

## **Department of Energy**

Portsmouth/Paducah Project Office 1017 Majestic Drive, Suite 200 Lexington, Kentucky 40513 (859) 219-4000

March 18, 2021

Mr. Brian Begley Federal Facility Agreement Manager Division of Waste Management Kentucky Department for Environmental Protection 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601

Mr. Victor Weeks Federal Facility Agreement Manager U.S. Environmental Protection Agency, Region 4 61 Forsyth Street Atlanta, Georgia 30303

Dear Mr. Begley and Mr. Weeks:

### TRANSMITTAL OF THE SITE EVALUATION REPORT FOR THE C-606 COAL CRUSHER BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2454&D1

In accordance with Appendix 4 of the approved Site Management Plan of the Paducah Federal Facility Agreement (FFA), the U.S. Department of Energy (DOE) hereby submits the D1 Site Evaluation Report for the C-606 Coal Crusher Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2454&D1 (SE) to the U.S. Environmental Protection Agency (EPA) and the Kentucky Department for Environmental Protection (KDEP) for review and comment. A joint policy issued under the DOE and EPA Memorandum, dated May 22, 1995, Policy on Decommissioning Department of Energy Facilities Under CERCLA, establishes a framework for conducting the decommissioning of DOE facilities and provides guidance on the use of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response authority to decommission DOE facilities. This policy states that DOE is required to conduct a removal site evaluation, in accordance with the National Contingency Plan and interagency agreements (i.e., FFA), to assess site conditions and determine whether a release or substantial threat of release exists at the facility. DOE, EPA, and KDEP have agreed to conduct decontamination and decommissioning activities for those facilities that pose an environmental release threat at the Paducah Site under the existing FFA. Section IX, Site *Evaluation(s)*, of the FFA requires that DOE conduct integrated site evaluations that consist of the removal site evaluation, remedial site evaluation, and solid waste management unit assessment reports. These integrated site evaluations are to be documented in an SE report.

PPPO-02-10009537-21

The C-606 Facility is listed in Appendix 4 of the Fiscal Year 2021 Site Management Plan under the Detailed Facility Decontamination and Decommissioning Operable Unit Facilities List as pending an SE. The enclosed SE recommends that a CERCLA non-time-critical removal action for the facility is warranted. Upon approval, Appendix 4 will be updated to indicate the facility status.

In accordance with Section XX of the FFA, EPA and KDEP have a 30-day review period to provide comments and/or approval of the document.

If you have any questions or require additional information, please contact me at (270) 441-6862.

Sincerely,



Digitally signed by Tracey L. Duncan Date: 2021.03.18 13:52:41 -05'00'

Tracey Duncan Federal Facility Agreement Manager Portsmouth/Paducah Project Office

Enclosures:

- 1. Certification Page
- 2. Site Evaluation Report for the C-606 Coal Crusher Building, DOE/LX/07-2454&D1

Administrative Record File-DDARC

cc w/enclosures: abigail.parish@pppo.gov, PPPO april.ladd@pppo.gov, PPPO april.webb@ky.gov, KDEP arcorrespondence@pad.pppo.gov, FRNP brian.begley@ky.gov, KDEP bruce.ford@pad.pppo.gov, FRNP bwhatton@tva.gov, TVA christopher.travis@ky.gov, KDEP frnpcorrespondence@pad.pppo.gov hjlawrence@tva.gov, TVA jana.white@pad.pppo.gov, FRNP jennifer.woodard@pppo.gov, PPPO joel.bradburne@pppo.gov, PPPO

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#### CERTIFICATION

#### **Document Identification:**

Site Evaluation Report for the C-606 Coal Crusher Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2454&D1

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Four Rivers Nuclear Partnership, LLC

Myrna E. Redfield, Program Manager Four Rivers Nuclear Partnership, LLC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U.S. Department of Energy

Pontifier Woodard, Paducah Site Lead Portsmouth/Paducah Project Office U.S. Department of Energy

DOE/LX/07-2454&D1 Primary Document

Site Evaluation Report for the C-606 Coal Crusher Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky



# **CLEARED FOR PUBLIC RELEASE**

### DOE/LX/07-2454&D1 Primary Document

### Site Evaluation Report for the C-606 Coal Crusher Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky

Date Issued—March 2021

U.S. DEPARTMENT OF ENERGY Office of Environmental Management

Prepared by FOUR RIVERS NUCLEAR PARTNERSHIP, LLC, managing the Deactivation and Remediation Project at the Paducah Gaseous Diffusion Plant under Contract DE-EM0004895

