# CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO



# U.S. Department of Energy DOE/EA-1856 Final

# June 2017

This document is approved for public release per review by:

James Snodgrass (signature on file)	6-21-17
PORTS Classification Office/Export Controlled Information Officer	Date

# CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO

# U.S. Department of Energy DOE/EA-1856 Final

June 2017

Prepared for U.S. Department of Energy Portsmouth/Paducah Project Office

Prepared by Fluor-BWXT Portsmouth LLC, Under Contract DE-AC30-10CC40017 FBP-ER-GEN-WD-RPT-0076, Revision 6

# CONTENTS

## Page

FIGUR	ES				v
TABL	E <b>S</b>				v
ACRO	NYMS.				vii
1.	INTRC	DUCTIO	N		1
	1.1	PURPOS	SE AND NE	ED FOR ACTION	1
	1.2	BACKG	ROUND		1
	1.3	SCOPE (	OF THIS EN	VIRONMENTAL ASSESSMENT	4
2.	DESCH	RIPTION	OF PROPOS	SED ACTION AND ALTERNATIVES	7
	2.1	PROPOS	SED ACTIO	N	7
		2.1.1	Land Use S	Scenarios and Assumptions	11
		2.1.2	CERCLA	120(h) Compliance	16
	2.2	NO ACT	TION ALTE	RNATIVE	17
	2.3	ALTERN	NATIVES C	ONSIDERED BUT ELIMINATED	17
		2.3.1	Lease-only	v or License-only Alternative	17
		2.3.2	Use of Pro	perty in a Manner Not Consistent with Expected Future Use	17
3	AFFE	TED EN	VIRONMEN	IT AND ENVIRONMENTAL CONSEQUENCES	19
5.	31		ISE AND V	ISUAL RESOURCES	19
	5.1	3.1.1	Affected F	nvironment	19
		••••	3.1.1.1	Land use	19
			3.1.1.2	Visual resources	20
		3.1.2	Environme	ental Consequences	21
			3.1.2.1	Proposed Action	21
			3.1.2.2	No Action Alternative	21
	3.2	CLIMAT	ΓE, AIR QU	ALITY, AND NOISE	21
		3.2.1	Affected E	nvironment	22
			3.2.1.1	Climate	22
			3.2.1.2	Air quality	23
			3.2.1.3	Noise	26
		3.2.2	Environme	ental Consequences	26
			3.2.2.1	Proposed Action	26
			3.2.2.2	No Action Alternative	28
	3.3	GEOLO	GY AND SO	DILS	28
		3.3.1	Affected E	nvironment	28
			3.3.1.1	Geology	28
			3.3.1.2	Soils	30
		3.3.2	Environme	ental Consequences	31
			3.3.2.1	Proposed Action	31
			3.3.2.2	No Action Alternative	31

# Page

3.4	WATER RESOURCES			
	3.4.1	Affected	Environment	
		3.4.1.1	Surface water	
		3.4.1.2	Groundwater	
		3.4.1.3	Floodplains and wetlands	
	3.4.2	Environm	nental Consequences	
		3.4.2.1	Proposed Action	
		3.4.2.2	No Action Alternative	
3.5	ECOLO	GICAL RE	SOURCES	
	3.5.1	Affected	Environment	
		3.5.1.1	Terrestrial resources	
		3.5.1.2	Aquatic resources	
		3513	Rare threatened and endangered species	47
		3514	Invasive species	50
		3515	Environmentally sensitive areas	50
	352	Environm	ental Consequences	51
	5.5.2	3 5 2 1	Proposed Action	51
		3522	No Action Alternative	52
3.6		RAL RESC	NIRCES	
5.0	361	Affected	Fnvironment	
	3.6.2	Environm	pental Consequences	
	5.0.2	2621	Proposed Action	
		3.0.2.1	No Action Alternative	
27	SOCIOI	5.0.2.2 ECONOMI	NO ACUOII AILEINAUVE	
5.7	3 7 1	Affected	Environment	
	3.7.1	2 7 1 1	Socioeconomics	
		3.7.1.1	Environmental justice	
	272	5.7.1.2 Environm	Environmental justice	
	3.1.2		Drop aged A ation	01
		3.7.2.1	Proposed Action	01
20		3.7.2.2	NO ACTION AITEMATIVE	
3.8	INFKA:	SIRUCIUE	KE AND TRANSPORTATION	
	3.8.1	Affected	Environment	
		3.8.1.1	Public utilities	
		3.8.1.2	Site utilities	
	• • •	3.8.1.3	Transportation	
	3.8.2	Environm	nental Consequences	
		3.8.2.1	Proposed Action	
		3.8.2.2	No Action Alternative	
3.9	WASTE	E MANAGE	EMENT	
	3.9.1	Affected	Environment	
	3.9.2	Environm	nental Consequences	67
		3.9.2.1	Proposed Action	67
		3.9.2.2	No Action Alternative	
3.10	HUMA	N HEALTH	I AND SAFETY	
	3.10.1	Affected	Environment	
	3.10.2	Environm	nental Consequences	69

# Page

		3.10.2.1 3.10.2.2 3.10.2.3	Proposed Action No Action Alternative Intentionally destructive acts	69 70 70
4.	CUMU	LATIVE IMPACTS		
	4.1	METHODOLOGY A	ND ANALYTICAL BASELINE	71
	4.2	POTENTIALLY CU	MULATIVE ACTIONS	71
	4.3	CUMULATIVE IMP	ACTS BY RESOURCE AREA	73
5.	REFER	ENCES		79
APPEN	IDIX A:	PUBLIC PARTICIPA	ATION AND COMMENT RESPONSE DOCUMENT	A-1
APPEN	DIX B:	CONSULTATION A	ND CORRESPONDENCE	B-1

# **FIGURES**

### Page

1.	Location of PORTS	2
2.	Aerial View of PORTS (circa early 2000s)	
3.	DOE PORTS Area	9
4.	Wind Rose for PORTS (98-ft level)	
5.	Schematic Block Diagram Showing Geological Relationships at PORTS	
6.	Surface Water Features in the PORTS Vicinity	
7.	Surface Water Monitoring Locations	
8.	100-Year Floodplains Near PORTS	
9.	Wetlands Identified at PORTS	41

