	Basement	103-C7	5/10/2012	**PCBs, Total**	4.1	J
103 A/B/C	Basement	103-C7	5/10/2012	Decachlorobiphenyl	0.0033	
103 A/B/C	Basement	103-C7	5/10/2012	Dichlorobiphenyls, Total	0.00017	J
103 A/B/C	Basement	103-C7	5/10/2012	Heptachlorobiphenyls, Total	2.1	J
103 A/B/C	Basement	103-C7	5/10/2012	Hexachlorobiphenyls, Total	1.3	J
103 A/B/C	Basement	103-C7	5/10/2012	Monochlorobiphenyls, Total	0.0000079	J
103 A/B/C	Basement	103-C7	5/10/2012	Nonachlorobiphenyls, Total	0.044	
103 A/B/C	Basement	103-C7	5/10/2012	Octachlorobiphenyls, Total	0.60	J
103 A/B/C	Basement	103-C7	5/10/2012	Pentachlorobiphenyls, Total	0.099	J
103 A/B/C	Basement	103-C7	5/10/2012	Tetrachlorobiphenyls, Total	0.0017	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
103 A/B/C	Basement	103-C7	5/10/2012	Trichlorobiphenyls, Total	0.00056	J
103 A/B/C	First	103-C1	5/7/2012	**PCBs, Total**	3.0	J
103 A/B/C	First	103-C1	5/7/2012	Decachlorobiphenyl	0.0018	
103 A/B/C	First	103-C1	5/7/2012	Dichlorobiphenyls, Total	0.00031	J
103 A/B/C	First	103-C1	5/7/2012	Heptachlorobiphenyls, Total	0.91	
103 A/B/C	First	103-C1	5/7/2012	Hexachlorobiphenyls, Total	1.4	
103 A/B/C	First	103-C1	5/7/2012	Monochlorobiphenyls, Total	0.000051	J
103 A/B/C	First	103-C1	5/7/2012	Nonachlorobiphenyls, Total	0.014	
103 A/B/C	First	103-C1	5/7/2012	Octachlorobiphenyls, Total	0.24	
103 A/B/C	First	103-C1	5/7/2012	Pentachlorobiphenyls, Total	0.40	
103 A/B/C	First	103-C1	5/7/2012	Tetrachlorobiphenyls, Total	0.014	J
103 A/B/C	First	103-C1	5/7/2012	Trichlorobiphenyls, Total	0.0026	J
103 A/B/C	First	103-C2	5/7/2012	**PCBs, Total**	1.4	J
103 A/B/C	First	103-C2	5/7/2012	Decachlorobiphenyl	0.0026	
103 A/B/C	First	103-C2	5/7/2012	Dichlorobiphenyls, Total	0.0013	J
103 A/B/C	First	103-C2	5/7/2012	Heptachlorobiphenyls, Total	0.61	
103 A/B/C	First	103-C2	5/7/2012	Hexachlorobiphenyls, Total	0.54	
103 A/B/C	First	103-C2	5/7/2012	Monochlorobiphenyls, Total	0.000046	J
103 A/B/C	First	103-C2	5/7/2012	Nonachlorobiphenyls, Total	0.013	
103 A/B/C	First	103-C2	5/7/2012	Octachlorobiphenyls, Total	0.16	
103 A/B/C	First	103-C2	5/7/2012	Pentachlorobiphenyls, Total	0.099	J
103 A/B/C	First	103-C2	5/7/2012	Tetrachlorobiphenyls, Total	0.0093	J
103 A/B/C	First	103-C2	5/7/2012	Trichlorobiphenyls, Total	0.0048	J
103 A/B/C	First	103-C3	5/7/2012	**PCBs, Total**	0.53	J
103 A/B/C	First	103-C3	5/7/2012	Decachlorobiphenyl	0.00094	
103 A/B/C	First	103-C3	5/7/2012	Dichlorobiphenyls, Total	0.00069	J
103 A/B/C	First	103-C3	5/7/2012	Heptachlorobiphenyls, Total	0.24	
103 A/B/C	First	103-C3	5/7/2012	Hexachlorobiphenyls, Total	0.16	J
103 A/B/C	First	103-C3	5/7/2012	Nonachlorobiphenyls, Total	0.0074	J
103 A/B/C	First	103-C3	5/7/2012	Octachlorobiphenyls, Total	0.069	J
103 A/B/C	First	103-C3	5/7/2012	Pentachlorobiphenyls, Total	0.038	J
103 A/B/C	First	103-C3	5/7/2012	Tetrachlorobiphenyls, Total	0.0047	J
103 A/B/C	First	103-C3	5/7/2012	Trichlorobiphenyls, Total	0.0027	J
103 D	First	103D-C2	5/4/2012	**PCBs, Total**	0.022	J
103 D	First	103D-C2	5/4/2012	Decachlorobiphenyl	0.00026	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
103 D	First	103D-C2	5/4/2012	Heptachlorobiphenyls, Total	0.0033	J
103 D	First	103D-C2	5/4/2012	Hexachlorobiphenyls, Total	0.0074	J
103 D	First	103D-C2	5/4/2012	Monochlorobiphenyls, Total	0.000041	J
103 D	First	103D-C2	5/4/2012	Nonachlorobiphenyls, Total	0.00034	J
103 D	First	103D-C2	5/4/2012	Octachlorobiphenyls, Total	0.00062	J
103 D	First	103D-C2	5/4/2012	Pentachlorobiphenyls, Total	0.0071	J
103 D	First	103D-C2	5/4/2012	Tetrachlorobiphenyls, Total	0.0017	J
103 D	First	103D-C2	5/4/2012	Trichlorobiphenyls, Total	0.0010	J
103 D	Second	103D-C1	5/4/2012	**PCBs, Total**	0.086	J
103 D	Second	103D-C1	5/4/2012	Decachlorobiphenyl	0.0011	
103 D	Second	103D-C1	5/4/2012	Dichlorobiphenyls, Total	0.00078	J
103 D	Second	103D-C1	5/4/2012	Heptachlorobiphenyls, Total	0.018	J
103 D	Second	103D-C1	5/4/2012	Hexachlorobiphenyls, Total	0.022	J
103 D	Second	103D-C1	5/4/2012	Monochlorobiphenyls, Total	0.000066	J
103 D	Second	103D-C1	5/4/2012	Nonachlorobiphenyls, Total	0.0014	J
103 D	Second	103D-C1	5/4/2012	Octachlorobiphenyls, Total	0.0072	
103 D	Second	103D-C1	5/4/2012	Pentachlorobiphenyls, Total	0.024	J
103 D	Second	103D-C1	5/4/2012	Tetrachlorobiphenyls, Total	0.0085	J
103 D	Second	103D-C1	5/4/2012	Trichlorobiphenyls, Total	0.0029	J
103 E	Basement	103E-C3	5/4/2012	**PCBs, Total**	0.034	J
103 E	Basement	103E-C3	5/4/2012	Decachlorobiphenyl	0.00076	
103 E	Basement	103E-C3	5/4/2012	Heptachlorobiphenyls, Total	0.010	J
103 E	Basement	103E-C3	5/4/2012	Hexachlorobiphenyls, Total	0.014	J
103 E	Basement	103E-C3	5/4/2012	Monochlorobiphenyls, Total	0.000019	J
103 E	Basement	103E-C3	5/4/2012	Nonachlorobiphenyls, Total	0.00029	J
103 E	Basement	103E-C3	5/4/2012	Octachlorobiphenyls, Total	0.0014	J
103 E	Basement	103E-C3	5/4/2012	Pentachlorobiphenyls, Total	0.0064	J
103 E	Basement	103E-C3	5/4/2012	Tetrachlorobiphenyls, Total	0.00050	J
103 E	Basement	103E-C3	5/4/2012	Trichlorobiphenyls, Total	0.00030	J
103 E	First	103E-C1	5/4/2012	**PCBs, Total**	0.19	J
103 E	First	103E-C1	5/4/2012	Decachlorobiphenyl	0.0021	
103 E	First	103E-C1	5/4/2012	Dichlorobiphenyls, Total	0.0016	
103 E	First	103E-C1	5/4/2012	Heptachlorobiphenyls, Total	0.047	J
103 E	First	103E-C1	5/4/2012	Hexachlorobiphenyls, Total	0.065	J
103 E	First	103E-C1	5/4/2012	Monochlorobiphenyls, Total	0.00042	J
103 E	First	103E-C1	5/4/2012	Nonachlorobiphenyls, Total	0.0018	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
103 E	First	103E-C1	5/4/2012	Octachlorobiphenyls, Total	0.013	J
103 E	First	103E-C1	5/4/2012	Pentachlorobiphenyls, Total	0.043	J
103 E	First	103E-C1	5/4/2012	Tetrachlorobiphenyls, Total	0.013	J
103 E	First	103E-C1	5/4/2012	Trichlorobiphenyls, Total	0.0035	J
103 E	First	103E-C2	5/4/2012	**PCBs, Total**	0.10	J
103 E	First	103E-C2	5/4/2012	Decachlorobiphenyl	0.0016	
103 E	First	103E-C2	5/4/2012	Dichlorobiphenyls, Total	0.00061	J
103 E	First	103E-C2	5/4/2012	Heptachlorobiphenyls, Total	0.028	J
103 E	First	103E-C2	5/4/2012	Hexachlorobiphenyls, Total	0.034	J
103 E	First	103E-C2	5/4/2012	Monochlorobiphenyls, Total	0.00026	J
103 E	First	103E-C2	5/4/2012	Nonachlorobiphenyls, Total	0.0013	J
103 E	First	103E-C2	5/4/2012	Octachlorobiphenyls, Total	0.0073	J
103 E	First	103E-C2	5/4/2012	Pentachlorobiphenyls, Total	0.023	J
103 E	First	103E-C2	5/4/2012	Tetrachlorobiphenyls, Total	0.0048	J
103 E	First	103E-C2	5/4/2012	Trichlorobiphenyls, Total	0.0012	J
103 F (112)	First	103F-C1	5/10/2012	**PCBs, Total**	**12**	J
103 F (112)	First	103F-C1	5/10/2012	Decachlorobiphenyl	0.0051	
103 F (112)	First	103F-C1	5/10/2012	Heptachlorobiphenyls, Total	5.6	
103 F (112)	First	103F-C1	5/10/2012	Hexachlorobiphenyls, Total	4.2	
103 F (112)	First	103F-C1	5/10/2012	Monochlorobiphenyls, Total	0.000029	J
103 F (112)	First	103F-C1	5/10/2012	Nonachlorobiphenyls, Total	0.14	
103 F (112)	First	103F-C1	5/10/2012	Octachlorobiphenyls, Total	2.1	
103 F (112)	First	103F-C1	5/10/2012	Pentachlorobiphenyls, Total	0.38	J
103 F (112)	First	103F-C1	5/10/2012	Tetrachlorobiphenyls, Total	0.0038	J
103 F (112)	First	103F-C1	5/10/2012	Trichlorobiphenyls, Total	0.000096	J
104 A/B/C/D	Basement	104-C1	5/10/2012	**PCBs, Total**	**14**	J
104 A/B/C/D	Basement	104-C1	5/10/2012	Decachlorobiphenyl	0.013	
104 A/B/C/D	Basement	104-C1	5/10/2012	Dichlorobiphenyls, Total	0.00039	J
104 A/B/C/D	Basement	104-C1	5/10/2012	Heptachlorobiphenyls, Total	6.5	
104 A/B/C/D	Basement	104-C1	5/10/2012	Hexachlorobiphenyls, Total	4.9	
104 A/B/C/D	Basement	104-C1	5/10/2012	Monochlorobiphenyls, Total	0.0000070	J
104 A/B/C/D	Basement	104-C1	5/10/2012	Nonachlorobiphenyls, Total	0.13	
104 A/B/C/D	Basement	104-C1	5/10/2012	Octachlorobiphenyls, Total	1.7	
104 A/B/C/D	Basement	104-C1	5/10/2012	Pentachlorobiphenyls, Total	0.63	J
104 A/B/C/D	Basement	104-C1	5/10/2012	Tetrachlorobiphenyls, Total	0.015	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
104 A/B/C/D	Basement	104-C1	5/10/2012	Trichlorobiphenyls, Total	0.0028	J
104 A/B/C/D	Basement	104-C2	5/10/2012	**PCBs, Total**	0.24	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Dichlorobiphenyls, Total	0.00021	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Heptachlorobiphenyls, Total	0.11	
104 A/B/C/D	Basement	104-C2	5/10/2012	Hexachlorobiphenyls, Total	0.093	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Monochlorobiphenyls, Total	0.0000024	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Nonachlorobiphenyls, Total	0.0017	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Octachlorobiphenyls, Total	0.022	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Pentachlorobiphenyls, Total	0.010	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Tetrachlorobiphenyls, Total	0.00074	J
104 A/B/C/D	Basement	104-C2	5/10/2012	Trichlorobiphenyls, Total	0.00076	J
104 A/B/C/D	Basement	104-C3	5/10/2012	**PCBs, Total**	**6,575**	J
104 A/B/C/D	Basement	104-C3	5/10/2012	Decachlorobiphenyl	0.83	
104 A/B/C/D	Basement	104-C3	5/10/2012	Dichlorobiphenyls, Total	1.6	J
104 A/B/C/D	Basement	104-C3	5/10/2012	Heptachlorobiphenyls, Total	**2,492**	
104 A/B/C/D	Basement	104-C3	5/10/2012	Hexachlorobiphenyls, Total	**2,792**	
104 A/B/C/D	Basement	104-C3	5/10/2012	Monochlorobiphenyls, Total	0.88	
104 A/B/C/D	Basement	104-C3	5/10/2012	Nonachlorobiphenyls, Total	**22**	
104 A/B/C/D	Basement	104-C3	5/10/2012	Octachlorobiphenyls, Total	**424**	
104 A/B/C/D	Basement	104-C3	5/10/2012	Pentachlorobiphenyls, Total	**814**	J
104 A/B/C/D	Basement	104-C3	5/10/2012	Tetrachlorobiphenyls, Total	**25**	J
104 A/B/C/D	Basement	104-C3	5/10/2012	Trichlorobiphenyls, Total	1.8	J
104 A/B/C/D	Basement	104-C4	5/10/2012	**PCBs, Total**	2.4	J
104 A/B/C/D	Basement	104-C4	5/10/2012	Decachlorobiphenyl	0.00073	
104 A/B/C/D	Basement	104-C4	5/10/2012	Dichlorobiphenyls, Total	0.000069	J
104 A/B/C/D	Basement	104-C4	5/10/2012	Heptachlorobiphenyls, Total	0.97	
104 A/B/C/D	Basement	104-C4	5/10/2012	Hexachlorobiphenyls, Total	1.0	
104 A/B/C/D	Basement	104-C4	5/10/2012	Monochlorobiphenyls, Total	0.000069	J
104 A/B/C/D	Basement	104-C4	5/10/2012	Nonachlorobiphenyls, Total	0.012	
104 A/B/C/D	Basement	104-C4	5/10/2012	Octachlorobiphenyls, Total	0.20	
104 A/B/C/D	Basement	104-C4	5/10/2012	Pentachlorobiphenyls, Total	0.18	
104 A/B/C/D	Basement	104-C4	5/10/2012	Tetrachlorobiphenyls, Total	0.0041	J
104 A/B/C/D	Basement	104-C4	5/10/2012	Trichlorobiphenyls, Total	0.00042	J
104 A/B/C/D	Basement	104-C5	5/10/2012	**PCBs, Total**	1.5	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Decachlorobiphenyl	0.00060	

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
104 A/B/C/D	Basement	104-C5	5/10/2012	Dichlorobiphenyls, Total	0.00078	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Heptachlorobiphenyls, Total	0.20	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Hexachlorobiphenyls, Total	0.72	
104 A/B/C/D	Basement	104-C5	5/10/2012	Monochlorobiphenyls, Total	0.00020	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Nonachlorobiphenyls, Total	0.0041	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Octachlorobiphenyls, Total	0.036	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Pentachlorobiphenyls, Total	0.47	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Tetrachlorobiphenyls, Total	0.11	J
104 A/B/C/D	Basement	104-C5	5/10/2012	Trichlorobiphenyls, Total	0.0090	J
104 A/B/C/D	Basement	104-C6	5/10/2012	**PCBs, Total**	**1955**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Decachlorobiphenyl	1.0	
104 A/B/C/D	Basement	104-C6	5/10/2012	Dichlorobiphenyls, Total	0.28	J
104 A/B/C/D	Basement	104-C6	5/10/2012	Heptachlorobiphenyls, Total	**600**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Hexachlorobiphenyls, Total	**963**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Monochlorobiphenyls, Total	0.42	
104 A/B/C/D	Basement	104-C6	5/10/2012	Nonachlorobiphenyls, Total	**13**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Octachlorobiphenyls, Total	**153**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Pentachlorobiphenyls, Total	**218**	
104 A/B/C/D	Basement	104-C6	5/10/2012	Tetrachlorobiphenyls, Total	5.9	
104 A/B/C/D	Basement	104-C6	5/10/2012	Trichlorobiphenyls, Total	0.22	
104 E	Second	104E-C1	5/8/2012	**PCBs, Total**	0.16	J
104 E	Second	104E-C1	5/8/2012	Decachlorobiphenyl	0.00098	
104 E	Second	104E-C1	5/8/2012	Dichlorobiphenyls, Total	0.0024	J
104 E	Second	104E-C1	5/8/2012	Heptachlorobiphenyls, Total	0.028	J
104 E	Second	104E-C1	5/8/2012	Hexachlorobiphenyls, Total	0.051	J
104 E	Second	104E-C1	5/8/2012	Monochlorobiphenyls, Total	0.00011	J
104 E	Second	104E-C1	5/8/2012	Nonachlorobiphenyls, Total	0.0012	J
104 E	Second	104E-C1	5/8/2012	Octachlorobiphenyls, Total	0.0092	J
104 E	Second	104E-C1	5/8/2012	Pentachlorobiphenyls, Total	0.042	J
104 E	Second	104E-C1	5/8/2012	Tetrachlorobiphenyls, Total	0.014	J
104 E	Second	104E-C1	5/8/2012	Trichlorobiphenyls, Total	0.0089	J
104 F	Second	104F-C1	5/2/2012	**PCBs, Total**	0.075	J
104 F	Second	104F-C1	5/2/2012	Decachlorobiphenyl	0.0014	
104 F	Second	104F-C1	5/2/2012	Dichlorobiphenyls, Total	0.0011	
104 F	Second	104F-C1	5/2/2012	Heptachlorobiphenyls, Total	0.013	J
104 F	Second	104F-C1	5/2/2012	Hexachlorobiphenyls, Total	0.014	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
104 F	Second	104F-C1	5/2/2012	Monochlorobiphenyls, Total	0.00015	J
104 F	Second	104F-C1	5/2/2012	Nonachlorobiphenyls, Total	0.0011	J
104 F	Second	104F-C1	5/2/2012	Octachlorobiphenyls, Total	0.0029	J
104 F	Second	104F-C1	5/2/2012	Pentachlorobiphenyls, Total	0.019	J
104 F	Second	104F-C1	5/2/2012	Tetrachlorobiphenyls, Total	0.013	J
104 F	Second	104F-C1	5/2/2012	Trichlorobiphenyls, Total	0.0099	J
105 A/B/C/D	Basement	105-C3	5/6/2012	**PCBs, Total**	0.31	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Decachlorobiphenyl	0.00041	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Dichlorobiphenyls, Total	0.00012	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Heptachlorobiphenyls, Total	0.091	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Hexachlorobiphenyls, Total	0.17	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Monochlorobiphenyls, Total	0.000029	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Nonachlorobiphenyls, Total	0.00098	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Octachlorobiphenyls, Total	0.012	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Pentachlorobiphenyls, Total	0.033	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Tetrachlorobiphenyls, Total	0.0022	J
105 A/B/C/D	Basement	105-C3	5/6/2012	Trichlorobiphenyls, Total	0.00098	J
105 A/B/C/D	Basement	105-C4	5/6/2012	**PCBs, Total**	0.16	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Decachlorobiphenyl	0.00092	
105 A/B/C/D	Basement	105-C4	5/6/2012	Dichlorobiphenyls, Total	0.000084	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Heptachlorobiphenyls, Total	0.048	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Hexachlorobiphenyls, Total	0.088	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Monochlorobiphenyls, Total	0.0000050	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Nonachlorobiphenyls, Total	0.00083	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Octachlorobiphenyls, Total	0.0066	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Pentachlorobiphenyls, Total	0.019	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Tetrachlorobiphenyls, Total	0.00052	J
105 A/B/C/D	Basement	105-C4	5/6/2012	Trichlorobiphenyls, Total	0.00042	J
105 A/B/C/D	Basement	105-C5	5/6/2012	**PCBs, Total**	1.3	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Decachlorobiphenyl	0.0036	
105 A/B/C/D	Basement	105-C5	5/6/2012	Dichlorobiphenyls, Total	0.000019	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Heptachlorobiphenyls, Total	0.65	
105 A/B/C/D	Basement	105-C5	5/6/2012	Hexachlorobiphenyls, Total	0.35	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Monochlorobiphenyls, Total	0.000011	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Nonachlorobiphenyls, Total	0.023	
105 A/B/C/D	Basement	105-C5	5/6/2012	Octachlorobiphenyls, Total	0.27	

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
105 A/B/C/D	Basement	105-C5	5/6/2012	Pentachlorobiphenyls, Total	0.030	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Tetrachlorobiphenyls, Total	0.00034	J
105 A/B/C/D	Basement	105-C5	5/6/2012	Trichlorobiphenyls, Total	0.00016	J
105 A/B/C/D	Basement	105-C6	5/6/2012	**PCBs, Total**	0.15	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Decachlorobiphenyl	0.0019	
105 A/B/C/D	Basement	105-C6	5/6/2012	Dichlorobiphenyls, Total	0.000076	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Heptachlorobiphenyls, Total	0.045	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Hexachlorobiphenyls, Total	0.068	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Monochlorobiphenyls, Total	0.000017	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Nonachlorobiphenyls, Total	0.00074	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Octachlorobiphenyls, Total	0.0050	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Pentachlorobiphenyls, Total	0.025	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Tetrachlorobiphenyls, Total	0.0010	J
105 A/B/C/D	Basement	105-C6	5/6/2012	Trichlorobiphenyls, Total	0.00021	J
105 A/B/C/D	Basement	105-C7	5/6/2012	**PCBs, Total**	**107**	J
105 A/B/C/D	Basement	105-C7	5/6/2012	Decachlorobiphenyl	0.13	
105 A/B/C/D	Basement	105-C7	5/6/2012	Dichlorobiphenyls, Total	0.0056	
105 A/B/C/D	Basement	105-C7	5/6/2012	Heptachlorobiphenyls, Total	**40**	
105 A/B/C/D	Basement	105-C7	5/6/2012	Hexachlorobiphenyls, Total	**44**	
105 A/B/C/D	Basement	105-C7	5/6/2012	Monochlorobiphenyls, Total	0.0022	
105 A/B/C/D	Basement	105-C7	5/6/2012	Nonachlorobiphenyls, Total	0.95	
105 A/B/C/D	Basement	105-C7	5/6/2012	Octachlorobiphenyls, Total	**12**	
105 A/B/C/D	Basement	105-C7	5/6/2012	Pentachlorobiphenyls, Total	**10**	J
105 A/B/C/D	Basement	105-C7	5/6/2012	Tetrachlorobiphenyls, Total	0.33	J
105 A/B/C/D	Basement	105-C7	5/6/2012	Trichlorobiphenyls, Total	0.028	J
105 A/B/C/D	Basement	105-C8	5/9/2012	**PCBs, Total**	7.5	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Decachlorobiphenyl	0.00061	
105 A/B/C/D	Basement	105-C8	5/9/2012	Heptachlorobiphenyls, Total	3.4	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Hexachlorobiphenyls, Total	2.9	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Monochlorobiphenyls, Total	0.000021	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Nonachlorobiphenyls, Total	0.052	
105 A/B/C/D	Basement	105-C8	5/9/2012	Octachlorobiphenyls, Total	0.83	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Pentachlorobiphenyls, Total	0.31	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Tetrachlorobiphenyls, Total	0.0063	J
105 A/B/C/D	Basement	105-C8	5/9/2012	Trichlorobiphenyls, Total	0.00029	J