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## ACRONYMS

AOC	area of concern
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement
NAL	no action level
NTCRA	non-time-critical removal action
OU	operable unit
PEGASIS	Portsmouth/Paducah Project Office Environmental Geographic Analytical Spatial
	Information System
RCRA	Resource Conservation and Recovery Act
RI	remedial investigation
SE	site evaluation
SMP	Site Management Plan
SWMU	solid waste management unit

#### **1. FACILITY/UNIT NUMBER**

C-606

### 2. FACILITY/UNIT NAME

Coal Crusher Building

#### **3. DATE**

March 18, 2021

#### 4. REGULATORY STATUS

A joint policy issued under a U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA) Memorandum dated May 22, 1995, Policy on Decommissioning Department of Energy Facilities under CERCLA (DOE 1995), establishes a framework for conducting decommissioning of DOE facilities and provides guidance on the use of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) response authority to decommission DOE facilities. The Policy states that DOE is required to conduct a removal site evaluation (SE) in accordance with the National Contingency Plan and interagency agreements [i.e., Federal Facility Agreement (FFA)] to assess site conditions and determine whether a release or substantial threat of release exists at the facility. At any facility for which DOE conducts a removal site evaluation, DOE will consult with EPA and will provide, as requested, EPA with such information necessary for EPA to review such evaluation. DOE, EPA, and the Commonwealth of Kentucky have agreed to conduct decontamination and decommissioning (D&D) activities for those facilities that pose an environmental release threat at the Paducah Gaseous Diffusion Plant under the existing FFA. Section IX [Site Evaluation(s)] of the FFA requires that DOE conduct integrated SEs that consist of the removal site evaluation, remedial site evaluation, and solid waste management unit (SWMU) assessment reports. The integrated SEs are to be documented in a site evaluation report consistent with the format in Appendix D of the FFA (EPA 1998).

Industrial facilities that DOE has determined to pose a potential threat of release of hazardous substances to the environment are listed as part of the facility D&D Operable Unit (OU) in Appendix 4 of the Site Management Plan (SMP) (DOE 2020). The SE report shall state whether demolition of the facility should be conducted using a CERCLA Non-Time-Critical Removal Action (NTCRA) and will serve to designate any facility or portions thereof that are related to any identified release as a SWMU and/or area of concern (AOC).

### **5. LOCATION**

The C-606 Coal Crusher Building is located in the central portion of the industrialized area of the Paducah Site, north of the C-600 Steam Plant. Figures 1 and 2 provide the location of C-606.

#### 6. APPROXIMATE DIMENSION OR CAPACITY

The gross floor space of C-606 is 1,470 ft<sup>2</sup> with an approximately 294 ft<sup>2</sup> footprint. C-606 is an approximately 51.5-ft tall, rectangular-plan building with a concrete foundation and/or basement. The approximate dimensions of C-606 are 21 ft  $\times$  14 ft. The building has an approximately 15-ft deep basement with a coal hopper pit. Figure 3 provides a portion of an engineering drawing that shows the building plan and profile, and Figures 4 and 5 are exterior photographs of the facility. Figure 6 shows the entrance to the

main building and an entrance to the underground portion of C-606. Additional engineering drawings are provided in the appendix to this report.

### 7. FUNCTION

C-606 housed the equipment used to crush, or pulverize, coal to a smaller, acceptable size for use at C-600. C-606 operated from construction in 1981 until early 2015. While in operation, coal was received by railcar and unloaded to the building via conveyor #1. There is also a coal feeder hopper on the north side of the building consisting of a metal grate over the hopper pit (Figure 7). Inside the facility the coal was crushed, or pulverized, to a smaller size acceptable for use at C-600. Figures 8 and 9 are interior views of the facility that show the instrumentation and the coal crusher equipment, respectively. From C-606, the pulverized coal either went directly to a coal chute for C-600 via conveyor #2 or to the C-602 Coal Storage Yard via conveyor #3.

#### 8. BRIEF HISTORY

C-606 was constructed in 1981 and operated until 2015. C-606 was leased to the United States Enrichment Corporation in the early 1990s. The coal crusher equipment was replaced with new equipment in 2011 and 2012. The facility was transitioned from the United States Enrichment Corporation to DOE in 2014 and ceased operations in April 2015 when coal was no longer used at the Paducah Site.