# TABLES

1.	Characteristics and Requirements of Typical Businesses and Industries that Could Occur	
	on Real Property after Transfer	. 13
2.	NAAQS and Attainment Status for PORTS	.24
3.	Summary of Trichloroethene Removed by PORTS Groundwater Treatment Facilities in 2015.	. 38
4.	Terrestrial Habitat Types at PORTS	. 46
5.	Federally- and State-listed Terrestrial RTE Species in the PORTS Vicinity	. 48
6.	State-listed RTE Plant Species Identified at PORTS	. 49
7.	Historic and Projected Populations for the ROI and Ohio	. 55
8.	2013 Employment by Sector (Percent) for PORTS	. 55
9.	ROI Employment and Unemployment Rates	. 56
10.	Per Capita Income of the ROI and Ohio	. 57
11.	ROI Housing Characteristics, 2014	. 57
12.	2013–2014 School Year Public Education Inventory for the ROI	. 58
13.	Minority and Low-income Populations in the PORTS ROI	. 59
14.	Traffic Conditions on Access Roads to PORTS	. 64
15.	Additional Industrial Parks in the PORTS ROI	. 72

### ACRONYMS

ACP	American Centrifuge Plant
ADT	average daily traffic
Centrus	Centrus Energy Corporation
CEO	Council on Environmental Quality
CEQ	Comprehensive Environmental Response Compensation and Lighility Act of 1080
CENCLA	comprehensive Environmental Response, Compensation, and Liability Act of 1980,
CED	
CFR	Code of Federal Regulations
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
$DUF_6$	depleted uranium hexafluoride
EA	environmental assessment
EIS	environmental impact statement
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FONSI	finding of no significant impact
IGWMP	Integrated Groundwater Monitoring Plan
LLW	low-level (radioactive) waste
LMES	Lockheed Martin Energy Systems, Inc.
NAAQS	National Ambient Air Quality Standards
NCES	National Center for Education Statistics
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRC	U.S. Nuclear Regulatory Commission
NRHP	National Register of Historic Places
OAC	Ohio Administrative Code
ODNR	Ohio Department of Natural Resources
ODSA	Ohio Development Services Agency
Ohio EPA	Ohio Environmental Protection Agency
OHPO	Ohio Historic Preservation Office
OSWDF	on-site waste disposal facility
OVEC	Ohio Valley Electric Corporation
PCB	polychlorinated binhenyl
PHWH	primary headwater habitat
PORTS	Portsmouth Gaseous Diffusion Plant
PSD	prevention of significant deterioration
RCRA	Resource Conservation and Recovery Act of 1976 as amended
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision
ROL	region of influence
RTE	rare threatened and endangered
SODI	Southern Ohio Diversification Initiative
TSCA	Toxic Substances Control Act of 1976
ISCA	US Army Corps of Engineers
USACE	United States Code
USC	United States Code

USDA	U.S. Department of Agriculture
USEC	United States Enrichment Corporation
USFA	U.S. Fire Administration
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WAI	Wastren Advantage Inc.
WRCC	Western Regional Climate Center

## 1. INTRODUCTION

### 1.1 PURPOSE AND NEED FOR ACTION

The Proposed Action evaluated in this Environmental Assessment (EA) is U.S. Department of Energy (DOE) conveyance of real property located at the Portsmouth Gaseous Diffusion Plant (PORTS). The primary purpose of the conveyance (hereinafter "transfer") of real property is economic development, but purposes other than economic development such as public benefit, conservation, or mitigation may also occur. The Proposed Action includes the option of leasing the real property prior to completing the transfer, but it does not include leasing only. For this EA, real property is defined as land, together with the improvements, structures, and fixtures located thereon. Transfers of real property at PORTS will assist DOE in shrinking the site footprint to reduce the costs of maintaining the site. This EA, *Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio,* evaluates the transfer of real property to the Southern Ohio Diversification Initiative (SODI) and/or other parties so that they may sell, lease, or license the transferred real property to further economic development in the area. DOE's action will be consistent with the goals of the President's Memorandum *Disposing of Unneeded Federal Real Estate—Increasing Sales Proceeds, Cutting Operating Costs, and Improving Energy Efficiency* (June 10, 2010).

PORTS concluded its operational (gaseous diffusion) mission in 2001. The site is a DOE Environmental Management (EM) program closure site, fully engaged in cleanup to include the decontamination and decommissioning (D&D) of contaminated facilities and the remediation of soil, sediment, surface water, and groundwater. As a result of the conclusion of the enrichment mission, the ongoing execution and progress of cleanup to reach the agreed-upon end-state, and initiatives within the federal government to transfer unneeded real property (per the above-mentioned 2010 Presidential Memorandum), DOE needs to reduce its footprint and reduce the cost of maintaining the site. Economic development transfers will reduce or eliminate operational and maintenance costs at PORTS. Transferring excess, unutilized and underutilized real property for local economic development purposes would have a positive impact on the economy in Piketon, Ohio and surrounding communities. Such transfer of real property for local development purposes could also reduce negative economic impacts caused by changes in the DOE mission at PORTS.

As discussed in Section 2, real property is expected to become available incrementally over time in coordination with the cleanup program. It is anticipated that real property outside the centrally developed area of PORTS would be unneeded and eligible for transfer sooner than real property that is within the centrally developed area, where most D&D will be occurring.

### **1.2 BACKGROUND**

PORTS is located on a 3,777-acre site (Figures 1 and 2) in a rural area of Pike County in south-central Ohio. PORTS began operations in 1954 and was one of three uranium enrichment facilities originally built in the United States; the other two were constructed in Oak Ridge, Tennessee, and Paducah, Kentucky. PORTS used the gaseous diffusion process to provide highly-enriched uranium to the U.S. Navy and low-enriched uranium for electrical power generation. From 1991 until production ceased in 2001, PORTS produced only low-enriched uranium for commercial power plants. In 1993, DOE leased the gaseous diffusion operations used for commercial uranium enrichment to the United States Enrichment Corporation (USEC). DOE has responsibility for environmental restoration and waste management activities, uranium programs, and long-term stewardship of nonleased facilities at PORTS.