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Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
105 A/B/C/D	First	105-C1	5/6/2012	**PCBs, Total**	0.15	J
105 A/B/C/D	First	105-C1	5/6/2012	Decachlorobiphenyl	0.00078	
105 A/B/C/D	First	105-C1	5/6/2012	Dichlorobiphenyls, Total	0.00032	J
105 A/B/C/D	First	105-C1	5/6/2012	Heptachlorobiphenyls, Total	0.060	
105 A/B/C/D	First	105-C1	5/6/2012	Hexachlorobiphenyls, Total	0.054	J
105 A/B/C/D	First	105-C1	5/6/2012	Monochlorobiphenyls, Total	0.000017	J
105 A/B/C/D	First	105-C1	5/6/2012	Nonachlorobiphenyls, Total	0.0014	J
105 A/B/C/D	First	105-C1	5/6/2012	Octachlorobiphenyls, Total	0.014	J
105 A/B/C/D	First	105-C1	5/6/2012	Pentachlorobiphenyls, Total	0.018	
105 A/B/C/D	First	105-C1	5/6/2012	Tetrachlorobiphenyls, Total	0.0030	J
105 A/B/C/D	First	105-C1	5/6/2012	Trichlorobiphenyls, Total	0.0024	J
105 A/B/C/D	First	105-C2	5/6/2012	**PCBs, Total**	0.10	J
105 A/B/C/D	First	105-C2	5/6/2012	Decachlorobiphenyl	0.0029	
105 A/B/C/D	First	105-C2	5/6/2012	Dichlorobiphenyls, Total	0.00018	J
105 A/B/C/D	First	105-C2	5/6/2012	Heptachlorobiphenyls, Total	0.019	J
105 A/B/C/D	First	105-C2	5/6/2012	Hexachlorobiphenyls, Total	0.034	J
105 A/B/C/D	First	105-C2	5/6/2012	Nonachlorobiphenyls, Total	0.0028	J
105 A/B/C/D	First	105-C2	5/6/2012	Octachlorobiphenyls, Total	0.0067	J
105 A/B/C/D	First	105-C2	5/6/2012	Pentachlorobiphenyls, Total	0.026	J
105 A/B/C/D	First	105-C2	5/6/2012	Tetrachlorobiphenyls, Total	0.0070	J
105 A/B/C/D	First	105-C2	5/6/2012	Trichlorobiphenyls, Total	0.0013	J
105 E	First	105E-C1	5/2/2012	**PCBs, Total**	0.18	J
105 E	First	105E-C1	5/2/2012	Decachlorobiphenyl	0.00052	
105 E	First	105E-C1	5/2/2012	Dichlorobiphenyls, Total	0.00060	J
105 E	First	105E-C1	5/2/2012	Heptachlorobiphenyls, Total	0.039	J
105 E	First	105E-C1	5/2/2012	Hexachlorobiphenyls, Total	0.068	J
105 E	First	105E-C1	5/2/2012	Monochlorobiphenyls, Total	0.000056	J
105 E	First	105E-C1	5/2/2012	Nonachlorobiphenyls, Total	0.0042	J
105 E	First	105E-C1	5/2/2012	Octachlorobiphenyls, Total	0.018	J
105 E	First	105E-C1	5/2/2012	Pentachlorobiphenyls, Total	0.037	J
105 E	First	105E-C1	5/2/2012	Tetrachlorobiphenyls, Total	0.0095	J
105 E	First	105E-C1	5/2/2012	Trichlorobiphenyls, Total	0.0029	J
105 E	Second	105E-C2	5/3/2012	**PCBs, Total**	0.040	J
105 E	Second	105E-C2	5/3/2012	Dichlorobiphenyls, Total	0.00045	J
105 E	Second	105E-C2	5/3/2012	Heptachlorobiphenyls, Total	0.011	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
105 E	Second	105E-C2	5/3/2012	Hexachlorobiphenyls, Total	0.012	J
105 E	Second	105E-C2	5/3/2012	Monochlorobiphenyls, Total	0.000065	J
105 E	Second	105E-C2	5/3/2012	Nonachlorobiphenyls, Total	0.00056	J
105 E	Second	105E-C2	5/3/2012	Octachlorobiphenyls, Total	0.0028	J
105 E	Second	105E-C2	5/3/2012	Pentachlorobiphenyls, Total	0.010	J
105 E	Second	105E-C2	5/3/2012	Tetrachlorobiphenyls, Total	0.0024	J
105 E	Second	105E-C2	5/3/2012	Trichlorobiphenyls, Total	0.0010	J
105 F	Second	105F-C1	5/9/2012	**PCBs, Total**	0.12	J
105 F	Second	105F-C1	5/9/2012	Decachlorobiphenyl	0.000056	J
105 F	Second	105F-C1	5/9/2012	Dichlorobiphenyls, Total	0.00050	J
105 F	Second	105F-C1	5/9/2012	Heptachlorobiphenyls, Total	0.036	J
105 F	Second	105F-C1	5/9/2012	Hexachlorobiphenyls, Total	0.053	J
105 F	Second	105F-C1	5/9/2012	Monochlorobiphenyls, Total	0.000017	J
105 F	Second	105F-C1	5/9/2012	Nonachlorobiphenyls, Total	0.00054	J
105 F	Second	105F-C1	5/9/2012	Octachlorobiphenyls, Total	0.0081	J
105 F	Second	105F-C1	5/9/2012	Pentachlorobiphenyls, Total	0.019	J
105 F	Second	105F-C1	5/9/2012	Tetrachlorobiphenyls, Total	0.0039	J
105 F	Second	105F-C1	5/9/2012	Trichlorobiphenyls, Total	0.0023	J
105 L	First	105L-C1	5/9/2012	**PCBs, Total**	5.9	J
105 L	First	105L-C1	5/9/2012	Decachlorobiphenyl	0.0019	
105 L	First	105L-C1	5/9/2012	Dichlorobiphenyls, Total	0.00088	J
105 L	First	105L-C1	5/9/2012	Heptachlorobiphenyls, Total	2.2	
105 L	First	105L-C1	5/9/2012	Hexachlorobiphenyls, Total	2.8	
105 L	First	105L-C1	5/9/2012	Monochlorobiphenyls, Total	0.00036	
105 L	First	105L-C1	5/9/2012	Nonachlorobiphenyls, Total	0.021	
105 L	First	105L-C1	5/9/2012	Octachlorobiphenyls, Total	0.38	
105 L	First	105L-C1	5/9/2012	Pentachlorobiphenyls, Total	0.37	J
105 L	First	105L-C1	5/9/2012	Tetrachlorobiphenyls, Total	0.0082	J
105 L	First	105L-C1	5/9/2012	Trichlorobiphenyls, Total	0.0038	J
105 L	First	105L-C2	5/9/2012	**PCBs, Total**	0.0041	J
105 L	First	105L-C2	5/9/2012	Heptachlorobiphenyls, Total	0.00086	J
105 L	First	105L-C2	5/9/2012	Hexachlorobiphenyls, Total	0.0029	J
105 L	First	105L-C2	5/9/2012	Nonachlorobiphenyls, Total	0.000038	J
105 L	First	105L-C2	5/9/2012	Octachlorobiphenyls, Total	0.000075	J
105 L	First	105L-C2	5/9/2012	Pentachlorobiphenyls, Total	0.00022	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
105 L	First	105L-C2	5/9/2012	Tetrachlorobiphenyls, Total	0.000075	J
107	Basement	107-C1	5/10/2012	**PCBs, Total**	**3,429**	J
107	Basement	107-C1	5/10/2012	Decachlorobiphenyl	0.26	J
107	Basement	107-C1	5/10/2012	Dichlorobiphenyls, Total	0.68	J
107	Basement	107-C1	5/10/2012	Heptachlorobiphenyls, Total	**1,024**	
107	Basement	107-C1	5/10/2012	Hexachlorobiphenyls, Total	**1,772**	
107	Basement	107-C1	5/10/2012	Monochlorobiphenyls, Total	0.32	J
107	Basement	107-C1	5/10/2012	Nonachlorobiphenyls, Total	8.2	J
107	Basement	107-C1	5/10/2012	Octachlorobiphenyls, Total	**150**	
107	Basement	107-C1	5/10/2012	Pentachlorobiphenyls, Total	**462**	J
107	Basement	107-C1	5/10/2012	Tetrachlorobiphenyls, Total	**11**	J
107	Basement	107-C1	5/10/2012	Trichlorobiphenyls, Total	1.1	J
107	Basement	107-C2	5/10/2012	**PCBs, Total**	1.1	J
107	Basement	107-C2	5/10/2012	Decachlorobiphenyl	0.0015	
107	Basement	107-C2	5/10/2012	Dichlorobiphenyls, Total	0.00044	J
107	Basement	107-C2	5/10/2012	Heptachlorobiphenyls, Total	0.34	
107	Basement	107-C2	5/10/2012	Hexachlorobiphenyls, Total	0.47	J
107	Basement	107-C2	5/10/2012	Monochlorobiphenyls, Total	0.00011	J
107	Basement	107-C2	5/10/2012	Nonachlorobiphenyls, Total	0.0081	J
107	Basement	107-C2	5/10/2012	Octachlorobiphenyls, Total	0.096	J
107	Basement	107-C2	5/10/2012	Pentachlorobiphenyls, Total	0.12	J
107	Basement	107-C2	5/10/2012	Tetrachlorobiphenyls, Total	0.021	J
107	Basement	107-C2	5/10/2012	Trichlorobiphenyls, Total	0.0071	J
108 A	First	108A-C1	5/5/2012	**PCBs, Total**	1.1	J
108 A	First	108A-C1	5/5/2012	Decachlorobiphenyl	0.0011	
108 A	First	108A-C1	5/5/2012	Heptachlorobiphenyls, Total	0.35	
108 A	First	108A-C1	5/5/2012	Hexachlorobiphenyls, Total	0.53	
108 A	First	108A-C1	5/5/2012	Monochlorobiphenyls, Total	0.00049	J
108 A	First	108A-C1	5/5/2012	Nonachlorobiphenyls, Total	0.0093	J
108 A	First	108A-C1	5/5/2012	Octachlorobiphenyls, Total	0.10	J
108 A	First	108A-C1	5/5/2012	Pentachlorobiphenyls, Total	0.11	J
108 A	First	108A-C1	5/5/2012	Tetrachlorobiphenyls, Total	0.0039	J
108 A	First	108A-C1	5/5/2012	Trichlorobiphenyls, Total	0.00031	J
108 A	First	108A-C2	5/5/2012	**PCBs, Total**	0.15	J
108 A	First	108A-C2	5/5/2012	Decachlorobiphenyl	0.00063	

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
108 A	First	108A-C2	5/5/2012	Heptachlorobiphenyls, Total	0.056	
108 A	First	108A-C2	5/5/2012	Hexachlorobiphenyls, Total	0.061	J
108 A	First	108A-C2	5/5/2012	Monochlorobiphenyls, Total	0.0000094	J
108 A	First	108A-C2	5/5/2012	Nonachlorobiphenyls, Total	0.0028	J
108 A	First	108A-C2	5/5/2012	Octachlorobiphenyls, Total	0.019	J
108 A	First	108A-C2	5/5/2012	Pentachlorobiphenyls, Total	0.013	J
108 A	First	108A-C2	5/5/2012	Tetrachlorobiphenyls, Total	0.0012	J
108 A	First	108A-C2	5/5/2012	Trichlorobiphenyls, Total	0.00011	J
108 A	First	108A-C3	5/5/2012	**PCBs, Total**	0.13	J
108 A	First	108A-C3	5/5/2012	Decachlorobiphenyl	0.0011	
108 A	First	108A-C3	5/5/2012	Heptachlorobiphenyls, Total	0.042	
108 A	First	108A-C3	5/5/2012	Hexachlorobiphenyls, Total	0.054	
108 A	First	108A-C3	5/5/2012	Nonachlorobiphenyls, Total	0.0021	J
108 A	First	108A-C3	5/5/2012	Octachlorobiphenyls, Total	0.013	
108 A	First	108A-C3	5/5/2012	Pentachlorobiphenyls, Total	0.013	J
108 A	First	108A-C3	5/5/2012	Tetrachlorobiphenyls, Total	0.0016	J
108 A	First	108A-C3	5/5/2012	Trichlorobiphenyls, Total	0.00020	J
108 A	First	108A-C4	5/5/2012	**PCBs, Total**	0.019	J
108 A	First	108A-C4	5/5/2012	Heptachlorobiphenyls, Total	0.0070	
108 A	First	108A-C4	5/5/2012	Hexachlorobiphenyls, Total	0.010	
108 A	First	108A-C4	5/5/2012	Nonachlorobiphenyls, Total	0.00011	J
108 A	First	108A-C4	5/5/2012	Octachlorobiphenyls, Total	0.00086	
108 A	First	108A-C4	5/5/2012	Pentachlorobiphenyls, Total	0.000063	J
108 A	First	108A-C4	5/5/2012	Tetrachlorobiphenyls, Total	0.00011	J
108 A	First	108A-C4	5/5/2012	Trichlorobiphenyls, Total	0.000032	J
108 B	First	108B-C1	5/5/2012	**PCBs, Total**	0.50	J
108 B	First	108B-C1	5/5/2012	Decachlorobiphenyl	0.00081	
108 B	First	108B-C1	5/5/2012	Heptachlorobiphenyls, Total	0.21	
108 B	First	108B-C1	5/5/2012	Hexachlorobiphenyls, Total	0.20	J
108 B	First	108B-C1	5/5/2012	Monochlorobiphenyls, Total	0.0000074	J
108 B	First	108B-C1	5/5/2012	Nonachlorobiphenyls, Total	0.0029	J
108 B	First	108B-C1	5/5/2012	Octachlorobiphenyls, Total	0.046	J
108 B	First	108B-C1	5/5/2012	Pentachlorobiphenyls, Total	0.039	J
108 B	First	108B-C1	5/5/2012	Tetrachlorobiphenyls, Total	0.0028	J
108 B	First	108B-C1	5/5/2012	Trichlorobiphenyls, Total	0.00033	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
108 B	First	108B-C2	5/5/2012	**PCBs, Total**	0.71	J
108 B	First	108B-C2	5/5/2012	Decachlorobiphenyl	0.00065	
108 B	First	108B-C2	5/5/2012	Heptachlorobiphenyls, Total	0.33	J
108 B	First	108B-C2	5/5/2012	Hexachlorobiphenyls, Total	0.24	J
108 B	First	108B-C2	5/5/2012	Nonachlorobiphenyls, Total	0.0045	J
108 B	First	108B-C2	5/5/2012	Octachlorobiphenyls, Total	0.077	J
108 B	First	108B-C2	5/5/2012	Pentachlorobiphenyls, Total	0.050	J
108 B	First	108B-C2	5/5/2012	Tetrachlorobiphenyls, Total	0.0040	J
108 B	First	108B-C2	5/5/2012	Trichlorobiphenyls, Total	0.00074	J
108 B	First	108B-C3	5/5/2012	**PCBs, Total**	0.43	J
108 B	First	108B-C3	5/5/2012	Decachlorobiphenyl	0.00068	
108 B	First	108B-C3	5/5/2012	Heptachlorobiphenyls, Total	0.19	J
108 B	First	108B-C3	5/5/2012	Hexachlorobiphenyls, Total	0.16	J
108 B	First	108B-C3	5/5/2012	Nonachlorobiphenyls, Total	0.0047	J
108 B	First	108B-C3	5/5/2012	Octachlorobiphenyls, Total	0.051	J
108 B	First	108B-C3	5/5/2012	Pentachlorobiphenyls, Total	0.023	J
108 B	First	108B-C3	5/5/2012	Tetrachlorobiphenyls, Total	0.0011	J
108 B	First	108B-C3	5/5/2012	Trichlorobiphenyls, Total	0.00013	J
110	Basement	110-C1	5/7/2012	**PCBs, Total**	4.4	J
110	Basement	110-C1	5/7/2012	Decachlorobiphenyl	0.0029	
110	Basement	110-C1	5/7/2012	Heptachlorobiphenyls, Total	2.0	J
110	Basement	110-C1	5/7/2012	Hexachlorobiphenyls, Total	1.4	
110	Basement	110-C1	5/7/2012	Monochlorobiphenyls, Total	0.000045	J
110	Basement	110-C1	5/7/2012	Nonachlorobiphenyls, Total	0.042	
110	Basement	110-C1	5/7/2012	Octachlorobiphenyls, Total	0.61	
110	Basement	110-C1	5/7/2012	Pentachlorobiphenyls, Total	0.34	J
110	Basement	110-C1	5/7/2012	Tetrachlorobiphenyls, Total	0.030	J
110	Basement	110-C1	5/7/2012	Trichlorobiphenyls, Total	0.00063	J
110	Basement	110-C2	5/7/2012	**PCBs, Total**	**15**	J
110	Basement	110-C2	5/7/2012	Decachlorobiphenyl	0.015	
110	Basement	110-C2	5/7/2012	Dichlorobiphenyls, Total	0.00016	J
110	Basement	110-C2	5/7/2012	Heptachlorobiphenyls, Total	6.1	
110	Basement	110-C2	5/7/2012	Hexachlorobiphenyls, Total	5.5	
110	Basement	110-C2	5/7/2012	Monochlorobiphenyls, Total	0.00012	J
110	Basement	110-C2	5/7/2012	Nonachlorobiphenyls, Total	0.12	

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
110	Basement	110-C2	5/7/2012	Octachlorobiphenyls, Total	1.6	
110	Basement	110-C2	5/7/2012	Pentachlorobiphenyls, Total	1.9	J
110	Basement	110-C2	5/7/2012	Tetrachlorobiphenyls, Total	0.12	J
110	Basement	110-C2	5/7/2012	Trichlorobiphenyls, Total	0.0015	J
110	Basement	110-C3	5/7/2012	**PCBs, Total**	**15**	J
110	Basement	110-C3	5/7/2012	Decachlorobiphenyl	0.011	
110	Basement	110-C3	5/7/2012	Dichlorobiphenyls, Total	0.0011	J
110	Basement	110-C3	5/7/2012	Heptachlorobiphenyls, Total	6.1	
110	Basement	110-C3	5/7/2012	Hexachlorobiphenyls, Total	5.4	J
110	Basement	110-C3	5/7/2012	Monochlorobiphenyls, Total	0.00068	
110	Basement	110-C3	5/7/2012	Nonachlorobiphenyls, Total	0.12	
110	Basement	110-C3	5/7/2012	Octachlorobiphenyls, Total	2.0	
110	Basement	110-C3	5/7/2012	Pentachlorobiphenyls, Total	0.90	J
110	Basement	110-C3	5/7/2012	Tetrachlorobiphenyls, Total	0.018	J
110	Basement	110-C3	5/7/2012	Trichlorobiphenyls, Total	0.0013	J
110	Basement	110-C4	5/7/2012	**PCBs, Total**	0.66	J
110	Basement	110-C4	5/7/2012	Decachlorobiphenyl	0.0018	
110	Basement	110-C4	5/7/2012	Dichlorobiphenyls, Total	0.00021	J
110	Basement	110-C4	5/7/2012	Heptachlorobiphenyls, Total	0.090	J
110	Basement	110-C4	5/7/2012	Hexachlorobiphenyls, Total	0.24	J
110	Basement	110-C4	5/7/2012	Monochlorobiphenyls, Total	0.000045	J
110	Basement	110-C4	5/7/2012	Nonachlorobiphenyls, Total	0.0045	J
110	Basement	110-C4	5/7/2012	Octachlorobiphenyls, Total	0.028	
110	Basement	110-C4	5/7/2012	Pentachlorobiphenyls, Total	0.26	J
110	Basement	110-C4	5/7/2012	Tetrachlorobiphenyls, Total	0.037	J
110	Basement	110-C4	5/7/2012	Trichlorobiphenyls, Total	0.0040	J
115	First	115-C1	5/8/2012	**PCBs, Total**	0.011	J
115	First	115-C1	5/8/2012	Dichlorobiphenyls, Total	0.00012	J
115	First	115-C1	5/8/2012	Heptachlorobiphenyls, Total	0.00057	J
115	First	115-C1	5/8/2012	Hexachlorobiphenyls, Total	0.0057	J
115	First	115-C1	5/8/2012	Monochlorobiphenyls, Total	0.000016	J
115	First	115-C1	5/8/2012	Nonachlorobiphenyls, Total	0.000025	J
115	First	115-C1	5/8/2012	Octachlorobiphenyls, Total	0.000100	J
115	First	115-C1	5/8/2012	Pentachlorobiphenyls, Total	0.0034	J
115	First	115-C1	5/8/2012	Tetrachlorobiphenyls, Total	0.00092	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
115	First	115-C1	5/8/2012	Trichlorobiphenyls, Total	0.00057	J
122 B	Basement	122B-C1	5/8/2012	**PCBs, Total**	0.035	J
122 B	Basement	122B-C1	5/8/2012	Decachlorobiphenyl	0.00013	J
122 B	Basement	122B-C1	5/8/2012	Heptachlorobiphenyls, Total	0.0085	J
122 B	Basement	122B-C1	5/8/2012	Hexachlorobiphenyls, Total	0.017	J
122 B	Basement	122B-C1	5/8/2012	Monochlorobiphenyls, Total	0.000019	J
122 B	Basement	122B-C1	5/8/2012	Nonachlorobiphenyls, Total	0.00019	J
122 B	Basement	122B-C1	5/8/2012	Octachlorobiphenyls, Total	0.0015	J
122 B	Basement	122B-C1	5/8/2012	Pentachlorobiphenyls, Total	0.0068	J
122 B	Basement	122B-C1	5/8/2012	Tetrachlorobiphenyls, Total	0.00076	J
122 B	Basement	122B-C1	5/8/2012	Trichlorobiphenyls, Total	0.00040	J
208 B	First	208B-C1	5/8/2012	**PCBs, Total**	0.14	J
208 B	First	208B-C1	5/8/2012	Heptachlorobiphenyls, Total	0.038	J
208 B	First	208B-C1	5/8/2012	Hexachlorobiphenyls, Total	0.070	J
208 B	First	208B-C1	5/8/2012	Monochlorobiphenyls, Total	0.000024	J
208 B	First	208B-C1	5/8/2012	Nonachlorobiphenyls, Total	0.00081	J
208 B	First	208B-C1	5/8/2012	Octachlorobiphenyls, Total	0.0099	J
208 B	First	208B-C1	5/8/2012	Pentachlorobiphenyls, Total	0.019	J
208 B	First	208B-C1	5/8/2012	Tetrachlorobiphenyls, Total	0.0024	J
208 B	First	208B-C1	5/8/2012	Trichlorobiphenyls, Total	0.0024	J
208 B	First	208B-C2	5/8/2012	**PCBs, Total**	0.21	J
208 B	First	208B-C2	5/8/2012	Decachlorobiphenyl	0.00010	J
208 B	First	208B-C2	5/8/2012	Dichlorobiphenyls, Total	0.0026	
208 B	First	208B-C2	5/8/2012	Heptachlorobiphenyls, Total	0.077	J
208 B	First	208B-C2	5/8/2012	Hexachlorobiphenyls, Total	0.082	J
208 B	First	208B-C2	5/8/2012	Nonachlorobiphenyls, Total	0.0016	J
208 B	First	208B-C2	5/8/2012	Octachlorobiphenyls, Total	0.017	J
208 B	First	208B-C2	5/8/2012	Pentachlorobiphenyls, Total	0.025	J
208 B	First	208B-C2	5/8/2012	Tetrachlorobiphenyls, Total	0.0030	J
208 B	First	208B-C2	5/8/2012	Trichlorobiphenyls, Total	0.00052	J
208 B	First	208B-C3	5/8/2012	**PCBs, Total**	0.012	J
208 B	First	208B-C3	5/8/2012	Heptachlorobiphenyls, Total	0.00066	J
208 B	First	208B-C3	5/8/2012	Hexachlorobiphenyls, Total	0.0059	J
208 B	First	208B-C3	5/8/2012	Monochlorobiphenyls, Total	0.000020	J
208 B	First	208B-C3	5/8/2012	Nonachlorobiphenyls, Total	0.000019	J

TABLE 9
INTERIOR CONCRETE DESTRUCTIVE CORE SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result [a,b] (mg/kg)	Flag
208 B	First	208B-C3	5/8/2012	Octachlorobiphenyls, Total	0.000071	J
208 B	First	208B-C3	5/8/2012	Pentachlorobiphenyls, Total	0.0019	J
208 B	First	208B-C3	5/8/2012	Tetrachlorobiphenyls, Total	0.0016	J
208 B	First	208B-C3	5/8/2012	Trichlorobiphenyls, Total	0.0019	J

Notes:

[a] For field duplicate samples, the higher result is shown.