#### 9. OPERATIONAL STATUS

Shutdown

#### **10. DATES OPERATED**

1981 to 2015

#### **11. SITE/PROCESS DESCRIPTION**

C-606 was used to crush, or pulverize, coal to a smaller, acceptable size for use at C-600. The general process is described above in Section 7, Function. A facility walkdown occurred in October 2020 and noted that all coal handling and crushing equipment was present in the building. There was standing water in the basement/hopper of the building which is pumped periodically from the facility.

#### **12. WASTE DESCRIPTION**

The primary waste stream that would be generated during D&D of C-606 would be nonhazardous construction and/or demolition debris. This demolition debris will be comprised primarily of metal structural components, concrete, equipment, insulation, and metal siding with the exceptions noted below.

Limited infrastructure items remain in the facility (e.g., light fixtures, exit lights, instrumentation panels, alarms) that could potentially contain *de minimis* quantities of regulated items [e.g., mercury, lead, polychlorinated biphenyls (PCBs)] which will be removed to the extent practicable during deactivation. The coal crusher motor likely contains lubricants and the associated gear boxes may contain oils. Any oils will be drained and properly dispositioned during deactivation prior to building demolition. Generation of any residual amounts of regulated items during deactivation and/or demolition will be properly containerized, characterized, and dispositioned in accordance with applicable regulatory requirements.

#### **13. WASTE QUANTITY**

Based on the waste forecast information available in the *Remedial Investigation/Feasibility Study Report* for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE 2018), the waste volume associated with C-606 is approximately 162 yd<sup>3</sup>. This volume is assumed to be nonhazardous solid waste.

#### 14. SUMMARY OF ENVIRONMENTAL SAMPLING DATA

Limited sampling of environmental media has occurred near C-606. Environmental sampling data were queried and viewed on the DOE's Portsmouth/Paducah Project Office Environmental Geographic Analytical Spatial Information System (PEGASIS). PEGASIS allowed a visual evaluation of environmental data located in proximity to C-606. Environmental data were available from 26 locations within 50 ft of C-606. These data were collected as part of previous environmental studies and investigations conducted at the Paducah Site with all samples associated with the evaluation of the C-616-L Pipeline and Vault soil contamination area (SWMU 165) as part of the Waste Area Groups 9 and 11 site investigation (DOE 1997; DOE 1999). SWMU 165, located east of C-606, was further evaluated as part of the Soils OU (DOE 2013). Soil samples were collected from 26 locations, primarily for PCBs (one location in 1990, 23 locations in 1995, and two locations in 1998). Several samples collected in 1995 included analyses for metals, and the samples collected in 1998 were analyzed for total polycyclic aromatic hydrocarbons also. The sampling locations for these data are shown in Figure 10. Historical data are shown in a table in the appendix to this report.

Soil data associated with SWMU 165 are evaluated in the Waste Area Groups 9 and 11 SE Report (DOE 1999) and the Soils OU Remedial Investigation (RI) Report (DOE 2013). The Soils OU RI Report provided comparisons to provisional background values where available, and comparisons to no action levels (NALs) and action levels for the industrial worker. The anticipated future land use likely is to be industrial. In addition, detected soil concentrations were compared to soil concentrations for the protection of groundwater. A discussion of the data comparison to the NAL criteria are provided later in this report.

For the soil sample locations evaluated in this SE, two constituents (barium and cadmium) were detected at concentrations that exceed the associated Paducah Site provisional background values in samples within 50 ft of C-606.

#### **15. DESCRIPTION OF RELEASE AND MEDIA AFFECTED**

Groundwater:	None Known
Surface Water:	None Known
<u>Soil</u> :	None Known
Ecology Affected (i.e., threatened/endangered species):	None Known
<u>Air</u> :	None Known

No releases are known to have occurred at C-606; however, by virtue of the nature of past operations within the building, and the equipment and materials contained therein, the building represents a potential threat of a release of contaminants into the environment due to the presence of coal dust and residual coal. Coal contains trace elements and radionuclides, many of which are identified as contaminants of potential concern.

#### **16. DOCUMENTATION OF NO RELEASE**

No releases are known to have occurred at C-606; however, by virtue of the nature of past operations within the building, and the equipment and materials contained therein, the building represents a potential threat of a release of contaminants into the environment due to the presence of coal dust and residual coal.