Figure 1. Location of PORTS



Figure 2. Aerial View of PORTS (circa early 2000s)

Two notable facilities have been constructed at PORTS since the initial plant construction. In the early 1980s, DOE built a separate gas centrifuge enrichment plant at PORTS as an alternative means of uranium enrichment. Two process buildings, a centrifuge recycle and assembly building, and several support facilities were constructed. The gas centrifuge enrichment facilities were leased to USEC and are currently leased to Centrus Energy Corporation (Centrus). Then, in 2008, the Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Conversion Facility was constructed to convert DUF<sub>6</sub> into constituents for disposal and commercial resale.

Should the gas centrifuge enrichment facilities cease to be leased, the buildings and land would return to DOE, which would determine an appropriate disposition path at that time. Likewise, when the  $DUF_6$  conversion mission is completed, real property associated with that facility will also be available following any D&D or remediation that may be necessary. The real property associated with both the gas centrifuge and the  $DUF_6$  conversion facilities are considered in this EA.

The PORTS reservation is owned by DOE. The plant consists of more than 400 facilities (a facility can be a building, utility system, or infrastructure unit) with three main process buildings designated as X-333, X-330, and X-326 that house the gaseous diffusion equipment. The three main process buildings are located in the center of PORTS and cover a combined footprint of approximately 90 acres. Various support and auxiliary buildings/structures and infrastructure are also present. Most facilities are planned to be removed under DOE's D&D program using controlled demolition, with waste materials treated as necessary and packaged for final disposition. As part of the decision in the *Record of Decision for the* 

*Process Buildings and Complex Facilities Decontamination and Decommissioning Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio* (DOE 2015a) (Process Buildings D&D Record of Decision [ROD]), infrastructure may be left in a state that protects future users of PORTS or it may be removed. Materials that can be recycled or reused will be segregated from the waste, as appropriate.

The three process buildings, as well as most of the remaining site facilities, are situated within the approximately 1,200-acre industrialized area bounded by Perimeter Road. The central, industrialized area is largely devoid of trees, with managed lawns, parking lots, and paved roadways dominating the open space. The portion of the DOE property outside of Perimeter Road, much of which has also been disturbed or developed during the various phases of plant construction and expansion, consists of more than 2,500 acres and is used for a variety of purposes including a water treatment plant, sediment ponds, sanitary landfills, cylinder storage yards, open fields, and forested buffer areas (DOE 2015a). Closed landfills and burial grounds account for approximately 101 acres. More than 300 acres of land are dedicated to the on-site waste disposal facility (OSWDF) and its support facilities, which will be used to manage waste from the PORTS D&D project (100 acres will be permanently committed as a waste disposal location with no alternate use in the future [DOE 2015b]). The D&D of the PORTS facilities and associated waste disposition activities were reviewed through the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) process (DOE 2015a; DOE 2015b) and are not covered in this EA.

### 1.3 SCOPE OF THIS ENVIRONMENTAL ASSESSMENT

DOE has prepared this EA to assess the consequences of the potential transfer of PORTS real property. D&D and remediation of the PORTS site are independent of the Proposed Action described in this document and will be performed independent of any real property transfer decisions (remediation of environmental media [e.g., soil and groundwater] will be implemented under Ohio EPA's Resource Conservation and Recovery Act of 1976, as amended [RCRA] Corrective Action Program). DOE will continue to conduct cleanup consistent with the CERCLA RODs and in accordance with applicable legal agreements with regulators regardless of proposed future property transfers.

The EA has been prepared in accordance with the Council on Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [*CFR*] Parts 1500 to 1508) that implement the National Environmental Policy Act of 1969 (NEPA) and the DOE NEPA implementing procedures in 10 *CFR* Part 1021. If DOE determines the impacts this EA describes are not significant, it will issue a finding of no significant impact (FONSI) for the actions described in Section 2. If impacts are potentially significant, DOE will consider a mitigated FONSI or evaluate the need to prepare an environmental impact statement (EIS). A mitigated FONSI would specify mitigation measures that would reduce impacts below the level of significance. Future specific transfers of real property may require a NEPA review to determine if additional NEPA analysis might be required beyond this EA, as discussed below.

If DOE determines there are significant impacts identified by this EA or by future supplemental analysis of any specific future use, it would evaluate whether a notice of intent and preparation of an EIS would be required. DOE would determine significance based on the context and intensity considerations provided in 40 *CFR* 1508.27. The additional NEPA review may be prepared by DOE or another federal agency, depending on the nature of the proposal.

Some future uses anticipated (see Section 2.1.1) could have greater potential than others for creating adverse environmental impacts to some environmental resource areas. For this reason, DOE's guidance (DOE 2004a) for implementing the CEQ regulations (40 *CFR* 1502.1 and 1502.2) recommends a sliding-scale approach so that actions with greater potential effect can be discussed in more detail than

4

those that have less potential for impact. Because the actual future use of the facilities and land is not known, a bounding analysis is used to estimate potential impacts. A bounding analysis is prepared when no specific activity has been identified for analysis. Because of the lack of detail on a future use or uses, especially in the case of real property transfer for development purposes, the bounding analysis typically uses assumptions regarding land uses and anticipated operations and employs analytical methods to estimate potential environmental impact.

Reasonably foreseeable future uses and their associated environmental impacts are addressed in this EA. The bounding analysis is based on the assumption that various types of industrial, commercial, mixed-use, and business park uses primarily would occur on the real property. This assumption was based on the types of industries and businesses currently operating in industrial parks in the region around PORTS, the types of industries most likely to locate to or expand in southern Ohio, and businesses that transferees would likely recruit. In addition, some areas may be designated for forest/wildlife management or conservation purposes (potentially as mitigation measures related to site cleanup). Residential use of the property is not included in the scope of this EA. Prior to future real property transfers, DOE would obtain information from interested parties who are requesting real property. This information would enable DOE to screen a potential transferee's proposed future uses against the uses evaluated in this EA. That DOE screening would enable DOE to ascertain whether future uses are within the bounds of this analysis.