[b] "Total" results were recalculated to exclude congeners flagged "K" or "B" in accordance with the recommendations of associated Level II Data Validation Reports.

J Estimated at the concentration shown
MDNR Missouri Department of Natural Resources
mg/kg Milligrams per kilogram
PCB Polychlorinated biphenyl

Shaded Exceeds MDNR Risk-Based Corrective Action Cleanup Level for PCBs in concrete (10 parts per million [ppm], destructive core)

TABLE 10
INTERIOR SURFACE DUST SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result (mg/kg)	Flag	EPA RSL Res Soil (mg/kg)	EPA RSL Ind Soil (mg/kg)	MRBCA RBTL[a] Res Soil (mg/kg)	MRBCA RBTL[a] Non-Res (mg/kg)
102 E	First	102E-ID3	5/4/2012	Lead	55	J	400	800	260	660
102 E	First	102E-ID4	5/4/2012	Lead	47	J	400	800	260	660
102 E	First	102E-ID5	5/4/2012	Lead	**290**	J	400	800	260	660
102 E	Second	102E-ID1	5/4/2012	Lead	160	J	400	800	260	660
102 E	Second	102E-ID2	5/4/2012	Lead	37	J	400	800	260	660
103 A/B/C	First	103-ID1	5/7/2012	Lead	**470**		400	800	260	660
103 A/B/C	First	103-ID1	5/7/2012	Mercury	**5.7**		10	43	2.19	17.6
103 A/B/C	First	103-ID2	5/7/2012	Lead	**810**		400	800	260	660
103 A/B/C	First	103-ID2	5/7/2012	Mercury	**8.6**		10	43	2.19	17.6
103 A/B/C	First	103-ID3	5/7/2012	Lead	170		400	800	260	660
103 A/B/C	First	103-ID3	5/7/2012	Mercury	0.49		10	43	2.19	17.6
103 A/B/C	First	103-ID4	5/7/2012	Lead	30		400	800	260	660
103 A/B/C	First	103-ID4	5/7/2012	Mercury	0.83		10	43	2.19	17.6
103 A/B/C	First	103-ID9	5/8/2012	Lead	170		400	800	260	660
103 A/B/C	Second	103-ID10	5/8/2012	Lead	56		400	800	260	660
103 A/B/C	Second	103-ID5	5/7/2012	Lead	170		400	800	260	660
103 A/B/C	Second	103-ID5	5/7/2012	Mercury	0.30		10	43	2.19	17.6
103 A/B/C	Second	103-ID6	5/7/2012	Lead	**450**		400	800	260	660
103 A/B/C	Second	103-ID6	5/7/2012	Mercury	0.94		10	43	2.19	17.6
103 A/B/C	Second	103-ID7	5/7/2012	Lead	**430**		400	800	260	660
103 A/B/C	Second	103-ID7	5/7/2012	Mercury	0.85		10	43	2.19	17.6
103 A/B/C	Second	103-ID8	5/7/2012	Lead	43		400	800	260	660
103 A/B/C	Second	103-ID8	5/7/2012	Mercury	1.0		10	43	2.19	17.6
103 D	First	103D-ID3	5/8/2012	Lead	**340**		400	800	260	660
103 D	First	103D-ID4	5/7/2012	Lead	72		400	800	260	660
103 D	Second	103D-ID1	5/4/2012	Lead	**320**	J	400	800	260	660
103 D	Second	103D-ID2	5/4/2012	Lead	**810**	J	400	800	260	660
103 E	Basement	103E-ID5	5/7/2012	Lead	**670**		400	800	260	660
103 E	First	103E-ID1	5/7/2012	Lead	91		400	800	260	660
103 E	First	103E-ID2	5/7/2012	Lead	130		400	800	260	660
103 E	Second	103E-ID3	5/7/2012	Lead	140		400	800	260	660
103 E	Second	103E-ID4	5/7/2012	Lead	45		400	800	260	660
103 F (112)	First	103F-ID1	5/10/2012	Lead	26		400	800	260	660
103 F (112)	First	103F-ID2	5/10/2012	Lead	140		400	800	260	660
104 A/B/C/D	First	104-ID1	5/8/2012	Lead	42		400	800	260	660

TABLE 10
INTERIOR SURFACE DUST SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result (mg/kg)	Flag	EPA RSL Res Soil (mg/kg)	EPA RSL Ind Soil (mg/kg)	MRBCA RBTL[a] Res Soil (mg/kg)	MRBCA RBTL[a] Non-Res (mg/kg)
104 A/B/C/D	First	104-ID2	5/8/2012	Lead	130		400	800	260	660
104 A/B/C/D	First	104-ID3	5/8/2012	Lead	100		400	800	260	660
104 A/B/C/D	First	104-ID4	5/8/2012	Lead	45		400	800	260	660
104 A/B/C/D	First	104-ID5	5/8/2012	Lead	35		400	800	260	660
104 A/B/C/D	First	104-ID6	5/8/2012	Lead	21		400	800	260	660
104 A/B/C/D	Second	104-ID10	5/9/2012	Lead	51		400	800	260	660
104 A/B/C/D	Second	104-ID11	5/9/2012	Lead	**1,100**		400	800	260	660
104 A/B/C/D	Second	104-ID12	5/10/2012	Lead	**2,500**		400	800	260	660
104 A/B/C/D	Second	104-ID7	5/8/2012	Lead	93		400	800	260	660
104 A/B/C/D	Second	104-ID8	5/8/2012	Lead	27		400	800	260	660
104 A/B/C/D	Second	104-ID9	5/9/2012	Lead	50		400	800	260	660
104 E	First	104E-ID1	5/8/2012	Lead	97		400	800	260	660
104 E	First	104E-ID2	5/8/2012	Lead	73		400	800	260	660
104 E	Second	104E-ID3	5/8/2012	Lead	190		400	800	260	660
104 E	Second	104E-ID4	5/8/2012	Lead	**280**		400	800	260	660
104 F	First	104F-ID3	5/4/2012	Lead	69	J	400	800	260	660
104 F	First	104F-ID4	5/4/2012	Lead	94	J	400	800	260	660
104 F	Second	104F-ID1	5/4/2012	Lead	81	J	400	800	260	660
104 F	Second	104F-ID2	5/4/2012	Lead	73	J	400	800	260	660
105 A/B/C/D	First	105-ID10	5/7/2012	Lead	37		400	800	260	660
105 A/B/C/D	First	105-ID11	5/7/2012	Lead	43		400	800	260	660
105 A/B/C/D	First	105-ID6	5/7/2012	Lead	210		400	800	260	660
105 A/B/C/D	First	105-ID7	5/7/2012	Lead	67		400	800	260	660
105 A/B/C/D	First	105-ID8	5/7/2012	Lead	38		400	800	260	660
105 A/B/C/D	First	105-ID9	5/7/2012	Lead	22		400	800	260	660
105 A/B/C/D	Second	105-ID1	5/7/2012	Lead	27		400	800	260	660
105 A/B/C/D	Second	105-ID2	5/7/2012	Lead	32	J	400	800	260	660
105 A/B/C/D	Second	105-ID3	5/7/2012	Lead	45		400	800	260	660
105 A/B/C/D	Second	105-ID4	5/7/2012	Lead	12		400	800	260	660
105 A/B/C/D	Second	105-ID5	5/7/2012	Lead	51		400	800	260	660
105 E	First	105E-ID1	5/4/2012	Lead	**330**	J	400	800	260	660
105 E	First	105E-ID2	5/4/2012	Lead	57	J	400	800	260	660
105 E	Second	105E-ID3	5/4/2012	Lead	**350**	J	400	800	260	660
105 E	Second	105E-ID4	5/4/2012	Lead	**1,300**	J	400	800	260	660
105 F	Basement	105F-ID5	5/9/2012	Lead	**1,200**		400	800	260	660

TABLE 10
INTERIOR SURFACE DUST SAMPLE DETECTIONS

Building	Floor	Sample Identifier	Sample Date	Analyte	Result (mg/kg)	Flag	EPA RSL Res Soil (mg/kg)	EPA RSL Ind Soil (mg/kg)	MRBCA RBTL[a] Res Soil (mg/kg)	MRBCA RBTL[a] Non-Res (mg/kg)
105 F	First	105F-ID3	5/9/2012	Lead	55		400	800	260	660
105 F	First	105F-ID4	5/9/2012	Lead	62		400	800	260	660
105 F	Second	105F-ID1	5/9/2012	Lead	**440**		400	800	260	660
105 F	Second	105F-ID2	5/9/2012	Lead	**640**		400	800	260	660
110	Basement	110-ID6	5/7/2012	Lead	180		400	800	260	660
110	Basement	110-ID7	5/7/2012	Lead	**830**		400	800	260	660
110	Basement	110-ID8	5/7/2012	Lead	**770**		400	800	260	660
110	First	110-ID3	5/7/2012	Lead	**460**		400	800	260	660
110	First	110-ID4	5/7/2012	Lead	54		400	800	260	660
110	First	110-ID5	5/7/2012	Lead	180		400	800	260	660
110	Second	110-ID2	5/7/2012	Lead	64		400	800	260	660
115	Basement	115-ID3	5/8/2012	Lead	**660**		400	800	260	660
115	First	115-ID1	5/8/2012	Lead	49		400	800	260	660
115	First	115-ID2	5/8/2012	Lead	120		400	800	260	660

Notes:

[a] The MRBCA LDTL for lead in soil is based on protection of domestic groundwater use pathway, which is not applicable to interior surface dust sources. The most conservative MRBCA RBTL for soil was selected instead. The MRBCA RBTL for mercury in residential soil is equivalent to the MRBCA LDTL for mercury in soil.

EPA	U.S. Environmental Protection Agency
Ind	Industrial
J	Estimated at the concentration shown
LDTL	MRBCA Lowest Default Target Level
MDNR	Missouri Department of Natural Resources
mg/kg	Milligrams per kilogram
MRBCA	MDNR Risk-based Corrective Action
Non-Res	Non-residential
RBTL	MRBCA Tier 1 Risk-Based Target Level, Soil Type 1 (Sandy), Indoor Inhalation of Vapor Emissions
Res	Residential
RSL	EPA Regional Screening Level

Shaded	Result exceeds EPA RSL for industrial soil or MDNR RBTL for non-residential soil
Bold	Result exceeds EPA RSL or MDNR RBTL for residential soil

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
102 E	102E-IS1	5/2/2012	Metals	Lead	242	mg/kg	J	400	800	260	660	NE	36.0
102 E	102E-IS1	5/2/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
102 E	102E-IS1	5/2/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
102 E	102E-IS2	5/2/2012	Metals	Lead	33.2	mg/kg	J	400	800	260	660	NE	36.0
102 E	102E-IS2	5/2/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
102 E	102E-IS2	5/2/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
102 E	102E-IS2	5/2/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS1	5/10/2012	Mercury	Mercury	0.373	mg/kg		10	43	2.19	17.6	21.6	0.06
103 A/B/C	103-IS1	5/10/2012	Metals	Lead	24.3	mg/kg		400	800	260	660	NE	36.0
103 A/B/C	103-IS1	5/10/2012	SVOC	Acenaphthene	0.0057	mg/kg	J	3,400	33,000	3,130	30,700	25,700	0.13
103 A/B/C	103-IS1	5/10/2012	SVOC	Acenaphthylene	0.0037	mg/kg	J	NE	NE	4,180	53,800	35,000	0.07
103 A/B/C	103-IS1	5/10/2012	SVOC	Anthracene	0.024	mg/kg		17,000	170,000	15,700	154,000	135,000	0.40
103 A/B/C	103-IS1	5/10/2012	SVOC	Benz(a)anthracene	0.12	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
103 A/B/C	103-IS1	5/10/2012	SVOC	Benzo(a)pyrene	**0.12**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
103 A/B/C	103-IS1	5/10/2012	SVOC	Benzo(b)fluoranthene	**0.18**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
103 A/B/C	103-IS1	5/10/2012	SVOC	Benzo(g,h,i)perylene	0.1	mg/kg		NE	NE	1,720	16,500	37,200	1.7
103 A/B/C	103-IS1	5/10/2012	SVOC	Benzo(k)fluoranthene	0.078	mg/kg		1.5	21	62	211	11,900	1.7
103 A/B/C	103-IS1	5/10/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.011	mg/kg		35	120	347	1,230	28,500	
103 A/B/C	103-IS1	5/10/2012	SVOC	Carbazole	0.017	mg/kg		NE	NE	242	858	46,900	
103 A/B/C	103-IS1	5/10/2012	SVOC	Chrysene	0.14	mg/kg		15	210	599	1,990	65,700	2.7
103 A/B/C	103-IS1	5/10/2012	SVOC	Dibenzo(a,h)anthracene	**0.026**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
103 A/B/C	103-IS1	5/10/2012	SVOC	Dibenzofuran	0.0079	mg/kg		78	1,000	137	1,790	835	
103 A/B/C	103-IS1	5/10/2012	SVOC	Di-n-butyl phthalate	0.0038	mg/kg	J	6,100	62,000	6,110	61,600	143,000	
103 A/B/C	103-IS1	5/10/2012	SVOC	Fluoranthene	0.26	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
103 A/B/C	103-IS1	5/10/2012	SVOC	Fluorene	0.0052	mg/kg	J	2,300	22,000	2,200	20,700	27,500	0.18

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 A/B/C	103-IS1	5/10/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.11	mg/kg		0.15	2.1	3.77	12.8	724	1.6
103 A/B/C	103-IS1	5/10/2012	SVOC	Phenanthrene	0.13	mg/kg		NE	NE	2,170	26,900	24,200	2.5
103 A/B/C	103-IS1	5/10/2012	SVOC	Pyrene	0.22	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
103 A/B/C	103-IS2	5/10/2012	Mercury	Mercury	0.0621	mg/kg		10	43	2.19	17.6	21.6	0.06
103 A/B/C	103-IS2	5/10/2012	Metals	Lead	13.2	mg/kg		400	800	260	660	NE	36.0
103 A/B/C	103-IS2	5/10/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS2	5/10/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS2	5/10/2012	SVOC	Benz(a)anthracene	0.0031	mg/kg	J	0.15	2.1	6.20	21.1	1,190	1.8
103 A/B/C	103-IS2	5/10/2012	SVOC	Benzo(a)pyrene	0.0052	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
103 A/B/C	103-IS2	5/10/2012	SVOC	Benzo(b)fluoranthene	0.0093	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
103 A/B/C	103-IS2	5/10/2012	SVOC	Benzo(g,h,i)perylene	0.015	mg/kg		NE	NE	1,720	16,500	37,200	1.7
103 A/B/C	103-IS2	5/10/2012	SVOC	Benzo(k)fluoranthene	0.0094	mg/kg		1.5	21	62	211	11,900	1.7
103 A/B/C	103-IS2	5/10/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.018	mg/kg		35	120	347	1,230	28,500	NE
103 A/B/C	103-IS2	5/10/2012	SVOC	Chrysene	0.0038	mg/kg	J	15	210	599	1,990	65,700	2.7
103 A/B/C	103-IS2	5/10/2012	SVOC	Dibenzo(a,h)anthracene	**0.015**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
103 A/B/C	103-IS2	5/10/2012	SVOC	Diethyl Phthalate	0.0024	mg/kg		49,000	490,000	48,900	493,000	1,140,000	NE
103 A/B/C	103-IS2	5/10/2012	SVOC	Di-n-butyl phthalate	0.0077	mg/kg		6,100	62,000	6,110	61,600	143,000	NE
103 A/B/C	103-IS2	5/10/2012	SVOC	Di-n-octylphthalate	0.012	mg/kg		NE	NE	2,280	22,700	23,100	NE
103 A/B/C	103-IS2	5/10/2012	SVOC	Fluoranthene	0.0038	mg/kg	J	2,300	22,000	2,280	21,800	43,800	4.1
103 A/B/C	103-IS2	5/10/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.016	mg/kg		0.15	2.1	3.77	12.8	724	1.6
103 A/B/C	103-IS2	5/10/2012	SVOC	Phenanthrene	0.0032	mg/kg	J	NE	NE	2,170	26,900	24,200	2.5
103 A/B/C	103-IS2	5/10/2012	SVOC	Pyrene	0.0031	mg/kg	J	1,700	17,000	1,710	16,400	33,700	3.0
103 A/B/C	103-IS3	5/10/2012	Mercury	Mercury	0.335	mg/kg		10	43	2.19	17.6	21.6	0.06
103 A/B/C	103-IS3	5/10/2012	Metals	Lead	**738**	mg/kg		400	800	260	660	NE	36.0
103 A/B/C	103-IS3	5/10/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 A/B/C	103-IS3	5/10/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS3	5/10/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Acenaphthene	0.25	mg/kg		3,400	33,000	3,130	30,700	25,700	0.13
103 A/B/C	103-IS3	5/10/2012	SVOC	Acenaphthylene	0.025	mg/kg		NE	NE	4,180	53,800	35,000	0.07
103 A/B/C	103-IS3	5/10/2012	SVOC	Acetophenone	0.0074	mg/kg		7,800	100,000	NE	NE	NE	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Anthracene	0.33	mg/kg		17,000	170,000	15,700	154,000	135,000	0.40
103 A/B/C	103-IS3	5/10/2012	SVOC	Benz(a)anthracene	**3.1**	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
103 A/B/C	103-IS3	5/10/2012	SVOC	Benzaldehyde	0.016	mg/kg		7,800	100,000	NE	NE	NE	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Benzo(a)pyrene	**3.2**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
103 A/B/C	103-IS3	5/10/2012	SVOC	Benzo(b)fluoranthene	**4.7**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
103 A/B/C	103-IS3	5/10/2012	SVOC	Benzo(g,h,i)perylene	3.1	mg/kg		NE	NE	1,720	16,500	37,200	1.7
103 A/B/C	103-IS3	5/10/2012	SVOC	Benzo(k)fluoranthene	**2.1**	mg/kg		1.5	21	62	211	11,900	1.7
103 A/B/C	103-IS3	5/10/2012	SVOC	Biphenyl, 1,1´-	0.019	mg/kg		51	210	3,420	35,300	11,600	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.06	mg/kg		35	120	347	1,230	28,500	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Carbazole	0.33	mg/kg		NE	NE	242	858	46,900	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Chrysene	4	mg/kg		15	210	599	1,990	65,700	2.7
103 A/B/C	103-IS3	5/10/2012	SVOC	Dibenzo(a,h)anthracene	**0.83**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
103 A/B/C	103-IS3	5/10/2012	SVOC	Dibenzofuran	0.11	mg/kg		78	1,000	137	1,790	835	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Diethyl Phthalate	0.0018	mg/kg	J	49,000	490,000	48,900	493,000	1,140,000	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Di-n-butyl phthalate	0.023	mg/kg		6,100	62,000	6,110	61,600	143,000	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Fluoranthene	6.6	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
103 A/B/C	103-IS3	5/10/2012	SVOC	Fluorene	0.19	mg/kg		2,300	22,000	2,200	20,700	27,500	0.18
103 A/B/C	103-IS3	5/10/2012	SVOC	Indeno(1,2,3-cd)pyrene	**3.3**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
103 A/B/C	103-IS3	5/10/2012	SVOC	Methylnaphthalene, 2-	0.031	mg/kg		230	22,000	273	3,590	926	0.014
103 A/B/C	103-IS3	5/10/2012	SVOC	Methylphenol, 3&4-	0.008	mg/kg		3,100	31,000	274	2,840	1,970	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 A/B/C	103-IS3	5/10/2012	SVOC	Naphthalene	0.059	mg/kg		3.6	18	25.9	119	215	0.20
103 A/B/C	103-IS3	5/10/2012	SVOC	Phenanthrene	3.2	mg/kg		NE	NE	2,170	26,900	24,200	2.5
103 A/B/C	103-IS3	5/10/2012	SVOC	Phenol	0.0039	mg/kg	J	18,000	180,000	11,700	128,000	34,100	NE
103 A/B/C	103-IS3	5/10/2012	SVOC	Pyrene	5.2	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
103 A/B/C	103-IS4	5/10/2012	Mercury	Mercury	0.145	mg/kg		10	43	2.19	17.6	21.6	0.06
103 A/B/C	103-IS4	5/10/2012	Metals	Lead	149	mg/kg		400	800	260	660	NE	36.0
103 A/B/C	103-IS4	5/10/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS4	5/10/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS4	5/10/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Acenaphthene	0.14	mg/kg		3,400	33,000	3,130	30,700	25,700	0.13
103 A/B/C	103-IS4	5/10/2012	SVOC	Acenaphthylene	0.0076	mg/kg		NE	NE	4,180	53,800	35,000	0.07
103 A/B/C	103-IS4	5/10/2012	SVOC	Anthracene	0.59	mg/kg		17,000	170,000	15,700	154,000	135,000	0.40
103 A/B/C	103-IS4	5/10/2012	SVOC	Benz(a)anthracene	**1.8**	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
103 A/B/C	103-IS4	5/10/2012	SVOC	Benzo(a)pyrene	**1.6**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
103 A/B/C	103-IS4	5/10/2012	SVOC	Benzo(b)fluoranthene	**2.2**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
103 A/B/C	103-IS4	5/10/2012	SVOC	Benzo(g,h,i)perylene	1.2	mg/kg		NE	NE	1,720	16,500	37,200	1.7
103 A/B/C	103-IS4	5/10/2012	SVOC	Benzo(k)Fluoranthene	0.93	mg/kg		1.5	21	62	211	11,900	1.7
103 A/B/C	103-IS4	5/10/2012	SVOC	Biphenyl, 1,1´-	0.005	mg/kg	J	51	210	3,420	35,300	11,600	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.07	mg/kg		35	120	347	1,230	28,500	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Butyl Benzyl Phthalate	0.0052	mg/kg	J	260	910	12,200	123,000	285,000	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Carbazole	0.33	mg/kg		NE	NE	242	858	46,900	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Chrysene	2.1	mg/kg		15	210	599	1,990	65,700	2.7
103 A/B/C	103-IS4	5/10/2012	SVOC	Dibenzo(a,h)anthracene	**0.25**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
103 A/B/C	103-IS4	5/10/2012	SVOC	Dibenzofuran	0.061	mg/kg		78	1,000	137	1,790	835	NE
103 A/B/C	103-IS4	5/10/2012	SVOC	Di-n-butyl phthalate	0.0052	mg/kg	J	6,100	62,000	6,110	61,600	143,000	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 A/B/C	103-IS4	5/10/2012	SVOC	Fluoranthene	2.8	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
103 A/B/C	103-IS4	5/10/2012	SVOC	Fluorene	0.14	mg/kg		2,300	22,000	2,200	20,700	27,500	0.18
103 A/B/C	103-IS4	5/10/2012	SVOC	Indeno(1,2,3-cd)pyrene	**1.3**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
103 A/B/C	103-IS4	5/10/2012	SVOC	Methylnaphthalene, 2-	0.021	mg/kg		230	22,000	273	3,590	926	0.014
103 A/B/C	103-IS4	5/10/2012	SVOC	Naphthalene	0.043	mg/kg		3.6	18	25.9	119	215	0.20
103 A/B/C	103-IS4	5/10/2012	SVOC	Phenanthrene	2.5	mg/kg		NE	NE	2,170	26,900	24,200	2.5
103 A/B/C	103-IS4	5/10/2012	SVOC	Pyrene	2.5	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
103 A/B/C	103-IS5	5/10/2012	Mercury	Mercury	0.0884	mg/kg		10	43	2.19	17.6	21.6	0.06
103 A/B/C	103-IS5	5/10/2012	Metals	Lead	**1,010**	mg/kg		400	800	260	660	NE	36.0
103 A/B/C	103-IS5	5/10/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS5	5/10/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS5	5/10/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Acenaphthene	0.026	mg/kg		3,400	33,000	3,130	30,700	25,700	0.13
103 A/B/C	103-IS5	5/10/2012	SVOC	Acenaphthylene	0.022	mg/kg		NE	NE	4,180	53,800	35,000	0.07
103 A/B/C	103-IS5	5/10/2012	SVOC	Acetophenone	0.0028	mg/kg	J	7,800	100,000	NE	NE	NE	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Anthracene	0.12	mg/kg		17,000	170,000	15,700	154,000	135,000	0.40
103 A/B/C	103-IS5	5/10/2012	SVOC	Benz(a)anthracene	**0.59**	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
103 A/B/C	103-IS5	5/10/2012	SVOC	Benzo(a)pyrene	**0.58**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
103 A/B/C	103-IS5	5/10/2012	SVOC	Benzo(b)fluoranthene	**0.85**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
103 A/B/C	103-IS5	5/10/2012	SVOC	Benzo(g,h,i)perylene	0.54	mg/kg		NE	NE	1,720	16,500	37,200	1.7
103 A/B/C	103-IS5	5/10/2012	SVOC	Benzo(k)fluoranthene	0.23	mg/kg		1.5	21	62	211	11,900	1.7
103 A/B/C	103-IS5	5/10/2012	SVOC	Biphenyl, 1,1´-	0.0043	mg/kg	J	51	210	3,420	35,300	11,600	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.042	mg/kg		35	120	347	1,230	28,500	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Butyl Benzyl Phthalate	0.0063	mg/kg	J	260	910	12,200	123,000	285,000	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Caprolactam	0.029	mg/kg		31,000	310,000	NE	NE	NE	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 A/B/C	103-IS5	5/10/2012	SVOC	Carbazole	0.084	mg/kg		NE	NE	242	858	46,900	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Chrysene	0.75	mg/kg		15	210	599	1,990	65,700	2.7
103 A/B/C	103-IS5	5/10/2012	SVOC	Dibenzo(a,h)anthracene	**0.12**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
103 A/B/C	103-IS5	5/10/2012	SVOC	Dibenzofuran	0.02	mg/kg		78	1,000	137	1,790	835	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Diethyl Phthalate	0.0029	mg/kg	J	49,000	490,000	48,900	493,000	1,140,000	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Di-n-butyl phthalate	0.008	mg/kg		6,100	62,000	6,110	61,600	143,000	NE
103 A/B/C	103-IS5	5/10/2012	SVOC	Fluoranthene	1	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
103 A/B/C	103-IS5	5/10/2012	SVOC	Fluorene	0.024	mg/kg		2,300	22,000	2,200	20,700	27,500	0.18
103 A/B/C	103-IS5	5/10/2012	SVOC	Indeno(1,2,3-cd)pyrene	**0.54**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
103 A/B/C	103-IS5	5/10/2012	SVOC	Methylnaphthalene, 2-	0.0084	mg/kg		230	22,000	273	3,590	926	0.014
103 A/B/C	103-IS5	5/10/2012	SVOC	Naphthalene	0.0065	mg/kg	J	3.6	18	25.9	119	215	0.20
103 A/B/C	103-IS5	5/10/2012	SVOC	Phenanthrene	0.63	mg/kg		NE	NE	2,170	26,900	24,200	2.5
103 A/B/C	103-IS5	5/10/2012	SVOC	Pyrene	0.95	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
103 D	103D-IS1	5/4/2012	Metals	Lead	126	mg/kg	J	400	800	260	660	NE	36.0
103 D	103D-IS1	5/4/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 D	103D-IS1	5/4/2012	PLM	Amosite (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 D	103D-IS1	5/4/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 D	103D-IS2	5/4/2012	Metals	Lead	211	mg/kg	J	400	800	260	660	NE	36.0
103 D	103D-IS2	5/4/2012	PLM	Asbestos, Total	**>2≤6**	%		NE	NE	NE	NE	NE	NE
103 D	103D-IS2	5/4/2012	PLM	Amosite (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 D	103D-IS2	5/4/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 E	103E-IS1	5/4/2012	Metals	Lead	**482**	mg/kg	J	400	800	260	660	NE	36.0
103 E	103E-IS1	5/4/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 E	103E-IS1	5/4/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 E	103E-IS2	5/4/2012	Metals	Lead	**681**	mg/kg	J	400	800	260	660	NE	36.0