#### **17. IMPACT ON OR BY OTHER SWMU/AOC**

There is no evidence that this facility impacts or is being impacted by other SWMUs and/or AOCs. Runoff associated with SWMU 165 that originates from coal pile and/or ash pile runoff lagoons potentially has impacted the area around C-606 (DOE 2013). While measures to be implemented during D&D are not a part of this SE, the CERCLA removal action documents for demolition of the C-606 facility would identify any necessary best management practices to prevent and/or minimize contaminated storm-water runoff and any debris from pooling and collecting in the below-grade coal hopper.

#### **18. PRELIMINARY REMEDIATION GOAL COMPARISON**

Based on the data, only arsenic had soil concentrations that exceeded the industrial worker NAL in samples collected within 50 ft of C-606 (at locations WC5-182, WC5-184, WC5-188, WC5-192, and WC5-194). The maximum detected concentration of arsenic (4.6 mg/kg) in those samples is less than the Paducah Site provisional surface soil background concentration (12 mg/kg).

The only analytes in soil in the samples collected within 50 ft of C-606 that exceeded both the provisional background concentrations and the groundwater protection screening values were barium and cadmium. Both barium and cadmium exceeded the screening values at locations WC5-182 and WC5-194 while cadmium exceeded the screening values at locations WC5-184, WC5-188, and WC5-192. Metals such as arsenic, barium, and cadmium are typically found in coal.

The Soils OU RI report concluded that plant processes that could have resulted in contamination at SWMU 165, and the vicinity of C-606, were releases from the coal pile runoff lagoons (DOE 2013).

### **19. RCRA FACILITY INVESTIGATION NECESSARY**

A Resource Conservation Recovery Act (RCRA) Facility Investigation is recommended for C-606. There is no evidence of a release; however, the building represents a potential threat of a release of contaminants into the environment due to the presence of coal dust and residual coal.

#### 20. CERCLA NTCRA NECESSARY

A CERCLA NTCRA is recommended for demolition of the facility structure following completion of deactivation. Based on knowledge regarding past usage, C-606 is believed to represent a potential threat of a release of contaminants into the environment due to the presence of residual coal and coal dust. Because no imminent danger exists, the building infrastructure removal action would be categorized as non-time-critical. Deactivation will include removal of any accessible loose items, to the extent practicable, prior to demolition.

#### **21. OU ASSIGNMENT**

C-606 currently is assigned to Facility D&D OU, Other Buildings (non-SWMUs) (SMP Appendix 4) (DOE 2020).

#### **22. REFERENCES**

- DOE (U.S. Department of Energy) 1995. Policy on Decommissioning of Department of Energy Facilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Joint policy from the U.S. Department of Energy and U.S. Environmental Protection Agency, May 22, 1995.
- DOE 1997. Sampling and Analysis Plan for the Site Evaluation of Waste Area Groupings 9 and 11 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-1582&D2, U.S. Department of Energy, Paducah, KY, June.
- DOE 1999. WAGs 9 & 11 Site Evaluation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-1785&D2, U.S. Department of Energy, Paducah, KY, June.
- DOE 2013. Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1, U.S. Department of Energy, Paducah, KY, February.
- DOE 2018. Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0244&D2/R2, U.S. Department of Energy, Paducah, KY, July.
- DOE 2020. Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2021, DOE/LX/07-2450&D1, U.S. Department of Energy, Paducah, KY, November.
- EPA (U.S. Environmental Protection Agency) 1998. Federal Facility Agreement for the Paducah Gaseous Diffusion Plant, DOE/OR/07-1707, U.S. Environmental Protection Agency, Atlanta, GA, February.



Figure 1. Aerial Photograph Showing the C-606 Coal Crusher Building Location



Figure 2. Map Showing the C-606 Coal Crusher Building Location

![](_page_20_Figure_0.jpeg)

Figure 3. Profile and Floor Plan for C-606

![](_page_21_Picture_0.jpeg)

Figure 4. Exterior View of C-606 (Looking Northeast)

![](_page_22_Figure_0.jpeg)

Figure 5. Exterior View of C-606 (Looking Southwest)

![](_page_23_Picture_0.jpeg)

Figure 6. C-606 Entry for Ground Level and Underground/Basement (Looking West)

![](_page_23_Picture_2.jpeg)