This EA does not:

- Define to whom DOE could or might transfer real property
- Identify specific future uses for individual parcels of real property
- Address D&D and remediation activities at PORTS taken under CERCLA and *The April 13, 2010 Director's Final Findings and Orders for Removal Action and Remedial Investigation and Feasibility Study and Remedial Design and Remedial Action, including the July 16, 2012 Modification thereto* or under the 1989 Ohio Consent Decree.

This EA is only a part of the process DOE must follow before it can transfer real property. Individual future transfer proposals will be screened against this EA.

## 2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Two alternatives are analyzed in this EA: the Proposed Action (the transfer of real property) and the No Action Alternative (DOE continues its mission and maintains ownership of the site). The Proposed Action has been identified as meeting DOE's purpose and need to reduce its footprint of the site, which would reduce the cost of maintaining the site as described in Section 1.1. The No Action Alternative provides a baseline for comparison of environmental impacts in Section 3 of this EA. Under the No Action Alternative, DOE would retain all right, title, and interest in the real property and no real property transfer would occur. The two alternatives are discussed in the following sections.

# 2.1 PROPOSED ACTION

DOE proposes to transfer, by fee title transfer, excess, underutilized, or unutilized (hereafter, "unneeded") real property at PORTS to interested parties who would sell, lease, or license the real property to further economic development in southern Ohio. The Proposed Action includes the option of leasing the real property prior to completing the transfer, but it does not include the option to lease only. Other types of transfers may also occur to assist DOE in shrinking its site footprint, such as transfers for conservation or mitigation purposes, though it is presumed that the majority of transfers would be to further economic development opportunities in the region. DOE intends to transfer the property for economic development purposes in accordance with 10 *CFR* 770, *Transfer of Real Property at Defense Nuclear Facilities for Economic Development*. Transfer of DOE real property is authorized under Section 161 g of the Atomic Energy Act (42 *United States Code [USC]* 2201 [g]).

As shown on Figure 3, PORTS consists of 3,777 acres of DOE-owned land. Perimeter Road surrounds an approximately 1,200-acre centrally developed area which contains most of the site facilities. More than 400 facilities (including buildings, utilities, systems, ponds, and infrastructure units) are located on PORTS, including the American Centrifuge Plant (ACP) (Centrus leases facilities from DOE for the ACP) and DUF<sub>6</sub> conversion facilities. These two facilities would not be considered for property transfer until they were unneeded (real property related to the ACP and DUF<sub>6</sub> facilities could be transferred at a future time and are considered in this EA). In general, most of the existing facilities at PORTS are located within the 1,200-acre centrally developed area and are planned to be removed under DOE's D&D Program.

The transfer of unneeded real property would support the DOE objective to reduce the DOE footprint at the site and reduce life-cycle costs. Real property outside the centrally developed area would be determined to be unneeded and therefore eligible for transfer sooner than real property within the centrally developed area, where most D&D will be occurring. For example, three of the largest facilities on the site (designated X-326, X-330, and X-333) are process facilities that were constructed in the 1950s to support the site's original enrichment mission. These three facilities are radiologically contaminated and occupy a footprint of more than 30 acres each. These facilities, as well as the ancillary facilities and infrastructure that supported the uranium enrichment process, will be demolished pursuant to the Process Buildings D&D ROD. The timeframe for D&D will preclude near-term transfer of this real property. The real property on which these process buildings are located would be available and considered for transfer once D&D has been completed and soil contamination has been remediated, if needed.



Figure 3. DOE PORTS Area

9

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

Under the Proposed Action, DOE could transfer up to 3,677 acres of real property located within the EA study area (designated by the DOE site boundary on Figure 3). The size of individual transfers of unneeded real property could vary. DOE would determine whether or not real property is considered unneeded based on real property utilization and mission considerations. Once real property is deemed unneeded, an environmental due diligence review would occur for each proposed transfer that DOE evaluates. A determination of *suitability* to transfer (i.e., environmental due diligence in accordance with CERCLA 120[h] as described in Section 2.1.2) would be made before unneeded real property *availability* for transfer is ascertained. DOE will consider all real property transfer requests on a case-by-case basis and will evaluate each request individually. For the purposes of this EA, it is assumed the property transfers would generally occur within an approximately 30-year period.

The Proposed Action assumes that the transferred real property would be developed for a range of uses, up to and including light industrial/general commercial to heavy industrial, as well as combined mixed uses (see Section 2.1.1 for a discussion of potential uses). Some transferred real property is expected to be left as open space. Recent trends in industrial and business parks recognize the value of open space as an amenity in keeping with the public interest in sustainability and the eco-industrial park movement. In addition to the construction of new facilities, development activities could include placement and compaction of earth backfill to establish required building elevations for new construction, land contouring (such as creation of elevated grades for visual enhancements and/or desired settings), and utility connections. Construction activities would also include vehicle access roads, parking lots, pedestrian walkways, and other enhancements such as lighting and landscaping.

### 2.1.1 Land Use Scenarios and Assumptions

Specific future industrial and commercial uses of the property are not known. Using input on preferred uses from the public (Ohio University 2012a), DOE has developed reasonably foreseeable uses to bound the analysis in this EA. These uses could include, but are not limited to, uses such as:

- Light to heavy industrial facilities including processing, manufacturing, assembly, and fabrication plants, which may use processed or previously manufactured materials or may produce products from raw materials
- Storage, warehousing, wholesaling, distribution, and trans-modal facilities, including truck and rail service terminals and related facilities
- Storage facilities for coal, coke, building material, sand, gravel, stone, and lumber and enclosed or open storage of equipment and supplies, etc.
- Research and testing facilities, including renewable, integrated, and advanced energy, industrial, environmental testing, and scientific research laboratories
- Administrative, technical, and professional offices in an office park setting or as individual facilities associated with on-site manufacturing facilities. Office space could also be constructed for use by DOE and its contractor workforce, such as for future D&D activities that will remove presently occupied facilities from use.
- Waste or chemical treatment facilities, including hazardous and mixed waste treatment for shipment to off-site storage and disposal facilities

- Recycling operations, including those for radioactively contaminated materials and those associated with metal treatment and processing
- Renewable energy production facilities (e.g., solar farms)
- Various commercial uses including retail stores, bulk cleaning and laundry plants, cold storage lockers, furniture and carpet warehouses, car washes, equipment and appliance repair, vehicle service centers, and convenience stores with gasoline/diesel pumps.