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
103 E	103E-IS2	5/4/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 E	103E-IS2	5/4/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS1	5/10/2012	Mercury	Mercury	0.0334	mg/kg		10	43	2.19	17.6	21.6	0.06
103 F (112)	103F-IS1	5/10/2012	Metals	Lead	109	mg/kg		400	800	260	660	NE	36.0
103 F (112)	103F-IS1	5/10/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS1	5/10/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS1	5/10/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS2	5/10/2012	Mercury	Mercury	0.51	mg/kg		10	43	2.19	17.6	21.6	0.06
103 F (112)	103F-IS2	5/10/2012	Metals	Lead	189	mg/kg		400	800	260	660	NE	36.0
103 F (112)	103F-IS2	5/10/2012	PLM	Asbestos, Total	**>4≤8**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS2	5/10/2012	PLM	Amosite (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
103 F (112)	103F-IS2	5/10/2012	PLM	Chrysotile (Asbestos)	**>2≤6**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS1	5/10/2012	Metals	Lead	**353**	mg/kg		400	800	260	660	NE	36.0
104 A/B/C/D	104-IS1	5/10/2012	PLM	Asbestos, Total	**>8≤15**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS1	5/10/2012	PLM	Amosite (Asbestos)	**>2≤6**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS1	5/10/2012	PLM	Chrysotile (Asbestos)	**>5≤10**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS2	5/10/2012	Metals	Lead	21.4	mg/kg		400	800	260	660	NE	36.0
104 A/B/C/D	104-IS2	5/10/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS2	5/10/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS3	5/10/2012	Metals	Lead	19	mg/kg		400	800	260	660	NE	36.0
104 A/B/C/D	104-IS3	5/10/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS3	5/10/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS4	5/10/2012	Metals	Lead	**429**	mg/kg		400	800	260	660	NE	36.0
104 A/B/C/D	104-IS4	5/10/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
104 A/B/C/D	104-IS4	5/10/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
104 A/B/C/D	104-IS5	5/10/2012	Metals	Lead	11.1	mg/kg		400	800	260	660	NE	36.0
104 A/B/C/D	104-IS6	5/10/2012	Metals	Lead	7.88	mg/kg		400	800	260	660	NE	36.0
104 E	104E-IS1	5/9/2012	Metals	Lead	**1,930**	mg/kg		400	800	260	660	NE	36.0
104 E	104E-IS1	5/9/2012	PLM	Asbestos, Total	**>1≤3**	%		NE	NE	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	PLM	Crocidolite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	SVOC	Acenaphthene	0.61	mg/kg		3,400	33,000	3,130	30,700	25,700	0.13
104 E	104E-IS1	5/9/2012	SVOC	Acenaphthylene	0.3	mg/kg		NE	NE	4,180	53,800	35,000	0.07
104 E	104E-IS1	5/9/2012	SVOC	Acetophenone	0.076	mg/kg		7,800	100,000	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	SVOC	Anthracene	0.66	mg/kg		17,000	170,000	15,700	154,000	135,000	0.40
104 E	104E-IS1	5/9/2012	SVOC	Benz(a)anthracene	**4.5**	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
104 E	104E-IS1	5/9/2012	SVOC	Benzaldehyde	0.17	mg/kg		7,800	100,000	NE	NE	NE	NE
104 E	104E-IS1	5/9/2012	SVOC	Benzo(a)pyrene	**5.2**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
104 E	104E-IS1	5/9/2012	SVOC	Benzo(b)fluoranthene	**8**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
104 E	104E-IS1	5/9/2012	SVOC	Benzo(g,h,i)perylene	5	mg/kg		NE	NE	1,720	16,500	37,200	1.7
104 E	104E-IS1	5/9/2012	SVOC	Benzo(k)fluoranthene	**2.9**	mg/kg		1.5	21	62	211	11,900	1.7
104 E	104E-IS1	5/9/2012	SVOC	Biphenyl, 1,1´-	0.18	mg/kg		51	210	3,420	35,300	11,600	NE
104 E	104E-IS1	5/9/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.41	mg/kg		35	120	347	1,230	28,500	NE
104 E	104E-IS1	5/9/2012	SVOC	Carbazole	0.36	mg/kg		NE	NE	242	858	46,900	NE
104 E	104E-IS1	5/9/2012	SVOC	Chrysene	6	mg/kg		15	210	599	1,990	65,700	2.7
104 E	104E-IS1	5/9/2012	SVOC	Dibenzo(a,h)anthracene	**1.2**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
104 E	104E-IS1	5/9/2012	SVOC	Dibenzofuran	0.38	mg/kg		78	1,000	137	1,790	835	NE
104 E	104E-IS1	5/9/2012	SVOC	Dichlorophenol, 2,4-	0.0067	mg/kg	J	180	1,800	168	1,700	1,460	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
104 E	104E-IS1	5/9/2012	SVOC	Dimethylphenol, 2,4-	0.028	mg/kg		1,200	12,000	1,130	11,400	10,600	NE
104 E	104E-IS1	5/9/2012	SVOC	Di-n-butyl phthalate	0.035	mg/kg		6,100	62,000	6,110	61,600	143,000	NE
104 E	104E-IS1	5/9/2012	SVOC	Dinitrotoluene, 2,4-	0.59	mg/kg		1.6	5.5	15	51.7	1,420	NE
104 E	104E-IS1	5/9/2012	SVOC	Fluoranthene	12	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
104 E	104E-IS1	5/9/2012	SVOC	Fluorene	0.27	mg/kg		2,300	22,000	2,200	20,700	27,500	0.18
104 E	104E-IS1	5/9/2012	SVOC	Indeno(1,2,3-cd)pyrene	**5.1**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
104 E	104E-IS1	5/9/2012	SVOC	Methylnaphthalene, 2-	0.39	mg/kg		230	22,000	273	3,590	926	0.014
104 E	104E-IS1	5/9/2012	SVOC	Methylphenol, 2-	0.009	mg/kg	J	3,100	31,000	2,760	28,400	22,500	NE
104 E	104E-IS1	5/9/2012	SVOC	Methylphenol, 3&4-	0.041	mg/kg		3,100	31,000	274	2,840	1,970	NE
104 E	104E-IS1	5/9/2012	SVOC	Naphthalene	0.058	mg/kg		3.6	18	25.9	119	215	0.20
104 E	104E-IS1	5/9/2012	SVOC	Nitrosodiphenylamine, n-	0.085	mg/kg		NE	NE	0.0915	0.313	1.71	NE
104 E	104E-IS1	5/9/2012	SVOC	Pentachlorophenol	0.021	mg/kg		NE	NE	29.7	90	4,770	NE
104 E	104E-IS1	5/9/2012	SVOC	Phenanthrene	4.2	mg/kg		NE	NE	2,170	26,900	24,200	2.5
104 E	104E-IS1	5/9/2012	SVOC	Phenol	0.062	mg/kg		18,000	180,000	11,700	128,000	34,100	NE
104 E	104E-IS1	5/9/2012	SVOC	Pyrene	9.7	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
104 E	104E-IS2	5/9/2012	Metals	Lead	18.7	mg/kg		400	800	260	660	NE	36.0
104 E	104E-IS2	5/9/2012	SVOC	Acenaphthene	0.0017	mg/kg	J	3,400	33,000	3,130	30,700	25,700	0.13
104 E	104E-IS2	5/9/2012	SVOC	Acetophenone	0.012	mg/kg		7,800	100,000	NE	NE	NE	NE
104 E	104E-IS2	5/9/2012	SVOC	Anthracene	0.0044	mg/kg	J	17,000	170,000	15,700	154,000	135,000	0.40
104 E	104E-IS2	5/9/2012	SVOC	Benz(a)anthracene	0.014	mg/kg		0.15	2.1	6.20	21.1	1,190	1.8
104 E	104E-IS2	5/9/2012	SVOC	Benzaldehyde	0.041	mg/kg		7,800	100,000	NE	NE	NE	NE
104 E	104E-IS2	5/9/2012	SVOC	Benzo(a)pyrene	0.014	mg/kg		0.015	0.21	0.62	2.11	119	2.1
104 E	104E-IS2	5/9/2012	SVOC	Benzo(b)fluoranthene	0.018	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
104 E	104E-IS2	5/9/2012	SVOC	Benzo(g,h,i)perylene	0.016	mg/kg		NE	NE	1,720	16,500	37,200	1.7
104 E	104E-IS2	5/9/2012	SVOC	Benzo(k)fluoranthene	0.0086	mg/kg		1.5	21	62	211	11,900	1.7

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
104 E	104E-IS2	5/9/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.015	mg/kg		35	120	347	1,230	28,500	NE
104 E	104E-IS2	5/9/2012	SVOC	Carbazole	0.0031	mg/kg	J	NE	NE	242	858	46,900	NE
104 E	104E-IS2	5/9/2012	SVOC	Chrysene	0.014	mg/kg		15	210	599	1,990	65,700	2.7
104 E	104E-IS2	5/9/2012	SVOC	Dibenzo(a,h)anthracene	0.0044	mg/kg	J	0.015	0.021	0.62	2.11	119	0.42
104 E	104E-IS2	5/9/2012	SVOC	Di-n-butyl phthalate	0.0038	mg/kg	J	6,100	62,000	6,110	61,600	143,000	NE
104 E	104E-IS2	5/9/2012	SVOC	Fluoranthene	0.03	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
104 E	104E-IS2	5/9/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.014	mg/kg		0.15	2.1	3.77	12.8	724	1.6
104 E	104E-IS2	5/9/2012	SVOC	Phenanthrene	0.015	mg/kg		NE	NE	2,170	26,900	24,200	2.5
104 E	104E-IS2	5/9/2012	SVOC	Pyrene	0.024	mg/kg		1,700	17,000	1,710	16,400	33,700	3.0
104 F	104F-IS1	5/3/2012	Metals	Lead	**1,080**	mg/kg	J	400	800	260	660	NE	36.0
104 F	104F-IS1	5/3/2012	PLM	Asbestos, Total	**>2≤6**	%		NE	NE	NE	NE	NE	NE
104 F	104F-IS1	5/3/2012	PLM	Amosite (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
104 F	104F-IS1	5/3/2012	PLM	Chrysotile (Asbestos)	**>1≤3**	%		NE	NE	NE	NE	NE	NE
104 F	104F-IS2	5/3/2012	Metals	Lead	8.38	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS1	5/6/2012	Metals	Lead	25.6	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS2	5/6/2012	Metals	Lead	139	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS3	5/6/2012	Metals	Lead	6.15	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS4	5/6/2012	Metals	Lead	42.3	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS4	5/6/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 A/B/C/D	105-IS4	5/6/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 A/B/C/D	105-IS4	5/6/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 A/B/C/D	105-IS5	5/9/2012	Metals	Lead	88.1	mg/kg	J	400	800	260	660	NE	36.0
105 A/B/C/D	105-IS5	5/9/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 A/B/C/D	105-IS5	5/9/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE

TABLE 11
INTERIOR CRAWLSPACE AND BASEMENT SURFACE SOIL SAMPLE DETECTIONS

Building	Sample Identifier	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA RBTL [b] Res Soil	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
105 A/B/C/D	105-IS5	5/9/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 A/B/C/D	105-IS6	5/9/2012	Metals	Lead	9.28	mg/kg	J	400	800	260	660	NE	36.0
105 E	105E-IS1	5/3/2012	Metals	Lead	**303**	mg/kg	J	400	800	260	660	NE	36.0
105 E	105E-IS1	5/3/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 E	105E-IS1	5/3/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 E	105E-IS2	5/3/2012	Metals	Lead	175	mg/kg	J	400	800	260	660	NE	36.0
105 E	105E-IS2	5/3/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 E	105E-IS2	5/3/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 F	105F-IS1	5/9/2012	Metals	Lead	38.8	mg/kg		400	800	260	660	NE	36.0
105 F	105F-IS1	5/9/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 F	105F-IS1	5/9/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 F	105F-IS2	5/9/2012	Metals	Lead	24.3	mg/kg		400	800	260	660	NE	36.0
105 F	105F-IS2	5/9/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
105 F	105F-IS2	5/9/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
105 F	105F-IS2	5/9/2012	PLM	Chrysotile (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
107	107-IS1	5/10/2012	Metals	Lead	**554**	mg/kg		400	800	260	660	NE	36.0

Notes:

[a] For field duplicate samples, the higher result is shown.

[b] Because some MRBCA LDTLs are based on protection of domestic groundwater use pathway (which is not directly applicable to interior surface soil surfaces), the most conservative MRBCA RBTL for soil was selected instead. In many cases, the most conservative MRBCA RBTL for soil is equivalent to the MRBCA LDTL for soil.

% Percent
Bkgd Background Level
CW Construction worker
EPA U.S. Environmental Protection Agency
IEPA Illinois Environmental Protection Agency
Ind Industrial

J	Estimated at the concentration shown
LDTL	MRBCA Lowest Default Target Level
MDNR	Missouri Department of Natural Resources
mg/kg	Milligrams per kilogram
MRBCA	MDNR Risk-based Corrective Action
MSA	Metropolitan Statistical Area
NE	Not established
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 *Code of Federal Regulations* [CFR] 61, Subpart M)
NR	Non-residential
PLM	Polarized light microscopy
Res	Residential
RBTL	MRBCA Risk-based Target Level, Soil Type 1 (Sandy)
RSL	EPA Regional Screening Level
SVOC	Semivolatile organic compound
Trace	Detected, but not at a concentration exceeding the NESHAP level of 1% for regulated asbestos-containing material
Shaded	Non-asbestos result exceeds EPA RSL for industrial scenario or MRBCA RBTL for non-residential or construction worker scenario / Asbestos result exceeds NESHAP level of 1% for regulated asbestos-containing material
Bold	Non-asbestos result exceeds EPA RSL for residential scenario or MRBCA RBTL for residential scenario / Asbestos result is detected

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-1	NE Quad	4/30/2012	VOC	Acetone	0.0039	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-1	NE Quad	4/30/2012	VOC	Dichloroethylene, 1,2-cis-	0.0036	mg/kg		160	2,000	0.521	13.8	2,310	NE
DPTS-1	NE Quad	4/30/2012	VOC	Trichloroethene	0.021	mg/kg		0.91	6.4	0.141	7.68	21,600	NE
DPTS-1	NE Quad	4/30/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0051	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-1	NE Quad	4/30/2012	TPH	Gasoline Range Organics	0.171	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-2	NE Quad	4/30/2012	VOC	Acetone	0.014	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-2	NE Quad	4/30/2012	SVOC	Acenaphthene	0.32	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-2	NE Quad	4/30/2012	SVOC	Acenaphthylene	0.021	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-2	NE Quad	4/30/2012	SVOC	Anthracene	0.91	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-2	NE Quad	4/30/2012	SVOC	Benz(a)anthracene	**4**	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-2	NE Quad	4/30/2012	SVOC	Benzo(a)pyrene	**2.9**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-2	NE Quad	4/30/2012	SVOC	Benzo(b)fluoranthene	**5.5**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-2	NE Quad	4/30/2012	SVOC	Benzo(g,h,i)perylene	2.8	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-2	NE Quad	4/30/2012	SVOC	Benzo(k)fluoranthene	**1.6**	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-2	NE Quad	4/30/2012	SVOC	Biphenyl, 1,1´-	0.0045	mg/kg	J	51	210	31	35,300	11,600	NE
DPTS-2	NE Quad	4/30/2012	SVOC	Carbazole	0.61	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-2	NE Quad	4/30/2012	SVOC	Chrysene	4.3	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-2	NE Quad	4/30/2012	SVOC	Dibenzo(a,h)anthracene	**0.82**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-2	NE Quad	4/30/2012	SVOC	Dibenzofuran	0.097	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-2	NE Quad	4/30/2012	SVOC	Di-n-butyl phthalate	0.011	mg/kg		6,100	62,000	5,460	61,600	143,000	NE
DPTS-2	NE Quad	4/30/2012	SVOC	Fluoranthene	7.8	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-2	NE Quad	4/30/2012	SVOC	Fluorene	0.35	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-2	NE Quad	4/30/2012	SVOC	Indeno(1,2,3-cd)pyrene	**3.0**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-2	NE Quad	4/30/2012	SVOC	Methylnaphthalene, 2-	0.0098	mg/kg		230	22,000	7.55	3,590	926	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-2	NE Quad	4/30/2012	SVOC	Naphthalene	0.019	mg/kg		3.6	18	0.325	119	215	0.20
DPTS-2	NE Quad	4/30/2012	SVOC	Phenanthrene	5.2	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-2	NE Quad	4/30/2012	SVOC	Pyrene	6.6	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-2	NE Quad	4/30/2012	TPH	Gasoline Range Organics	0.155	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-2	NE Quad	4/30/2012	TPH	Oil Range Organics	370	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-3	NE Quad	4/30/2012	VOC	Acetone	0.021	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Acenaphthene	0.0071	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-3	NE Quad	4/30/2012	SVOC	Acenaphthylene	0.0071	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-3	NE Quad	4/30/2012	SVOC	Anthracene	0.029	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-3	NE Quad	4/30/2012	SVOC	Benz(a)anthracene	0.12	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-3	NE Quad	4/30/2012	SVOC	Benzo(a)pyrene	**0.11**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-3	NE Quad	4/30/2012	SVOC	Benzo(b)fluoranthene	**0.16**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-3	NE Quad	4/30/2012	SVOC	Benzo(g,h,i)perylene	0.082	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-3	NE Quad	4/30/2012	SVOC	Benzo(k)fluoranthene	0.061	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-3	NE Quad	4/30/2012	SVOC	Bis(2-ethylhexyl)phthalate	4.4	mg/kg		35	120	347	1,230	28,500	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Carbazole	0.015	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Chlorophenyl phenyl ether, 4-	0.0021	mg/kg	J	NE	NE	0.0206	1.08	22.9	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Chrysene	0.14	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-3	NE Quad	4/30/2012	SVOC	Dibenzo(a,h)anthracene	**0.024**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-3	NE Quad	4/30/2012	SVOC	Dibenzofuran	0.0049	mg/kg	J	78	1,000	6.56	1,790	835	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Diethyl phthalate	0.0017	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Di-n-butyl phthalate	0.0029	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Di-n-octylphthalate	0.023	mg/kg		NE	NE	75.8	22,700	23,100	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-3	NE Quad	4/30/2012	SVOC	Fluoranthene	0.23	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-3	NE Quad	4/30/2012	SVOC	Fluorene	0.0066	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-3	NE Quad	4/30/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.089	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-3	NE Quad	4/30/2012	SVOC	Methylnaphthalene, 2-	0.0025	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Naphthalene	0.0038	mg/kg	J	3.6	18	0.325	119	215	0.20
DPTS-3	NE Quad	4/30/2012	SVOC	Nitroaniline, 3-	0.002	mg/kg	J	NE	NE	0.0329	177	274	NE
DPTS-3	NE Quad	4/30/2012	SVOC	Phenanthrene	0.12	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-3	NE Quad	4/30/2012	SVOC	Pyrene	0.21	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-3	NE Quad	4/30/2012	TPH	Gasoline Range Organics	0.16	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-3	NE Quad	4/30/2012	TPH	Oil Range Organics	20	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-4	NW Quad	5/1/2012	SVOC	Benz(a)anthracene	0.0023	mg/kg	J	0.15	2.1	6.12	21.1	1,190	1.8
DPTS-4	NW Quad	5/1/2012	SVOC	Benzo(a)pyrene	0.0019	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-4	NW Quad	5/1/2012	SVOC	Benzo(b)fluoranthene	0.0023	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-4	NW Quad	5/1/2012	SVOC	Benzo(g,h,i)perylene	0.002	mg/kg	J	NE	NE	1,720	16,500	37,200	1.7
DPTS-4	NW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0064	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-4	NW Quad	5/1/2012	SVOC	Chrysene	0.002	mg/kg	J	15	210	599	1,990	65,700	2.7
DPTS-4	NW Quad	5/1/2012	SVOC	Fluoranthene	0.0055	mg/kg	J	2,300	22,000	2,280	21,800	43,800	4.1
DPTS-4	NW Quad	5/1/2012	SVOC	Phenanthrene	0.003	mg/kg	J	NE	NE	158	20,700	27,500	2.5
DPTS-4	NW Quad	5/1/2012	SVOC	Pyrene	0.004	mg/kg	J	1,700	17,000	1,500	16,400	33,700	3.0
DPTS-4	NW Quad	5/1/2012	TPH	Gasoline Range Organics	0.192	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-5	NW Quad	5/1/2012	VOC	Acetone	0.072	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-5	NW Quad	5/1/2012	VOC	Carbon disulfide	0.017	mg/kg		820	3,700	6.26	50.4	42,800	NE
DPTS-5	NW Quad	5/1/2012	VOC	Methyl Ethyl Ketone	0.016	mg/kg		28,000	200,000	7.3	31,200	297,000	NE
DPTS-5	NW Quad	5/1/2012	SVOC	Anthracene	0.0028	mg/kg	J	17,000	170,000	3,060	154,000	135,000	0.40