Figure 7. Coal Feeder Hopper on North Side of C-606 (Looking Southwest)

![](_page_24_Picture_0.jpeg)

Figure 8. Interior View of the C-606 Instrumentation Panel

![](_page_24_Picture_2.jpeg)

Figure 9. Interior View of the C-606 Coal Crushing Equipment Drive Assembly

![](_page_25_Figure_0.jpeg)

Figure 10. SWMU and Sample Locations near C-606

APPENDIX

ENGINEERING DRAWINGS AND HISTORICAL DATA

![](_page_29_Figure_0.jpeg)

![](_page_29_Figure_1.jpeg)

A-3

![](_page_30_Figure_0.jpeg)

Figure A.2. Engineering Drawing A5EI4629B

A-4

Station	Sample ID	Depth (ft)	Collected	Result	Units	Analysis	Lab Qualifier <sup>b</sup>
165-008	165008SA001	0-1	9/17/1998	2	mg/kg	Polychlorinated biphenyl	<
165-008	165008SA001	0-1	9/17/1998	20	mg/kg	Polycyclic aromatic hydrocarbons (PAH)	U
165-009	165009SA001	0-1	9/18/1998	2	mg/kg	Polychlorinated biphenyl	<
165-009	165009SA001	0-1	9/18/1998	2	mg/kg	Polycyclic aromatic hydrocarbons (PAH)	U
RC-3917	RC-3917 <sup>a</sup>	0.5-0.5	5/31/1990	1000	µg/kg	Polychlorinated biphenyl	<
RC-3937	RC-3937 <sup>a</sup>	1.5-1.5	5/31/1990	1000	µg/kg	Polychlorinated biphenyl	<
RC-3957	RC-3957	1.5-1.5	7/9/1990	100	µg/kg	Polychlorinated biphenyl	<
RC-3977	RC-3977 <sup>a</sup>	0.5-0.5	4/25/1990	2900	µg/kg	Polychlorinated biphenyl	<
WC5-176	WC5-176	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-176	WC5-176D	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-177	WC5-177	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-178	WC5-178	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-179	WC5-179	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-180	WC5-180	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-181	WC5-181	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-182	WC5-182	1-1	3/10/1995	53	mg/kg	Antimony	UJN
WC5-182	WC5-182	1-1	3/10/1995	3	mg/kg	Arsenic	
WC5-182	WC5-182	1-1	3/10/1995	205	mg/kg	Barium	Ν
WC5-182	WC5-182	1-1	3/10/1995	0.24	mg/kg	Cadmium	
WC5-182	WC5-182	1-1	3/10/1995	24	mg/kg	Chromium	U
WC5-182	WC5-182	1-1	3/10/1995	46	mg/kg	Lead	UX
WC5-182	WC5-182	1-1	3/10/1995	0.2	mg/kg	Mercury	U
WC5-182	WC5-182	1-1	3/10/1995	140	mg/kg	Nickel	U
WC5-182	WC5-182	1-1	3/10/1995	0.5	mg/kg	Selenium	U
WC5-182	WC5-182	1-1	3/10/1995	4	mg/kg	Silver	U
WC5-182	WC5-182	1-1	3/10/1995	210	mg/kg	Thallium	U
WC5-182	WC5-182	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-183	WC5-183	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-184	WC5-184	1-1	3/10/1995	53	mg/kg	Antimony	UJN
WC5-184	WC5-184	1-1	3/10/1995	3.1	mg/kg	Arsenic	
WC5-184	WC5-184	1-1	3/10/1995	139	mg/kg	Barium	Ν
WC5-184	WC5-184	1-1	3/10/1995	0.23	mg/kg	Cadmium	
WC5-184	WC5-184	1-1	3/10/1995	24	mg/kg	Chromium	U
WC5-184	WC5-184	1-1	3/10/1995	46	mg/kg	Lead	UX
WC5-184	WC5-184	1-1	3/10/1995	0.2	mg/kg	Mercury	U
WC5-184	WC5-184	1-1	3/10/1995	140	mg/kg	Nickel	U