For any uses outside of the bounds evaluated in this EA, DOE may transfer the property and place conditions in the deed that require the transferee to obtain all necessary approvals for the use of the real property. The following activities by transferees may also occur as continuation of ongoing land management activities (e.g., mitigation measures related to site cleanup), and could occur in combination with the economic development endeavors identified above:

- Forestry management activities
- Wildlife management activities
- Conservation purposes and/or passive recreation.

DOE expects the impacts related to wildlife management or conservation uses would be less than those of industrial uses.

Table 1 presents assumptions regarding the characteristics and requirements of the typical businesses and industries that could use the transferred PORTS real property. The business and industrial uses shown in Table 1 would be part of the land use categories listed above.

Industry	Emissions	Effluents	Wastes	Comments
General process manufacturing, fabrication, and assembly	Facility may require state air permit for oil or natural gas combustion	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to a permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Apparel and finished fabrics (e.g., fabricated textiles, footwear, or luggage)	Minor air emissions, such as ketones, toluene, methanol, ammonia, and xylenes, controlled through the use of engineering controls and regulated under a state air quality permit	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to a permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Lumber and wood products (e.g., millwork, prefabricated wood buildings and manufactured homes, wood containers)	Minor air emissions, such as particulates, VOCs, CO, CO <sub>2</sub> , NO <sub>x</sub> , formaldehyde, and phenol, controlled through the use of engineering controls and regulated under a state air quality permit	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to a permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Furniture and fixtures (e.g., household and institutional furniture; mattresses and bedsprings; showcases, partitions, shelving, and lockers)	Minor air emissions, such as VOCs from finishing, and oil or natural gas combustion controlled through the use of engineering controls and regulated under a state air quality permit	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to a permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Storage, warehousing, wholesaling, and distribution facilities	Fugitive dust emissions and mobile emissions from internal combustion sources; facility may require state air permit for oil and natural gas combustion	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations

Table 1. Characteristics and Requirements of Typical Businesses and Industries that Could Occur on Real Property after Transfer

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

Industry	Emissions	Effluents	Wastes	Comments
Research and testing facilities	Minor air emissions controlled through the use of engineering controls and regulated under a state air quality permit	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Heavy industrial	Natural gas combustion releases, SO2, NOx, VOCs, and CO; air emissions, such as particulates, CO2, formaldehyde, and phenol, and other pollutants controlled through the use of engineering controls and regulated under a state air quality permitWastewater discharged to sewer in accordance with wastewater discharge permit restrictions		Solid waste is recycled or sent to permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Commercial offices	Facility may require state air permit for oil and natural gas combustion	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste recycled or sent to permitted landfill	Size of facility may require compliance with state and federal storm water runoff regulations
Waste treatment and recycling facilities (e.g., electronics recycling, contaminated materials treatment and recycling, metals decontamination and reuse)	Air emissions such as particulates, VOCs, radionuclides, and other pollutants controlled through the use of engineering controls and regulated under a state air quality permit and a radiological license	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste is recycled or sent to permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	Size of facility may require compliance with state and federal storm water runoff regulations
Retail shops (e.g., laundry, dry cleaner, auto parts, mailing service, appliance repair, copying center)	Air quality permit generally not required except for dry cleaner	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste recycled or sent to permitted landfill	None

# Table 1. Characteristics and Requirements of Typical Businesses and Industries that Could Occur on Real Property after Transfer (Continued)

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

# Table 1. Characteristics and Requirements of Typical Businesses and Industries that Could Occur on Real Property after Transfer (Continued)

Industry	Emissions	Effluents	Wastes	Comments
Auto repair shop/vehicle maintenance center	Minor air emissions controlled through the use of engineering controls and regulated under a state air quality permit	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Oil is collected for recycle or disposal; solid waste is recycled or sent to permitted landfill; RCRA hazardous wastes would be treated, stored, and disposed of according to state and federal regulations	None
Convenience food store with gasoline/diesel pumps	Air quality permit generally not required	Wastewater discharged to sewer in accordance with wastewater discharge permit restrictions	Solid waste sent to permitted landfill	Underground storage tank regulations must be met

Source: EPA Office of Enforcement and Compliance Assurance, Sector Notebooks, http://es.epa.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/occa/sector/. U.S. Census Bureau, North American Industry Classification System, http://census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/census.gov/cen

EPA = U.S. Environmental Protection Agency NO<sub>x</sub> = nitrogen oxides RCRA = Resource Conservation and Recovery Act of 1976, as amended VOC = volatile organic compound

The bounding analysis used in this EA assumes that the potential industrial and commercial uses would be compatible with other similar non-DOE uses in the area. The uses would also need not to negatively impact other ongoing missions and activities being performed by DOE. DOE also has based the bounding analysis in this EA on the following assumptions:

- Construction activities involving ground disturbance would be conducted incrementally, as property is transferred, and would limit the potential for soil erosion. Sensitive resources such as historic properties would be protected or mitigated as necessary through the use of deed restrictions, and the transferee would comply with all applicable local, state, and federal regulations pursuant to deed restrictions.
- Future owners and/or occupants would be responsible for seeking, obtaining, and complying with any applicable federal, state, and/or local permits and licenses for activities and operations at their facilities. Examples include, but are not limited to, building permits, permits for air emissions, industrial wastewater discharge permits, storm water discharge permits, and U.S. Nuclear Regulatory Commission (NRC) or State of Ohio licenses for operations that involve the handling or use of radioactive materials.
- State and federal storm water regulations to minimize erosion and sedimentation would be met by the transferees as part of their development planning. As applicable, notification of any disturbance would be made to the appropriate authorities prior to construction activities.
- Future owners and/or occupants would be responsible for obtaining utilities (existing utility systems at PORTS that are owned by DOE may be utilized or transferred but they are currently planned for D&D).