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-5	NW Quad	5/1/2012	SVOC	Benz(a)anthracene	0.007	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-5	NW Quad	5/1/2012	SVOC	Benzo(a)pyrene	0.0075	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-5	NW Quad	5/1/2012	SVOC	Benzo(b)fluoranthene	0.0092	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-5	NW Quad	5/1/2012	SVOC	Benzo(g,h,i)perylene	0.0081	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-5	NW Quad	5/1/2012	SVOC	Benzo(k)fluoranthene	0.0036	mg/kg	J	1.5	21	62	211	11,900	1.7
DPTS-5	NW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0022	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-5	NW Quad	5/1/2012	SVOC	Chrysene	0.0088	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-5	NW Quad	5/1/2012	SVOC	Fluoranthene	0.019	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-5	NW Quad	5/1/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0064	mg/kg	J	0.15	2.1	3.77	12.8	724	1.6
DPTS-5	NW Quad	5/1/2012	SVOC	Phenanthrene	0.015	mg/kg		NE	NE	158	20,700	27,500	2.5
DPTS-5	NW Quad	5/1/2012	SVOC	Pyrene	0.02	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-5	NW Quad	5/1/2012	TPH	Gasoline Range Organics	0.196	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-5	NW Quad	5/1/2012	TPH	Oil Range Organics	6.3	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-6	SW Quad	5/1/2012	VOC	Acetone	0.012	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-6	SW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0066	mg/kg		35	120	347	1,230	28,500	NE
DPTS-6	SW Quad	5/1/2012	SVOC	Caprolactam	0.0059	mg/kg	J	31,000	310,000	NE	NE	NE	NE
DPTS-6	SW Quad	5/1/2012	SVOC	Di-n-butyl phthalate	0.0026	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-6	SW Quad	5/1/2012	TPH	Gasoline Range Organics	0.157	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-7	SW Quad	5/1/2012	SVOC	Benzo(a)pyrene	0.0017	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-7	SW Quad	5/1/2012	SVOC	Benzo(b)fluoranthene	0.0026	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-7	SW Quad	5/1/2012	SVOC	Benzo(k)fluoranthene	0.002	mg/kg	J	1.5	21	62	211	11,900	1.7
DPTS-7	SW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.014	mg/kg		35	120	347	1,230	28,500	NE
DPTS-7	SW Quad	5/1/2012	SVOC	Diethyl phthalate	0.0021	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-7	SW Quad	5/1/2012	SVOC	Di-n-butyl phthalate	0.0057	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-7	SW Quad	5/1/2012	SVOC	Fluoranthene	0.002	mg/kg	J	2,300	22,000	2,280	21,800	43,800	4.1
DPTS-7	SW Quad	5/1/2012	SVOC	Nitroaniline, 3-	0.0027	mg/kg	J	NE	NE	0.0329	177	274	NE
DPTS-7	SW Quad	5/1/2012	SVOC	Phenanthrene	0.0026	mg/kg	J	NE	NE	158	26,900	24,200	2.5
DPTS-7	SW Quad	5/1/2012	SVOC	Pyrene	0.0023	mg/kg	J	1,700	17,000	1,500	16,400	33,700	3.0
DPTS-7	SW Quad	5/1/2012	TPH	Gasoline Range Organics	0.167	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-7	SW Quad	5/1/2012	TPH	Oil Range Organics	2.4	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-8	SW Quad	5/1/2012	VOC	Acetone	0.032	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-8	SW Quad	5/1/2012	SVOC	Benz(a)anthracene	0.0068	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-8	SW Quad	5/1/2012	SVOC	Benzo(a)pyrene	0.004	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-8	SW Quad	5/1/2012	SVOC	Benzo(b)fluoranthene	0.016	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-8	SW Quad	5/1/2012	SVOC	Benzo(g,h,i)perylene	0.0088	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-8	SW Quad	5/1/2012	SVOC	Benzo(k)fluoranthene	0.015	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-8	SW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0073	mg/kg		35	120	347	1,230	28,500	NE
DPTS-8	SW Quad	5/1/2012	SVOC	Chrysene	0.0099	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-8	SW Quad	5/1/2012	SVOC	Di-n-butyl phthalate	0.0039	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-8	SW Quad	5/1/2012	SVOC	Fluoranthene	0.016	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-8	SW Quad	5/1/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0077	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-8	SW Quad	5/1/2012	SVOC	Nitrobenzene	0.0033	mg/kg	J	4.8	24	0.0198	190	130	NE
DPTS-8	SW Quad	5/1/2012	SVOC	Phenanthrene	0.0071	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-8	SW Quad	5/1/2012	SVOC	Pyrene	0.018	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-8	SW Quad	5/1/2012	TPH	Gasoline Range Organics	0.193	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-8	SW Quad	5/1/2012	TPH	Oil Range Organics	5.9	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-8	SW Quad	5/1/2012	PCBs	PCBs, Total	7.33E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-8	SW Quad	5/1/2012	PCBs	Decachlorobiphenyl	5.81E-4	mg/kg		0.22	0.74	2.2	7.38	378	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-8	SW Quad	5/1/2012	PCBs	Monochlorobiphenyls	2.5E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-8	SW Quad	5/1/2012	PCBs	Nonachlorobiphenyls	1.52E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-8	SW Quad	5/1/2012	PCBs	Trichlorobiphenyls	3.67E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-9	SW Quad	5/1/2012	VOC	Acetone	0.037	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Acenaphthene	0.029	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-9	SW Quad	5/1/2012	SVOC	Acenaphthylene	0.014	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-9	SW Quad	5/1/2012	SVOC	Acetophenone	0.0055	mg/kg	J	7,800	100,000	NE	NE	NE	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Anthracene	0.1	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-9	SW Quad	5/1/2012	SVOC	Benz(a)anthracene	**0.31**	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-9	SW Quad	5/1/2012	SVOC	Benzo(a)pyrene	**0.31**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-9	SW Quad	5/1/2012	SVOC	Benzo(b)fluoranthene	**0.49**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-9	SW Quad	5/1/2012	SVOC	Benzo(g,h,i)perylene	0.21	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-9	SW Quad	5/1/2012	SVOC	Benzo(k)fluoranthene	0.19	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-9	SW Quad	5/1/2012	SVOC	Biphenyl, 1,1´-	0.0044	mg/kg	J	51	210	31	35,300	11,600	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0071	mg/kg		35	120	347	1,230	28,500	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Carbazole	0.053	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Chrysene	0.44	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-9	SW Quad	5/1/2012	SVOC	Dibenzo(a,h)anthracene	**0.054**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-9	SW Quad	5/1/2012	SVOC	Dibenzofuran	0.032	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Di-n-butyl phthalate	0.0028	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Fluoranthene	0.82	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-9	SW Quad	5/1/2012	SVOC	Fluorene	0.025	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-9	SW Quad	5/1/2012	SVOC	Indeno(1,2,3-cd)pyrene	**0.23**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-9	SW Quad	5/1/2012	SVOC	Methylnaphthalene, 2-	0.031	mg/kg		230	22,000	7.55	3,590	926	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-9	SW Quad	5/1/2012	SVOC	Methylphenol, 3&4-	0.0035	mg/kg	J	3,100	31,000	0.64	2,840	1,970	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Naphthalene	0.021	mg/kg		3.6	18	0.325	119	215	0.20
DPTS-9	SW Quad	5/1/2012	SVOC	Phenanthrene	0.53	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-9	SW Quad	5/1/2012	SVOC	Phenol	0.0025	mg/kg	J	18,000	180,000	25.6	128,000	34,100	NE
DPTS-9	SW Quad	5/1/2012	SVOC	Pyrene	0.7	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-9	SW Quad	5/1/2012	TPH	Diesel Range Organics	2.3	mg/kg		NE	NE	4,150	33,400	175,000	NE
DPTS-9	SW Quad	5/1/2012	TPH	Gasoline Range Organics	0.21	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-9	SW Quad	5/1/2012	TPH	Oil Range Organics	37	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-10	SW Quad	5/1/2012	SVOC	Benzaldehyde	0.012	mg/kg		7,800	100,000	NE	NE	NE	NE
DPTS-10	SW Quad	5/1/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0059	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-10	SW Quad	5/1/2012	SVOC	Di-n-butyl phthalate	0.0027	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-10	SW Quad	5/1/2012	TPH	Diesel Range Organics	1.9	mg/kg		NE	NE	4,150	33,400	175,000	NE
DPTS-10	SW Quad	5/1/2012	TPH	Gasoline Range Organics	0.156	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-10	SW Quad	5/1/2012	TPH	Oil Range Organics	7.7	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-14	SE Quad	5/2/2012	VOC	Acetone	0.035	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-14	SE Quad	5/2/2012	VOC	Carbon disulfide	0.0082	mg/kg		820	3,700	6.26	50.4	42,800	NE
DPTS-14	SE Quad	5/2/2012	VOC	Hexachlorocyclohexane, b-	**0.045**	mg/kg		0.27	0.96	0.045	9.58	285	NE
DPTS-14	SE Quad	5/2/2012	VOC	Xylenes, m&p-	0.0022	mg/kg	J	590	2,500	24.7	199	7,210	NE
DPTS-14	SE Quad	5/2/2012	VOC	Xylenes, Total	0.0027	mg/kg	J	630	2,700	24.7	199	7,210	NE
DPTS-14	SE Quad	5/2/2012	SVOC	Benz(a)anthracene	0.0023	mg/kg	J	0.15	2.1	6.12	21.1	1,190	1.8
DPTS-14	SE Quad	5/2/2012	SVOC	Benzo(a)pyrene	0.0022	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-14	SE Quad	5/2/2012	SVOC	Benzo(b)fluoranthene	0.0031	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-14	SE Quad	5/2/2012	SVOC	Benzo(g,h,i)perylene	0.0045	mg/kg	J	NE	NE	1,720	16,500	37,200	1.7
DPTS-14	SE Quad	5/2/2012	SVOC	Benzo(k)fluoranthene	0.0035	mg/kg	J	1.5	21	62	211	11,900	1.7

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-14	SE Quad	5/2/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.021	mg/kg		35	120	347	1,230	28,500	NE
DPTS-14	SE Quad	5/2/2012	SVOC	Chrysene	0.0024	mg/kg	J	15	210	599	1,230	28,500	2.7
DPTS-14	SE Quad	5/2/2012	SVOC	Diethyl phthalate	0.002	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-14	SE Quad	5/2/2012	SVOC	Di-n-butyl phthalate	0.0034	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-14	SE Quad	5/2/2012	SVOC	Fluoranthene	0.005	mg/kg	J	2,300	22,000	2,280	21,800	43,800	4.1
DPTS-14	SE Quad	5/2/2012	SVOC	Fluorene	0.002	mg/kg	J	2,300	22,000	211	20,700	27,500	0.18
DPTS-14	SE Quad	5/2/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0027	mg/kg	J	0.15	2.1	3.77	12.8	724	1.6
DPTS-14	SE Quad	5/2/2012	SVOC	Methylnaphthalene, 2-	0.002	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-14	SE Quad	5/2/2012	SVOC	Phenanthrene	0.0074	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-14	SE Quad	5/2/2012	SVOC	Pyrene	0.0057	mg/kg	J	1,700	17,000	1,500	16,400	33,700	3.0
DPTS-14	SE Quad	5/2/2012	TPH	Diesel Range Organics	1.7	mg/kg		NE	NE	4,150	33,400	175,000	NE
DPTS-14	SE Quad	5/2/2012	TPH	Gasoline Range Organics	3.95	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-14	SE Quad	5/2/2012	TPH	Oil Range Organics	5.3	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-15	NE Quad	5/2/2012	VOC	Acetone	0.018	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-15	NE Quad	5/2/2012	SVOC	Benzaldehyde	0.0053	mg/kg	J	7,800	100,000	NE	NE	NE	NE
DPTS-15	NE Quad	5/2/2012	SVOC	Benzo(b)fluoranthene	0.0018	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-15	NE Quad	5/2/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0098	mg/kg		35	120	347	1,230	28,500	NE
DPTS-15	NE Quad	5/2/2012	SVOC	Carbazole	0.0028	mg/kg	J	NE	NE	13.3	858	46,900	NE
DPTS-15	NE Quad	5/2/2012	SVOC	Di-n-butyl phthalate	0.0036	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-15	NE Quad	5/2/2012	TPH	Diesel Range Organics	1.7	mg/kg	J	NE	NE	4,150	33,400	175,000	NE
DPTS-15	NE Quad	5/2/2012	TPH	Gasoline Range Organics	0.159	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-15	NE Quad	5/2/2012	TPH	Oil Range Organics	6.8	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-16	NE Quad	5/2/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0098	mg/kg		35	120	347	1,230	28,500	NE
DPTS-16	NE Quad	5/2/2012	SVOC	Diethyl phthalate	0.0017	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-16	NE Quad	5/2/2012	SVOC	Di-n-butyl phthalate	0.0036	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-16	NE Quad	5/2/2012	TPH	Gasoline Range Organics	0.161	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-16	NE Quad	5/2/2012	TPH	Oil Range Organics	3.2	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-17	NE Quad	5/2/2012	VOC	Acetone	0.11	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-17	NE Quad	5/2/2012	VOC	Methyl Ethyl Ketone	0.019	mg/kg		28,000	200,000	7.3	31,200	297,000	NE
DPTS-17	NE Quad	5/2/2012	SVOC	Anthracene	0.0023	mg/kg	J	17,000	170,000	3,060	154,000	135,000	0.40
DPTS-17	NE Quad	5/2/2012	SVOC	Benz(a)anthracene	0.012	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-17	NE Quad	5/2/2012	SVOC	Benzo(a)pyrene	0.0085	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-17	NE Quad	5/2/2012	SVOC	Benzo(b)fluoranthene	0.0093	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-17	NE Quad	5/2/2012	SVOC	Benzo(g,h,i)perylene	0.0076	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-17	NE Quad	5/2/2012	SVOC	Benzo(k)fluoranthene	0.0059	mg/kg	J	1.5	21	62	211	11,900	1.7
DPTS-17	NE Quad	5/2/2012	SVOC	Chrysene	0.013	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-17	NE Quad	5/2/2012	SVOC	Fluoranthene	0.017	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-17	NE Quad	5/2/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0057	mg/kg	J	0.15	2.1	3.77	12.8	724	1.6
DPTS-17	NE Quad	5/2/2012	SVOC	Phenanthrene	0.013	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-17	NE Quad	5/2/2012	SVOC	Pyrene	0.026	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-17	NE Quad	5/2/2012	TPH	Gasoline Range Organics	0.188	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-17	NE Quad	5/2/2012	TPH	Oil Range Organics	5.0	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-18	NE Quad	5/2/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0042	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-18	NE Quad	5/2/2012	SVOC	Di-n-butyl phthalate	0.0026	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-18	NE Quad	5/2/2012	TPH	Gasoline Range Organics	0.145	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-20	SW Quad	5/2/2012	Metals	Arsenic	**2.67**	mg/kg	J	0.39	1.6	3.89	15.9	654	13.0
DPTS-20	SW Quad	5/2/2012	Metals	Barium	73	mg/kg	J	15,000	190,000	2,040	181,000	439,000	110
DPTS-20	SW Quad	5/2/2012	Metals	Chromium	14.4	mg/kg	J	120,000	1.5E+6	74,600	472,000	521,000	16.2

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
DPTS-20	SW Quad	5/2/2012	Metals	Lead	7.83	mg/kg	J	400	800	3.74	660	NE	36.0
DPTS-20	SW Quad	5/2/2012	Mercury	Mercury	0.00494	mg/kg		10	43	2.19	17.6	21.6	0.06
DPTS-20	SW Quad	5/2/2012	Metals	Selenium	0.933	mg/kg		390	5,100	6.27	4,780	12,800	0.48
DPTS-21	SW Quad	5/3/2012	Metals	Arsenic	**2.49**	mg/kg	J	0.39	1.6	3.89	15.9	654	13.0
DPTS-21	SW Quad	5/3/2012	Metals	Barium	50.7	mg/kg	J	15,000	190,000	2,040	181,000	439,000	110
DPTS-21	SW Quad	5/3/2012	Metals	Chromium	14.9	mg/kg	J	120,000	1.5E+6	74,600	472,000	521,000	16.2
DPTS-21	SW Quad	5/3/2012	Metals	Lead	7.52	mg/kg	J	400	800	3.74	660	NE	36.0
DPTS-21	SW Quad	5/3/2012	Mercury	Mercury	0.0106	mg/kg		10	43	2.19	17.6	21.6	0.06
DPTS-21	SW Quad	5/3/2012	Metals	Selenium	0.793	mg/kg		390	5,100	6.27	4,780	12,800	0.48
DPTS-21	SW Quad	5/3/2012	PLM	Amosite (Asbestos)	**Trace**	%		NE	NE	NE	NE	NE	NE
DPTS-21	SW Quad	5/3/2012	PLM	Asbestos, Total	**Trace**	%		NE	NE	NE	NE	NE	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Acenaphthene	0.015	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-22	SW Quad	5/3/2012	SVOC	Acenaphthylene	0.0021	mg/kg	J	NE	NE	175	53,800	35,000	0.07
DPTS-22	SW Quad	5/3/2012	SVOC	Anthracene	0.037	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-22	SW Quad	5/3/2012	SVOC	Benz(a)anthracene	0.067	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-22	SW Quad	5/3/2012	SVOC	Benzo(a)pyrene	**0.06**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-22	SW Quad	5/3/2012	SVOC	Benzo(b)fluoranthene	0.07	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-22	SW Quad	5/3/2012	SVOC	Benzo(g,h,i)perylene	0.038	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-22	SW Quad	5/3/2012	SVOC	Benzo(k)fluoranthene	0.031	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-22	SW Quad	5/3/2012	SVOC	Biphenyl, 1,1´-	0.0018	mg/kg	J	51	210	31	35,300	11,600	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0092	mg/kg		35	120	347	1,230	28,500	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Carbazole	0.013	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Chrysene	0.069	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-22	SW Quad	5/3/2012	SVOC	Dibenzo(a,h)anthracene	0.0096	mg/kg		0.015	0.021	0.62	2.11	119	0.42

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-22	SW Quad	5/3/2012	SVOC	Dibenzofuran	0.011	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Fluoranthene	0.16	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-22	SW Quad	5/3/2012	SVOC	Fluorene	0.018	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-22	SW Quad	5/3/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.043	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-22	SW Quad	5/3/2012	SVOC	Methylnaphthalene, 2-	0.004	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-22	SW Quad	5/3/2012	SVOC	Naphthalene	0.0041	mg/kg	J	3.6	18	0.325	119	215	0.20
DPTS-22	SW Quad	5/3/2012	SVOC	Phenanthrene	0.16	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-22	SW Quad	5/3/2012	SVOC	Pyrene	0.15	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-22	SW Quad	5/3/2012	TPH	Gasoline Range Organics	0.156	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-22	SW Quad	5/3/2012	TPH	Oil Range Organics	6.6	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-23	SE Quad	5/3/2012	SVOC	Benzo(b)fluoranthene	0.0022	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-23	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0099	mg/kg		35	120	347	1,230	28,500	NE
DPTS-23	SE Quad	5/3/2012	SVOC	Chrysene	0.0019	mg/kg	J	15	210	599	1,990	65,700	2.7
DPTS-23	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0045	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-23	SE Quad	5/3/2012	SVOC	Fluoranthene	0.0029	mg/kg	J	2,300	22,000	2,280	21,800	43,800	4.1
DPTS-23	SE Quad	5/3/2012	SVOC	Phenanthrene	0.003	mg/kg	J	NE	NE	158	26,900	24,200	2.5
DPTS-23	SE Quad	5/3/2012	SVOC	Pyrene	0.0029	mg/kg	J	1,700	17,000	1,500	16,400	33,700	3.0
DPTS-23	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.165	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-23	SE Quad	5/3/2012	TPH	Oil Range Organics	5.6	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-24	SE Quad	5/3/2012	VOC	Acetone	0.053	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-24	SE Quad	5/3/2012	SVOC	Benz(a)anthracene	0.0059	mg/kg	J	0.15	2.1	6.12	21.1	1,190	1.8
DPTS-24	SE Quad	5/3/2012	SVOC	Benzo(a)pyrene	0.0066	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-24	SE Quad	5/3/2012	SVOC	Benzo(b)fluoranthene	0.015	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-24	SE Quad	5/3/2012	SVOC	Benzo(g,h,i)perylene	0.0056	mg/kg	J	NE	NE	1,720	16,500	37,200	1.7