Station	Sample ID	Depth (ft)	Collected	Result	Units	Analysis	Lab Qualifier <sup>b</sup>
WC5-184	WC5-184	1-1	3/10/1995	0.5	mg/kg	Selenium	U
WC5-184	WC5-184	1-1	3/10/1995	4	mg/kg	Silver	U
WC5-184	WC5-184	1-1	3/10/1995	210	mg/kg	Thallium	U
WC5-184	WC5-184	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-185	WC5-185	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-186	WC5-186	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-187	WC5-187	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-188	WC5-188	1-1	3/10/1995	53	mg/kg	Antimony	UJN
WC5-188	WC5-188	1-1	3/10/1995	3.3	mg/kg	Arsenic	
WC5-188	WC5-188	1-1	3/10/1995	149	mg/kg	Barium	N
WC5-188	WC5-188	1-1	3/10/1995	2.3	mg/kg	Cadmium	
WC5-188	WC5-188	1-1	3/10/1995	24	mg/kg	Chromium	U
WC5-188	WC5-188	1-1	3/10/1995	46	mg/kg	Lead	UX
WC5-188	WC5-188	1-1	3/10/1995	0.2	mg/kg	Mercury	U
WC5-188	WC5-188	1-1	3/10/1995	140	mg/kg	Nickel	U
WC5-188	WC5-188	1-1	3/10/1995	0.5	mg/kg	Selenium	U
WC5-188	WC5-188	1-1	3/10/1995	4	mg/kg	Silver	U
WC5-188	WC5-188	1-1	3/10/1995	210	mg/kg	Thallium	U
WC5-188	WC5-188	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-189	WC5-189	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-190	WC5-190	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-191	WC5-191	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-192	WC5-192	1-1	3/10/1995	53	mg/kg	Antimony	UJN
WC5-192	WC5-192	1-1	3/10/1995	2.7	mg/kg	Arsenic	
WC5-192	WC5-192	1-1	3/10/1995	140	mg/kg	Barium	N
WC5-192	WC5-192	1-1	3/10/1995	3.4	mg/kg	Cadmium	
WC5-192	WC5-192	1-1	3/10/1995	24	mg/kg	Chromium	U
WC5-192	WC5-192	1-1	3/10/1995	46	mg/kg	Lead	UX
WC5-192	WC5-192	1-1	3/10/1995	0.2	mg/kg	Mercury	U
WC5-192	WC5-192	1-1	3/10/1995	140	mg/kg	Nickel	U
WC5-192	WC5-192	1-1	3/10/1995	0.5	mg/kg	Selenium	U
WC5-192	WC5-192	1-1	3/10/1995	4	mg/kg	Silver	U
WC5-192	WC5-192	1-1	3/10/1995	210	mg/kg	Thallium	U
WC5-192	WC5-192	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-193	WC5-193	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-194	WC5-194	1-1	3/10/1995	53	mg/kg	Antimony	UJN
WC5-194	WC5-194	1-1	3/10/1995	4.6	mg/kg	Arsenic	

#### Historical Soil Data near C-606 (Continued)

Station	Sample ID	Depth (ft)	Collected	Result	Units	Analysis	Lab Qualifier <sup>b</sup>
WC5-194	WC5-194	1-1	3/10/1995	222	mg/kg	Barium	Ν
WC5-194	WC5-194	1-1	3/10/1995	3.6	mg/kg	Cadmium	
WC5-194	WC5-194	1-1	3/10/1995	24	mg/kg	Chromium	U
WC5-194	WC5-194	1-1	3/10/1995	46	mg/kg	Lead	UX
WC5-194	WC5-194	1-1	3/10/1995	0.2	mg/kg	Mercury	U
WC5-194	WC5-194	1-1	3/10/1995	140	mg/kg	Nickel	U
WC5-194	WC5-194	1-1	3/10/1995	0.5	mg/kg	Selenium	U
WC5-194	WC5-194	1-1	3/10/1995	4	mg/kg	Silver	U
WC5-194	WC5-194	1-1	3/10/1995	210	mg/kg	Thallium	U
WC5-194	WC5-194	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<
WC5-195	WC5-195	1-1	3/10/1995	100	µg/kg	Polychlorinated biphenyl	<

<sup>a</sup> Samples are flagged as Soil and sediment samples collected in a location that has been removed (e.g., excavated) since sampling and are no longer representative of current conditions.

<sup>b</sup> Lab Qualifiers as defined as the following. A blank field indicates no qualifiers were applied.

< Numerical value reported was less than the requested reporting limit.

U Not detected.

J Estimated, tentatively identified compound or less than specified detection limit

N Spike recovery not within control limits.

X Other specific flags and footnotes may be required to properly define the results (see comments).