The future uses of the property are bounded by the types of uses identified above. Ensuring the identified future uses are within these categorical bounds will be accomplished through deed clauses or restrictions. If transferees identify a future use that is not within the bounds analyzed within this EA, additional NEPA review would be required. Residential use of the property is not included in the scope of this EA because site-wide environmental restoration cleanup goals are based on industrial land use scenarios.

### 2.1.2 CERCLA 120(h) Compliance

To transfer real property, DOE must comply with the requirements of CERCLA Sect.  $120(h)^1$ , which is an environmental due diligence review process that applies to all transfers of real property "owned by the United States" to nonfederal entities.

To comply with these requirements, DOE would prepare a report that documents the baseline environmental condition of the real property proposed for transfer and identifies hazardous materials that are present, stored, or have been released within the proposed transfer footprint. The report, called an environmental baseline survey, would also include information on prior property ownership, past and present property use, and past and present activities on adjacent properties. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process. Property would only be transferred after

<sup>&</sup>lt;sup>1</sup> This requirement is not unique to PORTS or to DOE, but is required of all federal agency property transfers.

DOE satisfies the CERCLA 120(h) process and obtains agreement from the appropriate regulatory authorities.

# 2.2 NO ACTION ALTERNATIVE

The No Action Alternative provides a baseline with which environmental impacts of the Proposed Action can be compared and is required by DOE NEPA regulations (10 *CFR* 1021). Under the No Action Alternative, the land uses at PORTS would continue to be managed by DOE, real property would not be transferred, and there would be no economic development or footprint reduction resulting from transfers as proposed in this EA. Ongoing and planned activities at the site would continue until completion, including environmental restoration, waste management, D&D, and other DOE functions (e.g., maintaining a level of security and maintenance appropriate to the site activity).

# 2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED

# 2.3.1 Lease-only or License-only Alternative

An alternative eliminated by DOE from further analysis was the transfer of the property by lease only or license only. Transfer via lease or license would not meet the stated need for the Proposed Action because it would not reduce DOE's footprint. Establishment of a lease program would introduce higher costs to DOE because personnel would need to be put in place to manage the leases. In addition, financing construction on leased real estate complicates the transactions for the lessee, making the real estate less competitive with other real estate which is not complicated by owner/lessee agreements.

# 2.3.2 Use of Property in a Manner Not Consistent with Expected Future Use

DOE did not include residential use in this analysis because it is inconsistent with the cleanup end state exposure of industrial use.

## 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the affected environment and potential environmental consequences of the Proposed Action and the No Action Alternative to the natural and human environment for the following potentially affected environmental resource areas: land use, visual resources, air quality, noise, geology and soils, water resources, ecological resources, socioeconomics and environmental justice, cultural resources, infrastructure and transportation, waste management, human health and safety, and intentionally destructive acts. Much of the specific information and data in this section is from either the 2014 Annual Site Environmental Report (DOE 2016a) or the 2015 Annual Groundwater Report (DOE 2016b), which are the most recent publicly available reports.

The Proposed Action in this EA analyzes the potential transfer of DOE real property at the PORTS site to one or more entities for uses that could be different from its current use. The transfer action itself would not have environmental impacts; rather, future development by a new owner could have the potential for environmental impacts. To provide information and context to decision makers and other document reviewers, this EA analyzes reasonably foreseeable land uses (industrial/commercial/mixed-use business park, conservation, and forestry/wildlife management uses).

The analysis in this EA serves only as a basis for estimating the potential environmental impacts of development, construction, and operational actions after property transfer. Potential uses would be contingent on the transferee's receipt of necessary permits and authorizations, and on additional environmental reviews undertaken by the transferees.

### 3.1 LAND USE AND VISUAL RESOURCES

This section describes land use on the PORTS site and in its vicinity. Visual resources are also described. The descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on land use and visual resources.

### 3.1.1 Affected Environment

#### 3.1.1.1 Land use

PORTS is located in a rural area of Pike County in south central Ohio (Figure 1). PORTS is approximately 20 miles north of the Kentucky/Ohio state line and 70 miles southeast of Columbus, Ohio. Towns in the vicinity of PORTS include Piketon, located approximately 1 mile north; Waverly, located 8 miles north; Jasper, located 1.2 miles northwest; and Lucasville, located 8 miles south of the site. The largest cities within an approximately 50-mile radius are Portsmouth, Ohio, located 27 miles to the south, and Chillicothe, Ohio, located 27 miles to the north.

Land uses in the general vicinity of PORTS include urban, residential, private and commercial farms, light industries, and transportation corridors (highways and railroads). In Pike County, the land use is approximately 66 percent forest, 23 percent cropland, and 8 percent pasture. The remaining 3 percent is classified as urban land, open water, and bare/mines areas (Ohio Development Services Agency [ODSA] 2016a). The latter classification refers to largely unvegetated areas of nonurban land, some of which may be associated with mining. Based on information from the Ohio Department of Natural Resources (ODNR) website (http://ohiodnr.gov/), two public recreational areas are located in the vicinity of the PORTS site: Brush Creek State Forest is located 15 miles southwest of the site, and Lake White State Park is located 6 miles north of the site.

In the immediate area surrounding PORTS, land is used primarily for agricultural cultivation and grazing, forests, and rural residences. The dominant land use is farming, which accounts for

approximately 25,430 acres. Farmland that qualifies for protection under the Farmland Protection and Policy Act of 1981 is located primarily along the Scioto River floodplain and in preglacial valley fill areas to the north and east of PORTS. Marginal quality farmland is located adjacent to PORTS. The soil survey of Pike County (U.S. Department of Agriculture [USDA] 1990) indicates that soils immediately adjacent to PORTS and on the site are of low fertility and do not qualify as prime farmland. The land surrounding PORTS has 24,400 acres of forest cover (USEC 2004).