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-24	SE Quad	5/3/2012	SVOC	Benzo(k)fluoranthene	0.0034	mg/kg	J	1.5	21	62	211	11,900	1.7
DPTS-24	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.022	mg/kg		35	120	347	1,230	28,500	NE
DPTS-24	SE Quad	5/3/2012	SVOC	Chrysene	0.0066	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-24	SE Quad	5/3/2012	SVOC	Dibenzo(a,h)anthracene	0.0023	mg/kg	J	0.015	0.021	0.62	2.11	119	0.42
DPTS-24	SE Quad	5/3/2012	SVOC	Diethyl phthalate	0.0026	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-24	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0074	mg/kg		6,100	62,000	5,460	61,600	143,000	NE
DPTS-24	SE Quad	5/3/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0072	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-24	SE Quad	5/3/2012	SVOC	Methylnaphthalene, 2-	0.0017	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-24	SE Quad	5/3/2012	SVOC	Phenanthrene	0.0087	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-24	SE Quad	5/3/2012	SVOC	Pyrene	0.013	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-24	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.175	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-24	SE Quad	5/3/2012	TPH	Oil Range Organics	6.6	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-25	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.01	mg/kg		35	120	347	1,230	28,500	NE
DPTS-25	SE Quad	5/3/2012	SVOC	Diethyl phthalate	0.0044	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-25	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0036	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-25	SE Quad	5/3/2012	TPH	Diesel Range Organics	1.9	mg/kg		NE	NE	4,150	33,400	175,000	NE
DPTS-25	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.165	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-25	SE Quad	5/3/2012	TPH	Oil Range Organics	6.9	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-27	SE Quad	5/3/2012	VOC	Acetone	0.021	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-27	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.027	mg/kg		35	120	347	1,230	28,500	NE
DPTS-27	SE Quad	5/3/2012	SVOC	Caprolactam	0.0053	mg/kg	J	31,000	310,000	NE	NE	NE	NE
DPTS-27	SE Quad	5/3/2012	SVOC	Diethyl phthalate	0.0017	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-27	SE Quad	5/3/2012	SVOC	Dimethylphenol, 2,4-	0.0042	mg/kg	J	1,200	12,000	9.37	11,400	10,600	NE
DPTS-27	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0037	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-27	SE Quad	5/3/2012	SVOC	Nitrophenol, 4-	0.0018	mg/kg	J	NE	NE	0.0539	795	339	NE
DPTS-27	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.164	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-27	SE Quad	5/3/2012	PCBs	PCBs, Total	1.74E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-27	SE Quad	5/3/2012	PCBs	Trichlorobiphenyls	1.74E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-28	SE Quad	5/3/2012	VOC	Acetone	0.025	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-28	SE Quad	5/3/2012	VOC	Carbon disulfide	0.011	mg/kg		820	3,700	6.26	50.4	42,800	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Acenaphthene	0.0022	mg/kg	J	3,400	33,000	174	30,700	25,700	0.13
DPTS-28	SE Quad	5/3/2012	SVOC	Anthracene	0.0055	mg/kg	J	17,000	170,000	3,060	154,000	135,000	0.40
DPTS-28	SE Quad	5/3/2012	SVOC	Benz(a)anthracene	0.014	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-28	SE Quad	5/3/2012	SVOC	Benzo(a)pyrene	0.013	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-28	SE Quad	5/3/2012	SVOC	Benzo(b)fluoranthene	0.016	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-28	SE Quad	5/3/2012	SVOC	Benzo(g,h,i)perylene	0.011	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-28	SE Quad	5/3/2012	SVOC	Benzo(k)fluoranthene	0.0069	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-28	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.12	mg/kg		35	120	347	1,230	28,500	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Carbazole	0.0033	mg/kg	J	NE	NE	13.3	858	46,900	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Chrysene	0.017	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-28	SE Quad	5/3/2012	SVOC	Dibenzo(a,h)anthracene	0.0029	mg/kg	J	0.015	0.021	0.62	2.11	119	0.42
DPTS-28	SE Quad	5/3/2012	SVOC	Dibenzofuran	0.002	mg/kg	J	78	1,000	6.56	1,790	835	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Diethyl phthalate	0.0038	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0094	mg/kg		6,100	62,000	5,460	61,600	143,000	NE
DPTS-28	SE Quad	5/3/2012	SVOC	Fluoranthene	0.035	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-28	SE Quad	5/3/2012	SVOC	Fluorene	0.0029	mg/kg	J	2,300	22,000	211	20,700	27,500	0.18
DPTS-28	SE Quad	5/3/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.011	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-28	SE Quad	5/3/2012	SVOC	Methylnaphthalene, 2-	0.0023	mg/kg	J	230	22,000	7.55	3,590	926	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

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DPTS-28	SE Quad	5/3/2012	SVOC	Naphthalene	0.0031	mg/kg	J	3.6	18	0.325	119	215	0.20
DPTS-28	SE Quad	5/3/2012	SVOC	Phenanthrene	0.029	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-28	SE Quad	5/3/2012	SVOC	Pyrene	0.031	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-28	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.576	mg/kg		NE	NE	385	3,100	1,290,000	NE
DPTS-28	SE Quad	5/3/2012	TPH	Oil Range Organics	6.6	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-29	SE Quad	5/3/2012	VOC	Acetone	0.013	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-29	SE Quad	5/3/2012	SVOC	Benzo(a)pyrene	0.0017	mg/kg	J	0.015	0.21	0.62	2.11	119	2.1
DPTS-29	SE Quad	5/3/2012	SVOC	Benzo(b)fluoranthene	0.0018	mg/kg	J	0.15	2.1	6.19	21.0	1,140	2.1
DPTS-29	SE Quad	5/3/2012	SVOC	Benzo(g,h,i)perylene	0.0018	mg/kg	J	NE	NE	1,720	16,500	37,200	1.7
DPTS-29	SE Quad	5/3/2012	SVOC	Benzo(k)fluoranthene	0.0021	mg/kg	J	1.5	21	62	211	11,900	1.7
DPTS-29	SE Quad	5/3/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.05	mg/kg		35	120	347	1,230	28,500	NE
DPTS-29	SE Quad	5/3/2012	SVOC	Diethyl phthalate	0.0037	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-29	SE Quad	5/3/2012	SVOC	Di-n-butyl phthalate	0.0079	mg/kg		6,100	62,000	5,460	61,600	143,000	NE
DPTS-29	SE Quad	5/3/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.0018	mg/kg	J	0.15	2.1	3.77	12.8	724	1.6
DPTS-29	SE Quad	5/3/2012	SVOC	Phenanthrene	0.0025	mg/kg	J	NE	NE	158	26,900	24,200	2.5
DPTS-29	SE Quad	5/3/2012	TPH	Gasoline Range Organics	0.152	mg/kg	J	NE	NE	385	3,100	1,290,000	NE
DPTS-29	SE Quad	5/3/2012	TPH	Oil Range Organics	4.8	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-30	SE Quad	5/4/2012	VOC	Acetone	0.03	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-30	SE Quad	5/4/2012	SVOC	Acenaphthene	0.0042	mg/kg	J	3,400	33,000	174	30,700	25,700	0.13
DPTS-30	SE Quad	5/4/2012	SVOC	Anthracene	0.0076	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-30	SE Quad	5/4/2012	SVOC	Benz(a)anthracene	0.024	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-30	SE Quad	5/4/2012	SVOC	Benzo(a)pyrene	**0.026**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-30	SE Quad	5/4/2012	SVOC	Benzo(b)fluoranthene	0.041	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-30	SE Quad	5/4/2012	SVOC	Benzo(g,h,i)perylene	0.027	mg/kg		NE	NE	1,720	16,500	37,200	1.7

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-30	SE Quad	5/4/2012	SVOC	Benzo(k)fluoranthene	0.017	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-30	SE Quad	5/4/2012	SVOC	Biphenyl, 1,1´-	0.012	mg/kg		51	210	31	35,300	11,600	NE
DPTS-30	SE Quad	5/4/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.013	mg/kg		35	120	347	1,230	28,500	NE
DPTS-30	SE Quad	5/4/2012	SVOC	Chrysene	0.033	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-30	SE Quad	5/4/2012	SVOC	Dibenzo(a,h)anthracene	0.0059	mg/kg	J	0.015	0.021	0.62	2.11	119	0.42
DPTS-30	SE Quad	5/4/2012	SVOC	Fluorene	0.01	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-30	SE Quad	5/4/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.024	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-30	SE Quad	5/4/2012	SVOC	Phenanthrene	0.047	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-30	SE Quad	5/4/2012	SVOC	Pyrene	0.049	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-30	SE Quad	5/4/2012	TPH	Oil Range Organics	3.7	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-30	SE Quad	5/4/2012	PCBs	PCBs, Total	1.44E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-30	SE Quad	5/4/2012	PCBs	Heptachlorobiphenyls	6.35E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-30	SE Quad	5/4/2012	PCBs	Hexachlorobiphenyls	3.70E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-30	SE Quad	5/4/2012	PCBs	Nonachlorobiphenyls	3.09E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-30	SE Quad	5/4/2012	PCBs	Trichlorobiphenyls	1.29E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	VOC	Acetone	0.07	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-31	SE Quad	5/4/2012	VOC	Methyl Ethyl Ketone	0.0054	mg/kg	J	28,000	200,000	7.3	31,200	297,000	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Acenaphthene	0.0086	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-31	SE Quad	5/4/2012	SVOC	Acenaphthylene	0.013	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-31	SE Quad	5/4/2012	SVOC	Anthracene	0.03	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-31	SE Quad	5/4/2012	SVOC	Benz(a)anthracene	0.092	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-31	SE Quad	5/4/2012	SVOC	Benzaldehyde	0.0054	mg/kg	J	7,800	100,000	NE	NE	NE	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Benzo(a)pyrene	**0.088**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-31	SE Quad	5/4/2012	SVOC	Benzo(b)fluoranthene	0.098	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-31	SE Quad	5/4/2012	SVOC	Benzo(g,h,i)perylene	0.0019	mg/kg	J	NE	NE	1,720	16,500	37,200	1.7
DPTS-31	SE Quad	5/4/2012	SVOC	Benzo(k)fluoranthene	0.047	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-31	SE Quad	5/4/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.014	mg/kg		35	120	347	1,230	28,500	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Carbazole	0.014	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Chrysene	0.097	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-31	SE Quad	5/4/2012	SVOC	Dibenzo(a,h)anthracene	**0.015**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-31	SE Quad	5/4/2012	SVOC	Dibenzofuran	0.0085	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Di-n-butyl phthalate	0.0035	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Fluoranthene	0.2	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-31	SE Quad	5/4/2012	SVOC	Fluorene	0.012	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-31	SE Quad	5/4/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.063	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-31	SE Quad	5/4/2012	SVOC	Methylnaphthalene, 2-	0.0055	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-31	SE Quad	5/4/2012	SVOC	Naphthalene	0.0068	mg/kg		3.6	18	0.325	119	215	0.20
DPTS-31	SE Quad	5/4/2012	SVOC	Phenanthrene	0.13	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-31	SE Quad	5/4/2012	SVOC	Pyrene	0.17	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-31	SE Quad	5/4/2012	TPH	Oil Range Organics	6.4	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-31	SE Quad	5/4/2012	PCBs	PCBs, Total	1.22E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	PCBs	Decachlorobiphenyl	8.50E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	PCBs	Heptachlorobiphenyls	1.31E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	PCBs	Nonachlorobiphenyls	1.65E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	PCBs	Pentachlorobiphenyls	1.93E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-31	SE Quad	5/4/2012	PCBs	Trichlorobiphenyls	5.34E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-32	SE Quad	5/4/2012	VOC	Acetone	0.086	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-32	SE Quad	5/4/2012	VOC	Methyl Ethyl Ketone	0.011	mg/kg		28,000	200,000	7.3	31,200	297,000	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-32	SE Quad	5/4/2012	SVOC	Acenaphthene	0.025	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-32	SE Quad	5/4/2012	SVOC	Acenaphthylene	0.025	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-32	SE Quad	5/4/2012	SVOC	Anthracene	0.13	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-32	SE Quad	5/4/2012	SVOC	Benz(a)anthracene	**0.28**	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-32	SE Quad	5/4/2012	SVOC	Benzo(a)pyrene	**0.24**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-32	SE Quad	5/4/2012	SVOC	Benzo(b)fluoranthene	**0.3**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-32	SE Quad	5/4/2012	SVOC	Benzo(g,h,i)perylene	0.15	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-32	SE Quad	5/4/2012	SVOC	Benzo(k)fluoranthene	0.14	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-32	SE Quad	5/4/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.015	mg/kg		35	120	347	1,230	28,500	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Butyl benzyl phthalate	0.0099	mg/kg		260	910	12,200	123,000	285,000	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Carbazole	0.046	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Chrysene	0.29	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-32	SE Quad	5/4/2012	SVOC	Dibenzo(a,h)anthracene	**0.048**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-32	SE Quad	5/4/2012	SVOC	Dibenzofuran	0.021	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Di-n-butyl phthalate	0.0038	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Fluoranthene	0.55	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-32	SE Quad	5/4/2012	SVOC	Fluorene	0.04	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-32	SE Quad	5/4/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.14	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-32	SE Quad	5/4/2012	SVOC	Methylnaphthalene, 2-	0.0033	mg/kg	J	230	22,000	7.55	3,590	926	NE
DPTS-32	SE Quad	5/4/2012	SVOC	Naphthalene	0.0062	mg/kg	J	3.6	18	0.325	119	215	0.20
DPTS-32	SE Quad	5/4/2012	SVOC	Phenanthrene	0.47	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-32	SE Quad	5/4/2012	SVOC	Pyrene	0.43	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-32	SE Quad	5/4/2012	TPH	Oil Range Organics	13	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-33	NW Quad	5/4/2012	Metals	Arsenic	**1.46**	mg/kg		0.39	1.6	3.89	15.9	654	13.0

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL [b] NR Soil	MRBCA RBTL [b] CW Soil	IEPA MSA Bkgd
DPTS-33	NW Quad	5/4/2012	Metals	Barium	27.6	mg/kg	J	15,000	190,000	2,040	181,000	439,000	110
DPTS-33	NW Quad	5/4/2012	Metals	Cadmium	0.457	mg/kg		70	800	9.31	74.8	2,810	0.6
DPTS-33	NW Quad	5/4/2012	Metals	Chromium	2.45	mg/kg	J	120,000	1.5E+6	74,600	472,000	521,000	16.2
DPTS-33	NW Quad	5/4/2012	Metals	Lead	**188**	mg/kg	J	400	800	3.74	660	NE	36.0
DPTS-33	NW Quad	5/4/2012	Mercury	Mercury	0.00164	mg/kg	J	10	43	2.19	17.6	21.6	0.06
DPTS-33	NW Quad	5/4/2012	Metals	Silver	0.0867	mg/kg	J	390	5,100	16.2	4,480	10,600	0.55
DPTS-34	NW Quad	5/4/2012	Metals	Arsenic	**2.2**	mg/kg		0.39	1.6	3.89	15.9	654	13.0
DPTS-34	NW Quad	5/4/2012	Metals	Barium	80.7	mg/kg	J	15,000	190,000	2,040	181,000	439,000	110
DPTS-34	NW Quad	5/4/2012	Metals	Chromium	9.24	mg/kg	J	120,000	1.5E+6	74,600	472,000	521,000	16.2
DPTS-34	NW Quad	5/4/2012	Metals	Lead	**7.34**	mg/kg	J	400	800	3.74	660	NE	36.0
DPTS-34	NW Quad	5/4/2012	Mercury	Mercury	0.0193	mg/kg		10	43	2.19	17.6	21.6	0.06
DPTS-34	NW Quad	5/4/2012	Metals	Selenium	0.161	mg/kg	J	390	5,100	6.27	4,780	12,800	0.48
DPTS-35	NW Quad	5/4/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0057	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-35	NW Quad	5/4/2012	TPH	Oil Range Organics	3.5	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-37	SW Quad	5/4/2012	VOC	Acetone	0.0079	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-37	SW Quad	5/4/2012	SVOC	Diethyl phthalate	0.0026	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-38	NW Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0037	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-38	NW Quad	5/7/2012	TPH	Oil Range Organics	2.8	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-39	NW Quad	5/7/2012	VOC	Acetone	0.041	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-39	NW Quad	5/7/2012	VOC	Methyl Ethyl Ketone	0.0039	mg/kg	J	28,000	200,000	7.3	31,200	297,000	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Acenaphthene	0.24	mg/kg		3,400	33,000	174	30,700	25,700	0.13
DPTS-39	NW Quad	5/7/2012	SVOC	Acenaphthylene	0.017	mg/kg		NE	NE	175	53,800	35,000	0.07
DPTS-39	NW Quad	5/7/2012	SVOC	Anthracene	0.25	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-39	NW Quad	5/7/2012	SVOC	Benz(a)anthracene	**0.43**	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-39	NW Quad	5/7/2012	SVOC	Benzaldehyde	0.0066	mg/kg		7,800	100,000	NE	NE	NE	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Benzo(a)pyrene	**0.44**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-39	NW Quad	5/7/2012	SVOC	Benzo(b)fluoranthene	**0.47**	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-39	NW Quad	5/7/2012	SVOC	Benzo(g,h,i)perylene	0.3	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-39	NW Quad	5/7/2012	SVOC	Benzo(k)fluoranthene	0.26	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-39	NW Quad	5/7/2012	SVOC	Biphenyl, 1,1´-	0.011	mg/kg		51	210	31	35,300	11,600	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.014	mg/kg		35	120	347	1,230	28,500	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Carbazole	0.14	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Chrysene	0.47	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-39	NW Quad	5/7/2012	SVOC	Dibenzo(a,h)anthracene	**0.087**	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-39	NW Quad	5/7/2012	SVOC	Dibenzofuran	0.094	mg/kg		78	1,000	6.56	1,790	835	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Diethyl phthalate	0.0024	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Di-n-butyl phthalate	0.0038	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Fluoranthene	1.1	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-39	NW Quad	5/7/2012	SVOC	Fluorene	0.18	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-39	NW Quad	5/7/2012	SVOC	Indeno(1,2,3-cd)pyrene	**0.28**	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-39	NW Quad	5/7/2012	SVOC	Methylnaphthalene, 2-	0.028	mg/kg		230	22,000	7.55	3,590	926	NE
DPTS-39	NW Quad	5/7/2012	SVOC	Naphthalene	0.028	mg/kg		3.6	18	0.325	119	215	0.20
DPTS-39	NW Quad	5/7/2012	SVOC	Phenanthrene	1.1	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-39	NW Quad	5/7/2012	SVOC	Pyrene	1.0	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0
DPTS-39	NW Quad	5/7/2012	TPH	Oil Range Organics	53	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-40	SW Quad	5/7/2012	VOC	Acetone	0.01	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-40	SW Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0055	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-40	SW Quad	5/7/2012	SVOC	Diethyl phthalate	0.0019	mg/kg	J	49,000	490,000	524	493,000	1,140,000	NE

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-40	SW Quad	5/7/2012	SVOC	Di-n-butyl phthalate	0.0021	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-41	SE Quad	5/7/2012	VOC	Acetone	0.32	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-41	SE Quad	5/7/2012	VOC	Methyl Ethyl Ketone	0.035	mg/kg		28,000	200,000	7.3	31,200	297,000	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Acenaphthene	0.0055	mg/kg	J	3,400	33,000	174	30,700	25,700	0.13
DPTS-41	SE Quad	5/7/2012	SVOC	Anthracene	0.016	mg/kg		17,000	170,000	3,060	154,000	135,000	0.40
DPTS-41	SE Quad	5/7/2012	SVOC	Benz(a)anthracene	0.041	mg/kg		0.15	2.1	6.12	21.1	1,190	1.8
DPTS-41	SE Quad	5/7/2012	SVOC	Benzo(a)pyrene	**0.051**	mg/kg		0.015	0.21	0.62	2.11	119	2.1
DPTS-41	SE Quad	5/7/2012	SVOC	Benzo(b)fluoranthene	0.07	mg/kg		0.15	2.1	6.19	21.0	1,140	2.1
DPTS-41	SE Quad	5/7/2012	SVOC	Benzo(g,h,i)perylene	0.046	mg/kg		NE	NE	1,720	16,500	37,200	1.7
DPTS-41	SE Quad	5/7/2012	SVOC	Benzo(k)fluoranthene	0.038	mg/kg		1.5	21	62	211	11,900	1.7
DPTS-41	SE Quad	5/7/2012	SVOC	Biphenyl, 1,1´-	0.004	mg/kg	J	51	210	31	35,300	11,600	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.014	mg/kg		35	120	347	1,230	28,500	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Carbazole	0.011	mg/kg		NE	NE	13.3	858	46,900	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Chrysene	0.06	mg/kg		15	210	599	1,990	65,700	2.7
DPTS-41	SE Quad	5/7/2012	SVOC	Dibenzo(a,h)anthracene	0.012	mg/kg		0.015	0.021	0.62	2.11	119	0.42
DPTS-41	SE Quad	5/7/2012	SVOC	Dibenzofuran	0.005	mg/kg	J	78	1,000	6.56	1,790	835	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Di-n-butyl phthalate	0.0046	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Fluoranthene	0.11	mg/kg		2,300	22,000	2,280	21,800	43,800	4.1
DPTS-41	SE Quad	5/7/2012	SVOC	Fluorene	0.0099	mg/kg		2,300	22,000	211	20,700	27,500	0.18
DPTS-41	SE Quad	5/7/2012	SVOC	Indeno(1,2,3-cd)pyrene	0.04	mg/kg		0.15	2.1	3.77	12.8	724	1.6
DPTS-41	SE Quad	5/7/2012	SVOC	Methylnaphthalene, 2-	0.017	mg/kg		230	22,000	7.55	3,590	926	NE
DPTS-41	SE Quad	5/7/2012	SVOC	Naphthalene	0.0033	mg/kg	J	3.6	18	0.325	119	215	0.20
DPTS-41	SE Quad	5/7/2012	SVOC	Phenanthrene	0.076	mg/kg		NE	NE	158	26,900	24,200	2.5
DPTS-41	SE Quad	5/7/2012	SVOC	Pyrene	0.088	mg/kg		1,700	17,000	1,500	16,400	33,700	3.0

TABLE 12
EXTERIOR SOIL SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result [a]	Unit	Flag	EPA RSL Res Soil	EPA RSL Ind Soil	MRBCA LDTL	MRBCA RBTL[b] NR Soil	MRBCA RBTL[b] CW Soil	IEPA MSA Bkgd
DPTS-41	SE Quad	5/7/2012	TPH	Diesel Range Organics	4.5	mg/kg		NE	NE	4,150	33,400	175,000	NE
DPTS-41	SE Quad	5/7/2012	TPH	Oil Range Organics	37	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-42	NE Quad	5/7/2012	VOC	Acetone	0.025	mg/kg		61,000	630,000	4.2	14,700	208,000	NE
DPTS-42	NE Quad	5/7/2012	VOC	Methyl Ethyl Ketone	0.0021	mg/kg	J	28,000	200,000	7.3	31,200	297,000	NE
DPTS-42	NE Quad	5/7/2012	VOC	Trichloroethene	0.0068	mg/kg		0.91	6.4	0.141	7.68	21,600	NE
DPTS-42	NE Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0089	mg/kg		35	120	347	1,230	28,500	NE
DPTS-42	NE Quad	5/7/2012	SVOC	Di-n-butyl phthalate	0.0024	mg/kg	J	6,100	62,000	5,460	61,600	143,000	NE
DPTS-43	NE Quad	5/7/2012	SVOC	Benzaldehyde	0.0041	mg/kg	J	7,800	100,000	NE	NE	NE	NE
DPTS-43	NE Quad	5/7/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0042	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-43	NE Quad	5/7/2012	TPH	Oil Range Organics	3.1	mg/kg		NE	NE	124,000	1,250,000	2,890,000	NE
DPTS-44	NW Quad	5/9/2012	VOC	Acetone	0.0075	mg/kg	J	61,000	630,000	4.2	14,700	208,000	NE
DPTS-44	NW Quad	5/9/2012	SVOC	Bis(2-ethylhexyl)phthalate	0.0035	mg/kg	J	35	120	347	1,230	28,500	NE
DPTS-45	Bldg 208B	5/9/2012	PCBs	PCBs, Total	9.06E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-45	Bldg 208B	5/9/2012	PCBs	Decachlorobiphenyl	6.39E-4	mg/kg		0.22	0.74	2.2	7.38	378	NE
DPTS-45	Bldg 208B	5/9/2012	PCBs	Heptachlorobiphenyls	1.36E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-45	Bldg 208B	5/9/2012	PCBs	Nonachlorobiphenyls	1.25E-4	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-45	Bldg 208B	5/9/2012	PCBs	Tetrachlorobiphenyls	5.43E-6	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-47	Bldg 208B	5/9/2012	PCBs	PCBs, Total	4.35E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE
DPTS-47	Bldg 208B	5/9/2012	PCBs	Heptachlorobiphenyls	4.35E-5	mg/kg	J	0.22	0.74	2.2	7.38	378	NE

Notes:

[a] For field duplicate samples, the higher result is shown.

[b] The most conservative non-residential or construction worker MRBCA RBTL for soil was selected for comparison.

%	Percent
Bkgd	Background level
CW	Construction worker
EPA	U.S. Environmental Protection Agency
IEPA	Illinois Environmental Protection Agency
Ind	Industrial
J	Estimated at the concentration shown
LDTL	MRBCA Lowest Default Target Level
MDNR	Missouri Department of Natural Resources
mg/kg	Milligrams per kilogram
MRBCA	MDNR Risk-based Corrective Action
MSA	Metropolitan Statistical Area
NE	Not established
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 *Code of Federal Regulations* [CFR] 61, Subpart M)
NR	Non-residential
PCB	Polychlorinated biphenyl
PLM	Polarized light microscopy
RBTL	MRBCA Risk-based Target Level, Soil Type 1 (Sandy)
Res	Residential
RSL	EPA Regional Screening Level
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
Trace	Detected, but not at a concentration exceeding the NESHAP level of 1% for regulated asbestos-containing material
VOC	Volatile organic compound

Shaded	Non-asbestos result exceeds EPA RSL for industrial scenario or MRBCA RBTL for non-residential or construction worker scenario / Asbestos result exceeds NESHAP level of 1% for regulated asbestos-containing material
Bold	Non-asbestos result exceeds EPA RSL for residential scenario or MRBCA LDTL / Asbestos result is detected

TABLE 13
EXTERIOR GROUNDWATER SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result[a]	Unit	Flag	EPA RSL Tapwater	EPA MCL	MRBCA LDTL	MRBCA RBTL NR	MRBCA RBTL CW
DPTGW-1	NE Quad	5/8/2012	SVOC	Bis(2-ethylhexyl)phthalate	**0.15**	µg/L	J	0.071	6.0	6.0	275	7,630
DPTGW-1	NE Quad	5/8/2012	SVOC	Di-n-octylphthalate	0.093	µg/L	J	NE	NE	213	2,420	6,720
DPTGW-1	NE Quad	5/8/2012	SVOC	Fluoranthene	0.064	µg/L	J	630	NE	164	1,660	4,620
DPTGW-1	NE Quad	5/8/2012	TPH	Oil Range Organics	94	µg/L		NE	NE	31,800	NE	NE
DPTGW-1	NE Quad	5/8/2012	VOC	Dichloroethylene, 1,2-cis-	4.4	µg/L	J	28	70	70	23,400	65,000
DPTGW-1	NE Quad	5/8/2012	VOC	Trichloroethene	**4.9**	µg/L	J	0.44	5.0	5.0	2,640	183,000
DPTGW-6	SW Quad	5/8/2012	SVOC	Bis(2-ethylhexyl)phthalate	**0.23**	µg/L	J	0.071	6.0	6.0	275	7,630
DPTGW-6	SW Quad	5/8/2012	SVOC	Di-n-octylphthalate	0.12	µg/L	J	NE	NE	213	2,420	6,720
DPTGW-9	SW Quad	5/8/2012	PCBs	PCBs, Total	**2.6**	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Decachlorobiphenyl	0.00052	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Heptachlorobiphenyls, Total	**1.0**	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Hexachlorobiphenyls, Total	**1.2**	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Nonachlorobiphenyls, Total	0.012	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Octachlorobiphenyls, Total	**0.22**	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Pentachlorobiphenyls, Total	**0.20**	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Tetrachlorobiphenyls, Total	0.0046	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-9	SW Quad	5/8/2012	PCBs	Trichlorobiphenyls, Total	8.5E-05	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-24	SE Quad	5/8/2012	SVOC	Bis(2-ethylhexyl)phthalate	**0.19**	µg/L	J	0.071	6.0	6.0	275	7,630
DPTGW-24	SE Quad	5/8/2012	TPH	Diesel Range Organics	12	µg/L		NE	NE	34,300	938,000	242,000,000
DPTGW-24	SE Quad	5/8/2012	TPH	Oil Range Organics	36	µg/L		NE	NE	31,800	NE	NE
DPTGW-25	SE Quad	5/8/2012	SVOC	Bis(2-ethylhexyl)phthalate	**0.12**	µg/L	J	0.071	6.0	6.0	275	7,630
DPTGW-27	SE Quad	5/8/2012	PCBs	PCBs, Total	0.00066	µg/L	J	0.17	0.5	0.0634	0. 231	16.1

TABLE 13
EXTERIOR GROUNDWATER SAMPLE DETECTIONS

Sample Identifier	Location	Sample Date	Analysis	Analyte	Result[a]	Unit	Flag	EPA RSL Tapwater	EPA MCL	MRBCA LDTL	MRBCA RBTL NR	MRBCA RBTL CW
DPTGW-27	SE Quad	5/8/2012	PCBs	Heptachlorobiphenyls, Total	0.00022	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-27	SE Quad	5/8/2012	PCBs	Hexachlorobiphenyls, Total	0.000052	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-27	SE Quad	5/8/2012	PCBs	Octachlorobiphenyls, Total	0.000062	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-27	SE Quad	5/8/2012	PCBs	Pentachlorobiphenyls, Total	0.00011	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-27	SE Quad	5/8/2012	PCBs	Tetrachlorobiphenyls, Total	0.00021	µg/L	J	0.17	0.5	0.0634	0. 231	16.1
DPTGW-37	SW Quad	5/8/2012	SVOC	Acetophenone	0.1	µg/L	J	1,500	NE	NE	NE	NE
DPTGW-37	SW Quad	5/8/2012	SVOC	Bis(2-ethylhexyl)phthalate	**5.9**	µg/L		0.071	6.0	6.0	275	7,630
DPTGW-37	SW Quad	5/8/2012	SVOC	Butyl benzyl phthalate	0.093	µg/L	J	14	NE	1,550	23,200	64,400
DPTGW-37	SW Quad	5/8/2012	SVOC	Diethyl phthalate	0.07	µg/L	J	11,000	NE	11,900	1,680,000	4,660,000
DPTGW-37	SW Quad	5/8/2012	SVOC	Fluoranthene	0.055	µg/L	J	630	NE	164	1,660	4,620
DPTGW-37	SW Quad	5/8/2012	SVOC	Phenanthrene	0.054	µg/L	J	NE	NE	75	2,330	6,470

Notes:

[a] For field duplicate samples, the higher result is shown.

CW Construction Worker
EPA U.S. Environmental Protection Agency
J Estimated at the concentration shown
LDTL MDNR Risk-based Corrective Action Lowest Default Target Level
MCL EPA Maximum Contaminant Level
MDNR Missouri Department of Natural Resources
µg/L Micrograms per liter
NE Not established
NR Non-residential
PCB Polychlorinated biphenyl
RBTL MRBCA Risk-based Target Level
RSL EPA Regional Screening Level
SVOC Semivolatile organic compound
TPH Total petroleum hydrocarbons
VOC Volatile organic compound

Shaded Result exceeds EPA MCL or MRBCA RBTL for non-residential or construction worker scenario