The PORTS site contains 3,777 acres of DOE-owned land. On the PORTS site, Perimeter Road surrounds a 1,200-acre centrally developed industrial use area, which includes a 750-acre controlled access area (DOE 2014a). The portion of the site outside of Perimeter Road comprises approximately 2,500 acres of land, including several contiguous parcels ranging from 1 to more than 1,000 acres. Land uses in this area include a water treatment plant, sewage treatment plant, holding ponds, sanitary and inert landfills, cylinder storage yards, parking areas, open fields, and forested buffer areas (DOE 2014a). The OSWDF, which covers 100 acres permanently committed as a waste disposal location (DOE 2015b), is also located in the area outside of Perimeter Road.

PORTS includes more than 400 facilities, including three large process buildings, support buildings and structures, utilities, plant systems, holding ponds, and infrastructure units. All of the facilities are planned for D&D pursuant to the Process Buildings D&D ROD. Two facilities not included in the Process Buildings D&D ROD are the Centrus ACP, which was constructed to produce enriched uranium for commercial nuclear reactor fuel, and the DUF<sub>6</sub> Conversion Facility, which is used by DOE to convert DUF<sub>6</sub> into constituents for disposal and commercial resale.

DOE is engaged in the D&D of the site and waste management of the generated waste pursuant to the Process Buildings D&D ROD and the *Record of Decision for the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio* (DOE 2015b) (Waste Disposition ROD), along with the continued remediation of soil and groundwater. DOE evaluated the waste anticipated to be produced by D&D of buildings and structures at PORTS, including the three major process buildings (X-326, X-330, and X-333) that previously enriched uranium, and concluded an OSWDF was the preferred alternative for disposition of the bulk of the D&D wastes.

At present, DOE has two real property leases with SODI. The first lease was signed in April 1998 for 7 acres of land on the north side of the DOE property. This tract is used as a right-of-way for a railroad spur that connects to the existing DOE north rail spur. SODI subleases a portion of this property to allow access to the rail line for a wood-grading operation. In October 2000, a second lease between DOE and SODI was signed to allow concurrent SODI access to and use of the existing north rail spur.

### 3.1.1.2 Visual resources

NEPA and CEQ regulations stipulate that visual resources are one of the elements or factors in the human environment that must be considered in determining the impacts of a Proposed Action. For example, would the Proposed Action impede the view of or change the visual characteristics of identified visual resources such as important landmarks and historic sites, parks, and designated scenic areas or roadways?

There are no designated scenic areas in the near vicinity of PORTS. More than 90 percent of the land surrounding PORTS is either undeveloped or serves as agricultural land for cultivation and grazing. PORTS is surrounded by lightly to heavily forested areas to the immediate north, east, south, and west, which obscure public views of the site from these directions. As a result, facilities on the site are generally not visible to the public from highways or other off-site locations.

The area of the PORTS site within Perimeter Road is primarily flat land that resulted from industrial development. It is dominated by numerous PORTS buildings and facilities of moderate height, one notable exception being the on-site water storage tower. The remainder of the site is a largely rural landscape with a mixture of flatlands and hills. The northern portion of the PORTS site consists of open and forested buffer areas. Many of the open areas within the site are maintained as lawns and fields.

# 3.1.2 Environmental Consequences

The total land area that would actually be transferred is unknown at this time. However, this analysis assumes 3,677 acres for eventual real property transfer. Existing facilities at PORTS are generally located within the 1,200-acre centrally developed area. As such, approximately 2,577 acres are considered undeveloped (though they are not undisturbed). Of the 2,577 acres, approximately 1,550 acres (about 60 percent) are assumed to be readily developable. The analysis also assumes the remaining acreage could be transferred but would not be developed due to various constraints (e.g., wetlands, land with slopes greater than 15 percent, utilities, etc.) that would make development more costly compared to the balance of the readily developable property on the site.

# 3.1.2.1 Proposed Action

Under the Proposed Action, the present land use of PORTS would change over time as property is transferred and development occurs. The visual character of the less developed areas would change from a more natural to a more man-made environment and the landscape, particularly outside of Perimeter Road, would change from largely undeveloped to developed. Constraints on developing portions of the site include wetlands, cemeteries, and closed landfills. These areas can be transferred, but any future development would need to be coordinated by the transferee and the appropriate regulatory authority. Areas where DOE has a mission need to retain real property, such as active landfills and operational areas (areas undergoing D&D or remediation, the  $DUF_6$  site, and the Centrus ACP), would not be appropriate for transfer until the areas are no longer needed for DOE mission purposes (they could be transferred at a future time). Desirable infrastructure such as power lines, utility rights-of-way, and rail spurs are also present, though they may also create development constraints. Thus, all portions of PORTS are not equally developable; other complementary uses such as open space and recreational elements may be able to be incorporated into future development. Constraints such wetlands would not preclude a transfer, but the deed would need to identify the resource and the means by which it is regulated, should the transferee wish to alter the resource. Land use and visual impacts from forestry/wildlife management or conservation uses would be minimal. Facilities and land areas on the site are generally not visible to the public from highways or other off-site locations. Therefore, because the site is already an industrial site, minimal impacts to land use and visual resources would be expected from the Proposed Action.

### 3.1.2.2 No Action Alternative

Under the No Action Alternative, the existing land use would continue and the land would remain as DOE property. No additional impacts to land use or visual resources would occur other than those expected from implementing the D&D and remedial action program. The maintenance or repair of infrastructure and on-site structures would be expected to continue.

### 3.2 CLIMATE, AIR QUALITY, AND NOISE

This section describes the climate and air quality at PORTS and in its vicinity, as well as the sound environment at PORTS and the vicinity. These descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on climate, air quality, and the sound environment.

# 3.2.1 Affected Environment

## 3.2.1.1 Climate

The climate of the PORTS area is humid-continental and is characterized by warm, humid summers and cold, humid winters. For the period of record (June 1893 to September 2012) in Waverly, Ohio (approximately 8 miles north of PORTS), the daily temperature averages 73°F in the summer (June through August) and 33°F in the winter (December through February). The average annual temperature is 54°F. Record high and low temperatures are 107°F and -31°F, respectively (Western Regional Climate Center [WRCC] 2016).