Bold Result exceeds EPA RSL for tapwater or MRBCA LDTL

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
101	Asbestos	A building-wide survey indicated asbestos-containing building material (ACBM) was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM operations and maintenance (O&M) and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in surface and subsurface exterior soil borings exceeded Missouri Risk-Based Corrective Action (MRBCA) default target levels (DTL) but not MRBCA type 3 non-residential values.	No additional recommendations
	Other Metals	Arsenic in surface and subsurface exterior soil borings exceeded MRBCA DTLs but was within or below the range of U.S. Geological Survey (USGS) reported background concentrations for St. Louis County. Mercury in subsurface soil samples was below MRBCA DTLs, and indoor air monitoring detected no mercury vapor.	No additional recommendations
	Polychlorinated Biphenyls (PCB)	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Subsurface soil sampling identified no PCB concentrations above MRBCA DTLs. Occupational Exposure (OEE) Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the Missouri Department of Natural Resources (MDNR) MRBCA Cleanup Level of 10 parts per million (ppm).	OEE Update: No additional recommendations
	Volatile/ Semivolatile Organic Compounds (VOC/SVOC)	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 A/B/C OEE Update: Mothballed. GSA requested no additional investigation until building future is known.	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Prior to building demolition, renovation, or reoccupation, conduct interior soil sampling for asbestos and implement controls as necessary. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSL) values, but appear low enough that no further action is warranted. The explosives 2,6-dinitrotoluene, 2-amino-4,6-dinitrotoluene, nitrobenzene, and 4-nitrotoluene in crawlspace shallow soil/sediment samples exceeded MRBCA DTLs but not industrial RSLs or MRBCA type 3 non-residential/construction values. 2,4-Dinitrotoluene (polycyclic aromatic hydrocarbons [PAH] analysis) exceeded the MRBCA DTL and industrial RSL.	Develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, crawlspace contamination in the mothballed building. Prior to demolition, renovation, or reoccupation of Building 102 A/B/C, conduct recommended sampling of explosives in interior soil (western half of the building) and implement controls as necessary..
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion. Follow-up lead wipe samples collected in crawlspaces also exceeded the criterion. Additionally, lead in crawlspace shallow soil samples exceeded the MRBCA type 3 non-residential value and industrial RSL. Some samples were collected directly from process lines/equipment. Lead in nearby exterior soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential values.	Develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, basement/crawlspace contamination. Prior to demolition, renovation, or reoccupation of the building, conduct the following recommended sampling and implement controls as necessary. To verify wipe sample results and more directly evaluate risk, conduct dust sampling for lead analysis in areas of the building where occupational exposures are expected. Collect additional interior soil samples at the western half of the building.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102A/B/C OEE Update: Mothballed. GSA requested no additional investigation until building future is known.	Other	Sample collection on the western half of the building was limited.	At the western half of the building, conduct additional interior soil sampling for metals, explosives, and PAHs.
	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) in building air monitoring / sampling. Antimony, mercury, and zinc in basement / crawlspace soil / sediment and beryllium in exterior soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Arsenic and copper in basement / crawlspace soil/sediment and arsenic in exterior soil borings exceeded both MRBCA type 3 non-residential/construction values and industrial RSLs. However, the exterior arsenic exceedence was below the mean USGS-reported background concentrations for St. Louis County. Some crawlspace samples were collected directly from process piping / equipment. Sample collection on the western half of the building was limited.	Develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, basement/crawlspace contamination. Prior to demolition, renovation, or reoccupation of the building, conduct the following recommended sampling and implement controls as necessary. Collect additional interior soil samples at the western half of the for metals analysis.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 A/B/C OEE Update: Mothballed. GSA requested no additional investigation until building future is known.	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 on one wipe sample exceeded the Toxic Substances Control Act (TSCA)/MRBCA cleanup criterion for impervious surfaces. Aroclor 1242 and 1260 in crawlspace soil exceeded MRBCA DTLs but not type 3 non-residential/construction values. Aroclor 1260 in crawlspace soil/sediment exceeded EPA's industrial RSL and remediation goal for soils (1 part per million [ppm]).	On the western half of the building, conduct additional interior soil sampling and clearance sampling for PCB analysis. MDNR requires destructive core sampling for concrete and other pervious materials; wipe sampling is acceptable for impervious materials. Collect destructive core samples as necessary where historical wipe samples were collected from concrete and other pervious materials. In areas where contamination is identified and occupational exposure is anticipated, collect indoor air samples for PCB analysis.
	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene in basement/crawlspace soil/sediment exceeded industrial RSLs and MRBCA type 3 non-residential/construction values. 2,4-Dinitrotoluene exceeded the industrial RSL and MRBCA DTL. And the PAHs benzo(k)fluoranthene, chrysene, 2,6-dinitrotoluene, and naphthalene and the VOCs acetone and 2-hexanone exceeded the MRBCA DTL only. Some crawlspace samples were collected directly from process piping/equipment. Subsequent investigation of an ethylene glycol release identified benzo(a)pyrene in exterior soil in exceedence of the MRBCA DTL but not the MRBCA type 3 non-residential value. Ethylene glycol also may be present at concentrations above the MRBCA DTL, but laboratory reporting limits exceeded this value. OEE Update: TCE was detected at a concentration approaching the MCL of 5.0 µg/L in groundwater sample DPTGW 1 (4.9 µg/L). TCE also was detected in corresponding soil sample DPTS-1 at 0.021 mg/kg, below the EPA industrial RSL and MRBCA non-residential or construction worker RBTL. PAH concentrations in exterior soil sample DPTS-2 exceeded Illinois Environmental Protection Agency (IEPA) background levels for metropolitan statistical areas (MSA), EPA industrial RSLs, and RBCA non-residential RBTLs.	At the western half of the building, conduct additional interior soil sampling for PAHs. Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. OEE Update: Further delineate the lateral and vertical extent of TCE- and PAH-contaminated soil and groundwater as part of a **Remedial Investigation**. If future delineation of soil and groundwater contamination reveals higher concentrations of TCE (or another chemical of potential concern for vapor intrusion), recommendation is to re-evaluate indoor air concentrations prior to reoccupation.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 D OEE Update: Mothballed. GSA requested no additional investigation until building future is known.	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Prior to building demolition, renovation, or reoccupation, conduct interior soil sampling for asbestos and implement controls as necessary. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in four wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 micrograms per square foot [µg/ft^2]). Lead in crawlspace shallow soil/sediment and in nearby exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Some crawlspace samples were collected from or adjacent to process piping and equipment. Lead was in a tunnel water sample at a concentration exceeding the MCL and MRBCA tap water value. Lead in shallow and deep exterior soil borings exceeded the MRBCA DTL but not the MRBCA tier 3 non-residential RBTL.	Develop a contaminant management plan to minimize exposure to, and disturbance or dispersion of, basement/crawlspace contamination. Prior to demolition, renovation, or reoccupation of the building, conduct the following recommended sampling and implement controls as necessary. To verify wipe sample results and more directly evaluate risk, conduct dust sampling for lead analysis in areas of the building where occupational exposures are expected.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 D OEE Update: Mothballed. GSA requested no additional investigation until building future is known.	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but one mercury wipe result (33,000 µg/ft^2) suggests additional action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Copper, mercury, and zinc in crawlspace soil/sediment samples and arsenic and beryllium in nearby soil borings exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values. Arsenic also exceeded industrial RSLs but concentrations were comparable to USGS reported background concentrations for St. Louis County. Some crawlspace samples were collected directly from process piping / equipment.	Prior to demolition, renovation, or reoccupation of Building 102 D, conduct dust sampling for mercury analysis.
	PCBs	No transformers were noted in inspections. No PCBs were detected in wipe samples.	No additional recommendations
	VOCs/SVOCs	The PAH dibenzo(a,h)anthracene in basement shallow soil/sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential/construction value. Some crawlspace samples were collected directly from process piping/equipment. OEE Update: Dibenzo(a,h)anthracene was detected in exterior soil sample DPTS-3 at a concentration exceeding the EPA industrial RSL but below the IEPA background level for MSAs.	No additional recommendations
102 E	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Trace asbestos was detected in basement soil.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 E	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations
	Inorganics	Phosphorous was detected in a shallow soil sample from the crawlspace; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead in one lead wipe sample collected from crawlspace concrete exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/crawlspace shallow soil/sediment and in a nearby exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas; lead concentrations did not exceed the MRBCA RBTL for non-residential soil or EPA RSLs for industrial soil. Lead was detected in basement soil, but concentrations did not exceed the MRBCA RBTL for non-residential soil or EPA RSLs for industrial soil.	OEE Update: No additional recommendations
	Other Metals	Mercury was detected in wipe and paint chip samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic and beryllium in basement/crawlspace soil/sediment and in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value. Arsenic in basement/crawlspace soil/sediment also exceeded the industrial RSL.	No additional recommendations
	PCBs	No transformers were noted in inspections. No PCBs were detected in one wipe sample.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 F/G/H	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in two soil samples and a stormwater inlet sample exceeded the MRBCA DTL but not MRBCA type 3 non-residential value. No lead in exterior subsurface soil samples exceeded the MRBCA non-residential value.	No additional recommendations
	Other Metals	Arsenic in exterior soil borings exceeded the MRBCA DTL and industrial RSL but not the MRBCA type 3 non-residential / construction value. OEE Update: Soil samples were collected for metals analysis. Arsenic was detected at a concentration exceeding the EPA RBTL for industrial soil, but not the IEPA background level for MSAs.	OEE Update: No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
102 J/K	Asbestos	No information on the ACBM content or nature of building demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead in an exterior subsurface soil sample exceeded MRBCA non-residential value.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
102 J/K	Other Metals	No mercury or metals in an exterior subsurface soil sample exceeded MRBCA construction worker and/or non-residential levels.	No additional recommendations
	PCBs	No PCBs in an exterior subsurface soil sample exceeded MRBCA construction worker and/or non-residential levels.	No additional recommendations
	VOCs/SVOCs	Subsurface samples were not analyzed for VOCs or SVOCs. OEE Update: PAH concentrations in exterior soil sample DPTS-2 exceeded IEPA MSA background levels, EPA industrial RSLs, and RBCA non-residential RBTLs. TPH also was detected, but at concentrations below EPA RSLs or MRBCA RBTLs.	OEE Update: Further delineate the lateral and vertical extent of this PAH contamination in soil as part of a **Remedial Investigation**.
103 A/B/C	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 3% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 A/B/C	Lead	Six wipe samples collected from crawlspaces and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/ crawlspace soil/sediment and in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded EPA RSLs for industrial soil and MRBCA RBTLs for non-residential soil. Lead in interior soil samples also exceeded EPA RSLs for industrial soil and MRBCA RBTLs for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean areas impacted by lead in dust and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other	Sample collection was limited as compared to Building 102. OEE Update: Follow-up sampling was conducted as described herein.	OEE Update: No additional recommendations
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but one mercury wipe result (9,100 µg/ft^2) suggests additional action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in basement/crawlspace soil/sediment exceeded the MRBCA DTL and industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium and copper in basement/crawlspace soil/sediment and beryllium in an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values. OEE Update: Bulk dust verification samples were collected from occupied areas. Mercury in bulk dust samples exceeded its MRBCA RBTL for residential soil, but not the EPA RSLs for residential and industrial soil or MRBCA RBTL for non-residential soil.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 A/B/C	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in five wipe samples, but at concentrations below the TSCA/MRBCA cleanup criterion for impervious surfaces. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	Benzo(a)pyrene in basement/crawlspace soil exceeded the industrial RSL. OEE Update: Follow-up interior soil sampling identified multiple PAHs at concentrations exceeding the EPA RSL for industrial soil and the MRBCA RBTL for non-residential soil.	OEE Update: Recommendation is to implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.
103 D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 6% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. 2,4-Dinitrotoluene (SVOC analysis) in crawlspace soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 D	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Four lead wipe samples collected from crawlspaces, elevator shafts, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement/crawlspace soil/sediment, exterior soil borings, and a storm sewer inlet exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil. Lead detected in interior soil samples did not exceed EPA RSLs or MRBCA RBTLs.	OEE Update: Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean areas impacted by lead in dust and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in basement/crawlspace soil/sediment, exterior soil borings, and a storm sewer inlet exceeded the MRBCA DTL and industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium in an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations
	PCBs	No PCBs were detected in wipe samples. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 D	VOCs/SVOCs	2,4-Dinitrotoluene in crawlspace soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value.	No additional recommendations
103 E	Asbestos	No building-specific inspection and management plan is included in the record. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 3% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Develop a management plan that addresses asbestos in soil. Implement and document recommended asbestos O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed asbestos within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples and follow-up wipe samples collected from crawlspaces exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential soil, as well as MRBCA RBTLs for residential and non-residential soil. Lead in interior soil samples also exceeded EPA RSLs for industrial soil and MRBCA RBTLs for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean areas impacted by lead in dust and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 E	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Arsenic in crawlspace sediment and exterior soil borings exceeded the MRBCA DTL and/or industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Beryllium in crawlspace soil/sediment and an exterior soil boring exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations
	PCBs	No PCBs were detected in wipe samples. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
103 F (previous 112)	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 8% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 F (previous 112)	Lead	Lead wipe samples and follow-up lead wipe samples collected from crawlspaces exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead concentrations did not exceed the PEL in building air based on ambient and personnel monitoring samples. Lead in basement / crawlspace / tunnel soil/sediment exceeded the industrial RSL and MRBCA type 3 non-residential value. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead was detected in first floor bulk dust samples, but not at concentrations exceeding EPA RSLs or MRBCA RBTLs. Lead detections in crawlspace soil samples were below EPA RSLs or MRBCA RBTLs and did not replicate historical exceedence of these levels.	OEE Update: No additional recommendations
	Other Metals	No mercury or metals wipe samples were collected. Mercury concentrations did not exceed the PEL in building air monitoring / sampling. Mercury, antimony, and arsenic were detected in basement / crawlspace soil / sediment samples at concentrations exceeding industrial RSLs and MRBCA type 3 non-residential/construction values. Some samples were collected within or adjacent to process piping and equipment. Beryllium, silver, and thallium in basement / crawlspace soil / sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Mercury concentrations in indoor air were below the PEL but exceeded MRBCA and RSL values. OEE Update: Bulk dust verification samples were collected from occupied areas. No mercury was detected in bulk dust samples collected on the first floor. Mercury detections in crawlspace soil samples were below EPA RSLs or MRBCA RBTLs and did not replicate historical exceedence of these levels.	OEE Update: Conduct verification indoor air sampling for mercury analysis.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 F (previous 112)	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. Aroclor 1260 also was detected in basement / crawlspace soil at concentrations exceeding the EPA industrial RSL and remediation goal for soils (1 ppm), and MRBCA DTLs. OEE Update: PCBs were detected in concrete core samples at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: Manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces.
	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene in basement / crawlspace soil / sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. Some crawlspace samples were collected directly from process piping/equipment.	No additional recommendations
103 F/G/H	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected and analyzed for asbestos. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings and a storm sewer inlet exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic in exterior soil borings and a storm sewer inlet exceeded the industrial RSL, but concentrations were below the mean USGS-reported background concentrations for St. Louis County.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
103 F/G/H	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
103 J/K	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected and analyzed for asbestos. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead was not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	Other Metals	Other metals were not identified as contaminants of concern. See also 103D and 103E.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. See also 103D and 103E.	No additional recommendations
	VOCs/SVOCs	Samples specific to these buildings were not collected for VOC or SVOC analysis. However, in a crawlspace soil / sediment sample collected in adjacent Building 103D, the SVOC and explosives compound 2,4-dinitrotoluene exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value. OEE Update: VOCs, SVOCs, and TPH were detected in exterior soil samples. No concentrations exceeded EPA RSLs or MRBCA RBTLs.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 A/B/C/D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 15% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/ crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples collected from crawlspaces, an elevator shaft, and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Follow-up wipe samples exceeded the EPA threshold for floor surfaces (40 µg/ft^2) and the MRBCA non-residential cleanup criterion (200 µg/ft) in crawl spaces but not regularly occupied areas. No particulate lead was detected during air monitoring /sampling on the second floor. Lead in crawlspace soil, sump sediment, railroad track subgrade soil, and exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil. Lead was detected in interior soil samples, but not at concentrations exceeding EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean areas impacted by lead in dust and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 A/B/C/D	Other	Sample collection was limited compared to Building 102. OEE Update: Follow-up sampling was conducted as indicated herein.	OEE Update: No additional recommendations
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Mercury concentrations in indoor air were below the PEL but exceeded MRBCA and RSL values. Arsenic in crawlspace soil, sump sediment, railroad track subgrade soil, and shallow soil boring soil exceeded the MRBCA DTL and industrial RSL, but concentrations were within the range of USGS-reported background level for St. Louis County. Antimony in sump sediment, copper in crawlspace soil and sump sediment, and zinc in crawlspace soil exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	OEE Update: Conduct verification indoor air sampling for mercury analysis.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 micrograms per square centimeter [µg/cm^2]) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment at concentrations exceeding MRBCA DTLs or industrial RSLs. No PCBs were detected in exterior soil borings. OEE Update: PCBs were detected in concrete core samples at concentrations significantly exceeding (up to 657.5 times) the MRBCA Cleanup Level of 10 ppm.	OEE Update: Manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces. Given the significance of the cleanup level exceedences at Buildings 104 A/B/C and 107, recommendation is to delineate the lateral and vertical extent of potential PCB contamination in surrounding soil and groundwater as part of a **Remedial Investigation**. If future delineation of soil and groundwater contamination reveals higher concentrations of PCBs, re-evaluate indoor air concentrations and the need for indoor air sampling.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 A/B/C/D	VOCs/SVOCs	No SVOCs were detected in basement / crawlspace shallow soil and sediment. The PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene in a shallow soil boring exceeded MRBCA DTLs and industrial RSLs; the PAH naphthalene exceeded the MRBCA DTL but not the industrial RSL. Samples were not analyzed for VOCs. OEE Update: VOCs and SVOCs in soil borings did not exceed MRBCA non-residential RBTLs/industrial DTLs.	OEE Update: No additional comments
104 E	Asbestos	No building-specific inspection and management plan is included in the record. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 3% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Develop a management plan that addresses asbestos in soil. Implement and document recommended asbestos O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed asbestos within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 E	Lead	Lead wipe samples collected from crawl spaces and above suspended ceilings exceeded the HUD interim dust lead sample for floor services (40 µg/ft^2). A paint chip sample contained lead below the HUD threshold level for lead-based paint. Lead in water from the multipurpose room exceeded the MCL and the MRBCA tap water value. Lead in a storm sewer inlet and in crawlspace soil and piping exceeded the MRBCA type 3 non-residential value and the industrial RSL. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the MRBCA RBTL for residential soil, but not the EPA RSLs for residential and industrial soil or MRBCA RBTL for non-residential soil. Lead in interior soil samples exceeded the MRBCA RBTL for industrial soil and MRBCA RBTL for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.
	Other Metals	Mercury was detected in wipe samples and a paint chip sample; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Arsenic in crawlspace soil, a storm sewer inlet, and exterior soil borings exceeded the MRBCA DTL and/or industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Mercury and beryllium in crawlspace soil exceeded the MRBCA DTL but not MRBCA type 3 non-residential/construction values.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 E	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment at concentrations exceeding MRBCA DTLs or industrial RSLs. No PCBs were detected in exterior soil borings. OEE Update: PCBs were detected in a concrete core sample, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	Interior soil / sediment and exterior soil borings were not analyzed for VOCs or SVOCs. OEE Update: PAHs in follow-up interior soil samples exceeded the MRBCA RBTL for industrial soil and/or MRBCA RBTL for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.
104 F	Asbestos	No building-specific inspection and management plan is included in the record. OEE Update: Interior soil samples were collected and analyzed for asbestos. Asbestos concentrations up to 6% were detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Develop a management plan that addresses asbestos in soil. Implement and document recommended asbestos O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed asbestos within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 F	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	A lead wipe sample from a crawlspace area exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Follow-up wipe samples in regularly occupied areas did not exceed the EPA threshold for floor surfaces (40 µg/ft^2) or the MRBCA non-residential cleanup criterion (200 µg/ft). Lead in a crawlspace soil and exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead was detected in bulk dust samples, but not at concentrations exceeding EPA RSLs for residential and industrial soil, or MRBCA RBTLs for residential and non-residential soil. Lead in interior soil samples exceeded the MRBCA RBTL for industrial soil and MRBCA RBTL for non-residential soil.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.
	Other Metals	Mercury was detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. Arsenic in exterior soil borings exceeded the industrial RSL, but concentrations were below the mean USGS-reported background level for St. Louis County. Thallium in an exterior soil boring exceeded the MRBCA DTL and industrial RSL. Beryllium in a crawlspace soil and an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 F	PCBs	No PCBs were detected in wipe samples, basement / crawlspace soil / sediment samples, or exterior soil borings. OEE Update: PCBs were detected in a concrete core sample, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	Benzo(a)pyrene in a shallow exterior soil boring exceeded the MRBCA DTL but not the industrial RSL.	No additional recommendations
104 G/H/J	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	No explosives were detected in soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in a tunnel soil / sediment sample exceeded the industrial RSL and MRBCA non-residential level. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Confirmation soil samples were analyzed for lead. Lead concentrations were below EPA RSLs and MRBCA RBTLs.	OEE Update: No additional recommendations
	Other Metals	Arsenic in exterior soil borings and tunnel soil / sediment samples exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential / construction value. OEE Update: Confirmation soil samples were analyzed for metals. Arsenic concentrations exceeded the EPA RSL for industrial soil, but not the IEPA background level for MSAs.	OEE Update: No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 G/H/J	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 K	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead was detected in exterior soil borings at concentrations exceeding the industrial RSL or MRBCA DTL. See also 104L.	No additional recommendations
	Other Metals	No other metals were detected in exterior soil borings at concentrations exceeding industrial RSLs or MRBCA DTLs. See also 104L.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. No PCBs were detected in one exterior soil boring.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 L	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in an exterior soil boring exceeded the MRBCA DTL. Lead in tunnel sump sediment exceeded the industrial RSL and the MRBCA type 3 non-residential value.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
104 L	Other Metals	Mercury in exterior soil borings exceeded the industrial RSL and the MRBCA type 3 non-residential / construction values. Arsenic in an exterior soil boring and tunnel sump sediment exceeded the industrial RSL and MRBCA DTL; arsenic in the tunnel sump sediment sample also exceeded the range of USGS-reported background levels for St. Louis County. Barium and copper in tunnel sump sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential values.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern. No PCBs were detected in one exterior soil boring.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
104 M/N	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: Soil samples were collected for asbestos analysis. No asbestos was detected.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in a tunnel sample exceeded the industrial RSL and the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern.	No additional recommendations
	VOCs/SVOCs	Samples specific to these buildings were not collected for VOC or SVOC analysis. No SVOCs were detected in exterior soil borings. Samples for VOC analysis do not appear to have been collected. OEE Update: Follow-up soil samples contained detectable concentrations of VOCs, SVOCs, and TPH, but these concentrations did not exceed EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 A/B/C/D	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected for asbestos analysis, and trace asbestos was detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. No explosives were detected in basement / crawlspace soil / sediment or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 A/B/C/D	Lead	Lead wipe samples collected from crawlspaces, above suspended ceilings, the floor, and a masonry wall exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil / sediment exceeded the industrial RSL and MRBCA type 3 non-residential value. Additionally, lead in sump water exceeded the MCL. Lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead was detected in bulk dust samples, but not at concentrations exceeding EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil. Lead was detected in interior soil samples, but not at concentrations exceeding EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil.	OEE Update: No additional recommendations
	Other	Sample collection was limited as compared to Building 102. OEE Update: Follow-up sampling was conducted as indicated herein.	OEE Update: No additional recommendations
	Other Metals	Mercury in building air monitoring / sampling did not exceed the PEL but did exceed MRBCA and RSL values. Arsenic in basement / crawlspace soil / sediment samples exceeded the industrial RSL and MRBCA type 3 non-residential value. Arsenic in one interior surface soil sample also exceeded the range of USGS-reported background levels for St. Louis County. Copper in surface soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Recommendation is to implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. Conduct verification indoor air samples for mercury analysis.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 A/B/C/D	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings. OEE Update: PCBs were detected in multiple concrete cores, and in one core at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: Manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces.
	VOCs/SVOCs	The PAHs benz(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene exceeded industrial RSLs and MRBCA type 3 non-residential/construction values. The PAHs bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, 3,3-dichlorobenzidine, and indeno(1,2,3-cd)pyrene in basement / crawlspace soil and sump sediment exceeded MRBCA DTLs but not MRBCA type 3 non-residential/construction values. The PAH benzo(k)fluoranthene in basement / crawlspace soil exceeded the industrial RSL but not the MRBCA value. Some crawlspace samples were collected directly from process piping/equipment.	Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.
105 E	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected for asbestos analysis, and trace asbestos was detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 E	Explosives	Explosives were detected in wipe samples; results are not directly comparable to MRBCA or RSL values but appear low enough that no further action is warranted. 2,4- and 2,6-Dinitrotoluene (SVOC analysis) in shallow soil exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations
	Lead	Lead wipe samples collected from crawlspaces and above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil / sediment exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. No lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil.	OEE Update: Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean and resample impacted area. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other Metals	Arsenic in basement / crawlspace soil / sediment samples exceeded the industrial RSL and MRBCA type 3 non-residential value. Arsenic in one surface soil sample also exceeded the range of USGS-reported background levels for St. Louis County. Beryllium and silver in surface soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential RBTL.	Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 E	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings. OEE Update: PCBs were detected in concrete cores, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	Benzo(a)pyrene in shallow soil exceeded the industrial RSL. 2,4-Dinitrotoluene, and 2,6-dinitrotoluene in shallow soil exceeded MRBCA DTLs but not MRBCA type 3 non-residential / construction values.	Develop a contaminant management plan to minimize occupational exposure to, and disturbance or dispersion of, crawlspace contamination.
105 F	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place. OEE Update: Interior soil samples were collected for asbestos analysis, and trace asbestos was detected.	OEE Update: Implement engineering or institutional controls to prevent occupational exposure to and the unauthorized disturbance or dispersion of basement/crawlspace contamination. Revise management plan to address asbestos in soil. Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in wipe samples, basement / crawlspace soil / sediment, or exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 F	Lead	Lead wipe samples collected from above suspended ceilings exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). Lead in basement / crawlspace / tunnel soil exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Lead in exterior soil borings exceeded the MRBCA DTL or industrial RSL. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil. Lead was detected in interior soil samples, but not at concentrations exceeding EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil.	OEE Update: Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean the impacted area and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other Metals	Arsenic in exterior soil borings and tunnel soil / sediment samples exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	Benzo(a)pyrene in interior soil exceeded the industrial RSL. OEE Update: PAHs were detected in exterior soil sample DPTS-32 at concentrations above EPA industrial RSLs but below IEPA background levels for MSAs.	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 G/H/J	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: No soil sample was collected directly from the building footprint, because only fill material was expected as a result of recent removal associated with utility renovations and construction of a new parking lot. No asbestos was detected in sample DPTS-37, collected west of the building footprint.	OEE Update: No additional recommendations
	Explosives	No explosives were detected in exterior soil borings.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead was detected in exterior soil borings at concentrations exceeding the MRBCA DTL or industrial RSL.	No additional recommendations
	Other Metals	No other metals were detected in exterior soil borings at concentrations exceeding industrial RSLs or MRBCA DTLs.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
105 L	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	No explosives were detected in exterior soil borings.	No additional recommendations
	Inorganics	Phosphorous was detected in shallow soil/sediment samples from crawlspaces; however, total phosphorous analytical results cannot be directly compared to MRBCA DTLs and EPA RSLs, which are for white phosphorous only. Total phosphorous concentrations were below USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
105 L	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	No PCBs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
105 M/N	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: No asbestos was detected in soil samples collected from the footprint of Buildings 105M and 105N.	Conduct additional records review as necessary to determine the former building's ACBM content and demolition approach. If building materials remain on the property or their disposition is unknown, collect soil samples for asbestos analysis. If asbestos is present, develop a management plan to minimize occupational exposure to, and disturbance or dispersion of, the asbestos. OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	No PCBs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs.	No additional recommendations
	VOCs/SVOCs	No TPH-DRO or TPH-GRO were detected. No other VOCs or SVOCs were detected at concentrations exceeding MRBCA DTLs or industrial RSLs. OEE Update: PAHs were detected in exterior soil sample DPTS-32 at concentrations above EPA industrial RSLs but below IEPA background levels for MSAs.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
106	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations
	PCBs	PCBs were not identified as a contaminant of concern.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
107	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in shallow and deep exterior soil borings exceeded the MRBCA DTL but not the MRBCA tier 3 non-residential value. OEE Update: Lead was detected in interior soil samples, but not at concentrations exceeding EPA RSLs for industrial soil or MRBCA RBTLs for non-residential soil.	OEE Update: No additional recommendations
	Other Metals	Arsenic in a shallow exterior soil boring exceeded the industrial RSL and MRBCA DTL, but concentrations were within the range of USGS-reported background concentrations for St. Louis County.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
107	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. No PCBs were detected in basement / crawlspace soil / sediment or in exterior soil borings. OEE Update: PCBs were detected in a concrete core sample at concentrations significantly exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: Manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces. Given the significance of the cleanup level exceedences at Buildings 104 A/B/C and 107, recommendation is to delineate the lateral and vertical extent of potential PCB contamination in surrounding soil and groundwater as part of a **Remedial Investigation**. If future delineation of soil and groundwater contamination reveals higher concentrations of PCBs, re-evaluate indoor air concentrations and the need for indoor air sampling.
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
108 A	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
108 A	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA non-residential / construction values. Aroclor 1260 in groundwater (one of five samples) also exceeded the MRBCA DTL, tap water RSL, and MCL. OEE Update: Although PCB concentrations in concrete core samples did not exceed the MRBCA Cleanup Level of 10 ppm, PCBs in groundwater exceeded the EPA MCL and MRBCA non-residential RBTL. The calculated indoor air concentration, assuming the maximum detected PCB concentration in groundwater and a commercial scenario, did not exceed the target risk for carcinogens.	OEE Update: Recommendation is to further delineate the lateral and vertical extent of this PCB contamination in soil and groundwater as part of a **Remedial Investigation**. If future delineation of soil and groundwater contamination reveals higher concentrations of PCBs, re-evaluate indoor air concentrations and the need for indoor air sampling.
	VOCs/SVOCs	Analysis was limited to TPH-DRO. TPH-DRO was detected in exterior soil borings and groundwater, but at concentrations below the MRBCA DTL. OEE Update: PAHs were detected in exterior soil sample DPTS-9 at concentrations above EPA industrial RSLs but below IEPA background levels for MSAs.	No additional recommendations
108 B	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Metals were not identified as a contaminant of concern.	No additional recommendations
	Other Metals	Metals were not identified as a contaminant of concern.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
108 B	PCBs	All PCB-containing transformers are reportedly removed. Aroclor 1260 was detected in wipe samples, but at concentrations below the MRBCA cleanup criterion (10 µg/cm^2) for impervious surfaces. Aroclor 1260 in crawlspace soil exceeded the industrial RSL and MRBCA DTL. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA DTL. Aroclor 1260 in groundwater (one of five samples) also exceeded the MRBCA DTL. OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm. The calculated indoor air concentration, assuming the maximum detected PCB concentration in groundwater and a commercial scenario, did not exceed the target risk for carcinogens (1.00E-06).	OEE Update: Implement engineering controls (e.g., capping, PPE requirements) and/or institutional controls (e.g., access restrictions) to prevent occupational exposure to and unauthorized disturbance or dispersion of basement/crawlspace contamination. Recommendation is to further delineate the lateral and vertical extent of this PCB contamination in soil and groundwater as part of a **Remedial Investigation**. If future delineation of soil and groundwater contamination reveals higher concentrations of PCBs, re-evaluate indoor air concentrations and the need for indoor air sampling.
	VOCs/SVOCs	Analysis was limited to TPH-DRO. TPH-DRO was detected in crawlspace soil and exterior soil borings but at concentrations below the MRBCA DTL.	Conduct additional exterior soil boring and groundwater sampling for analyses for VOCs and PCBs to determine the extent of contamination in soil and groundwater and to evaluate the potential for that contamination to migrate to indoor air.
110	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern. Liquid infiltrating an interior pit contains fluoride and fecal coliform, indicating a possible sanitary sewer system leak.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
110	Lead	Lead wipe samples collected from tank saddles and a wall and column exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). No shallow soil samples were collected from basement / crawlspace areas for lead analysis. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Lead in tap water exceeded the MRBCA DTL and MCL. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil.	OEE Update: Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean the impacted areas and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other	No groundwater sampling was conducted in vicinity of ASTs.	Sample crawlspace soil and exterior soil borings for analyses for SVOCs and TPH. Collect groundwater samples for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH. If volatiles are identified in groundwater, evaluate vapor intrusion potential.
	Other Metals	No shallow soil samples were collected from basement / crawlspace areas for metals analysis. Arsenic in exterior soil borings exceeded the industrial RSL and MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	Collect crawlspace soil samples for metals analysis.
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. No PCBs were detected in wipe samples. No shallow soil samples were collected from basement / crawlspace areas for PCB analysis. No PCBs were detected in exterior soil borings. OEE Update: PCBs were detected in two concrete core samples at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: Manage continued use and disposal of PCB-contaminated concrete in accordance with 40 CFR 761.30(p), including source removal, surface cleaning, coating or containment, and surface markings. In areas where contamination is identified and occupational exposure is anticipated, follow cleanup and containment actions with collection of indoor air samples for PCB analysis. Removal of PCB-contaminated concrete is prohibited unless disposal accords with 40 CFR 761.61 or 40 CFR 761.79 for surfaces contaminated by spills, or 40 CFR 761.62 for manufactured porous surfaces.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
110	VOCs/SVOCs	Analysis was limited to TPH. TPH DRO was detected in crawlspace soil and exterior soil borings but at concentrations below the MRBCA DTL. OEE Update: PAHs were detected in exterior soil sample DPTS-39 at concentrations exceeding EPA RSLs for industrial soil but below IEPA MSA background levels.	OEE Update: No additional recommendations
111	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: No soil sample was collected directly from the building footprint, because only fill material was expected as a result of recent removal associated with utility renovations and construction of a new parking lot. No asbestos was detected in sample DPTS-37, collected southeast of the building footprint, or samples DPTS-20 and -21, collected east of the building footprint.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	No lead in exterior soil borings exceeded the industrial RSL or MRBCA DTL.	No additional recommendations
	Other Metals	No metals in exterior soil borings exceeded the industrial RSL or MRBCA DTL.	No additional recommendations
	PCBs	All PCB-containing transformers are reportedly removed. Historical inspections noted leaking transformers in this building. In some cases, documentation of cleanup was not available. Aroclor 1260 in exterior soil borings exceeded the industrial RSL and MRBCA DTL. OEE Update: PCBs in groundwater exceeded the EPA MCL and MRBCA non-residential RBTL.	OEE Update: Recommendation is to further delineate the lateral and vertical extent of this PCB contamination in soil and groundwater as part of a **Remedial Investigation**.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
111	VOCs/SVOCs	Analysis was limited to TPH-DRO. TPH-DRO was detected in exterior soil borings and groundwater, but at concentrations below the MRBCA DTL. OEE Update: PAHs were detected in exterior soil sample DPTS-9 at concentrations above EPA industrial RSLs but below IEPA background levels for MSAs.	No additional recommendations
115	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	One lead wipe sample collected in the crawlspace exceeded the MRBCA non-residential cleanup criterion (200 µg/ft^2). No shallow soil samples were collected from basement / crawlspace areas for lead analysis. Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. OEE Update: Bulk dust verification samples were collected from occupied areas. Lead in a bulk dust sample exceeded the EPA RSLs for residential and industrial soil, as well as MRBCA RBTLs for residential and non-residential soil. A planned interior soil sample could not be collected because the tunnel floor was concrete.	OEE Update: Ensure that lead-based paint is encapsulated or abated in accordance with federal and state laws and regulations. Clean the impacted area and conduct verification sampling. Implement and maintain housekeeping procedures and systems to minimize and eliminate the presence of dust.
	Other Metals	No shallow soil samples were collected from basement / crawlspace areas for metals analysis. Arsenic in exterior soil borings exceeded the industrial RSL and MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County. Beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential RBTL.	Collect crawlspace soil samples for metals analysis.

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
115	PCBs	No PCBs were detected in wipe samples. No basement / crawlspace soil samples were collected for PCB analysis. No PCBs were detected in exterior soil borings. OEE Update: PCBs were detected in a concrete core sample, but at concentrations below the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations
	VOCs/SVOCs	No basement / crawlspace shallow soil samples were collected for VOC/SVOC analysis. No TPH DRO or TPH GRO in exterior soil borings exceeded the industrial RSL or MRBCA DTL. Analysis included VOCs but not SVOCs. Groundwater sampling was limited to TPH analysis.	Conduct additional exterior soil boring and groundwater sampling for analyses for VOCs including 1,4-dioxane, SVOCs, and TPH to determine the extent of contamination in soil and groundwater, and to evaluate the potential for that contamination to migrate to indoor air.
122 B	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in the shallow and deep portions of an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic in the shallow and deep portions of an exterior soil boring exceeded the MRBCA DTL, but concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	Samples specific to this building do not appear to have been collected for PCB analysis. The nearest buildings are Buildings 108A and 110. OEE Update: PCBs were detected in a concrete core sample, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
122 B	Pesticides / Herbicides	Grounds crews may have handled pesticides or herbicides. No groundwater sampling was conducted in the vicinity of the maintenance/service shop. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
	VOCs/SVOCs	Samples specific to this building do not appear to have been collected for VOC or SVOC analysis. The nearest buildings are Buildings 108A and 110. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
136 A/B/E/F	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: No asbestos was detected in a soil sample collected near the building footprint.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other	No groundwater sampling was conducted in vicinity of fuel tanks. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
	Other Metals	Arsenic and beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Arsenic concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
136 A/B/E/F	VOCs/SVOCs	No VOCs were detected in exterior soil borings. Analysis did not include SVOCs or TPH. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
137 A	Asbestos	No information on the former building's ACBM content or demolition is available in the record. Whether building materials were removed from facility property is unclear. OEE Update: No asbestos was detected in a soil sample collected near the building footprint.	OEE Update: No additional recommendations
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	Lead in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value.	No additional recommendations
	Other Metals	Arsenic and beryllium in exterior soil borings exceeded the MRBCA DTL but not the MRBCA type 3 non-residential value. Arsenic concentrations were below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	No PCBs were detected in exterior soil borings.	No additional recommendations
	VOCs/SVOCs	No VOCs in exterior soil borings exceeded the industrial RSL or MRBCA DTL. Analysis did not include SVOCs or TPH. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
	Pesticides/ Herbicides	Grounds crews may have handled pesticides or herbicides. No groundwater sampling was conducted in the vicinity of fuel tanks. OEE Update: Follow-up sampling revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
141 C	Asbestos	A building-wide survey indicated ACBM was present. Not all areas were accessible, and destructive testing was not conducted in all cases. A management plan is in place.	Implement and document recommended ACBM O&M and response actions. Have an accredited inspector re-inspect all friable and non-friable known or assumed ACBM within 3 years of effective date of management plan. Before commencing renovation or construction projects, validate inventory.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	The lead concentration in an exterior soil boring was below the MRBCA DTL and industrial RSL.	No additional recommendations
	Other Metals	Arsenic and beryllium in an exterior soil boring exceeded the MRBCA DTL but not the MRBCA type 3 non-residential RBTL. The arsenic concentration was below the mean of USGS-reported background levels for St. Louis County.	No additional recommendations
	PCBs	No PCBs were detected in an exterior soil boring.	No additional recommendations
	VOCs/SVOCs	VOCs/SVOCs were not identified as contaminants of concern.	No additional recommendations
208 B	Asbestos	No building-specific inspection and management plan is included in the record.	Before commencing renovation or construction projects, conduct and document a building-wide ACBM survey. If ACBM is identified, prepare an asbestos management plan.
	Explosives	Explosives were not identified as a contaminant of concern.	No additional recommendations
	Inorganics	Inorganics were not identified as a contaminant of concern.	No additional recommendations
	Lead	OEE Update: No lead was detected in exterior soil samples.	OEE Update: No additional recommendations
	Other Metals	OEE Update: No other RCRA metals were detected in exterior soil samples.	OEE Update: No additional recommendations

TABLE 14
CONCLUDING BUILDING ENVIRONMENTAL SUMMARY AND RECOMMENDATIONS

Building	Contaminant	Summary	Recommendations
208 B	PCBs	OEE Update: PCBs were detected in concrete core samples, but not at concentrations exceeding the MRBCA Cleanup Level of 10 ppm. Exterior soil samples revealed no exceedences of EPA industrial RSLs or MRBCA non-residential RBTLs.	OEE Update: No additional recommendations
	VOCs/SVOCs	OEE Update: No VOCs, SVOCs, or TPH were detected in exterior soil samples.	OEE Update: No additional recommendations