Precipitation is distributed relatively evenly throughout the year and averages approximately 40 in./year. The month with the highest average precipitation for the period of record (June 1893 to September 2012) is July, followed by May. Groundwater recharge and flood potential are greatest during the spring. October is the driest month. Snowfall averages approximately 19 in./year, and snowmelt is part of the total annual precipitation (WRCC 2016).

Surface meteorological data, including wind data, is collected at the on-site meteorological tower at the 33-, 98-, and 197-ft levels. The tower is in the southern part of the site. A comparison of annual wind roses indicates that wind patterns at the 33-ft level are different from those at the 98- and 197-ft levels. Winds at the 33-ft level appear to be influenced by local topographical and/or vegetative features. Accordingly, wind data at the 98-ft level, believed to be representative of the site, are presented in Figure 4, which is based on hourly surface data from the on-site tower. More than 40 percent of the time, wind blew from the southwest quadrant and the prevailing wind was from the south. Average wind speed was about 6.2 mph. Directional wind speed was highest (7.4 mph) from the northwest, and it was lowest (4.0 mph) from the east. Because PORTS is not near a coastal area, potential adverse impacts from hurricanes are not a concern (DOE 2004b).

Tornadoes are rare in the area surrounding the PORTS site. From January 1950 through December 2015, 1,130 tornadoes were reported throughout Ohio with an average of 17 tornadoes per year. While 11 tornadoes were reported in Pike County during this period, all were level F2 or less (wind speeds less than 157 mph) on the Fujita scale (National Oceanic and Atmospheric Administration [NOAA] 2016).



Source: modified from USEC 2004

Figure 4. Wind Rose for PORTS (98-ft level)

### 3.2.1.2 Air quality

DOE characterizes ambient air quality in an area in terms of the primary and secondary National Ambient Air Quality Standards (NAAQS). The *Clean Air Act* (42 *USC* 7401 et seq.) requires that the U.S. Environmental Protection Agency (EPA) set standards for pollutants considered harmful to public health and the environment. To assess air quality, EPA has established maximum concentrations of pollutants that are referred to as NAAQS. Table 2 presents a list of the NAAQS; the Ohio State Ambient

Air Quality Standards are identical. Six criteria pollutants used as indicators of air quality include ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter with a mean diameter of 10  $\mu$ m or less (PM<sub>10</sub>), particulate matter with a mean diameter of 2.5  $\mu$ m or less (PM<sub>2.5</sub>), and lead. Areas in which the ambient air concentrations meet the standards for each criteria pollutant are designated as *attainment areas*. Areas that do not meet the standards are designated as *nonattainment areas*. PORTS is located in the Wilmington-Chillicothe-Logan Intrastate Air Quality Control Region, which covers the south-central part of Ohio. Pike County is in attainment for all criteria pollutants (40 *CFR* 81.336) (Ohio Environmental Protection Agency [Ohio EPA] 2010).

		NAAQS		
	Averaging	Primary	Secondary	Attainment
Pollutant	Times	Standard	Standard	Status
Carbon	8-hour <sup>a</sup>	10 μg/m <sup>3</sup> 9 ppm	None	Attainment
monoxide	1-hour <sup>a</sup>	40 μg/m <sup>3</sup> 35 ppm	None	Attainment
Lead	Rolling 3-month average	$0.15 \ \mu\text{g/m}^3$	Same	Attainment
	Quarterly average	$1.5 \ \mu g/m^{3}$	Same	Attainment
Nitrogen dioxide	Annual	100 μg/m <sup>3</sup> 0.053 ppm	Same	Attainment
	1-hour <sup>b</sup>	100 ppb	None	Attainment
Particulate matter (PM <sub>10</sub> )	24-hour <sup>c</sup>	$150 \ \mu g/m^3$	Same	Attainment
Particulate	Annual <sup>d</sup>	$12 \ \mu g/m^3$	$15 \ \mu g/m^3$	Attainment
matter $(PM_{2.5})$	24-hour <sup>b</sup>	35 μg/m <sup>3</sup>	Same	Attainment
07000	8-hour <sup>e</sup>	0.075 ppm	Same	Attainment
Ozone	1-hour <sup>a</sup>	0.12 ppm	Same	Attainment
Sulfur dioxide	1-hour <sup>a</sup>	75 ppb	None	Attainment

### Table 2. NAAQS and Attainment Status for PORTS

Source: Ohio EPA 2010

<sup>a</sup>Not to be exceeded more than once per year.

<sup>b</sup>To attain this standard, the 3-year average of the 98<sup>th</sup> percentile is considered.

<sup>c</sup>To attain this standard, this level should not be exceeded more than once per year, on average, over 3 years.

<sup>d</sup>Annual mean averaged over 3 years.

<sup>e</sup>To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor is considered.

NAAQS = National Ambient Air Quality Standards

Ohio EPA = Ohio Environmental Protection Agency

DOE is required to submit an annual report called the Ohio EPA Fee Emissions Report for nonradiological air pollutants. DOE reported the following emissions of nonradiological air pollutants for 2014: 12.18 tons of particulate matter, 2.96 tons of organic compounds, and 0.595 ton of nitrogen oxides. Emissions for 2014 are associated with the X-627 Groundwater Treatment Facility, X-333 Coolant System, X-326 Dry Air Plant Emergency Generator, and plant roads and parking areas (DOE 2016a).

The DUF<sub>6</sub> Conversion Facility emits only a small quantity of nonradiological air pollutants. Because of these small emissions, Ohio EPA requires a Fee Emissions Report only once every 2 years. A report
was not required in 2014. DOE reported less than 10 tons/year of specified nonradiological air pollutants for 2013 (the report requires reporting of emissions in increments: zero, less than 10 tons, 10 to 50 tons, more than 50 tons, and more than 100 tons). DOE reported 70 lb of hydrogen fluoride were emitted to the air in the Toxic Chemical Release Inventory for 2014 (DOE 2016a).

Another potential air pollutant present at PORTS is asbestos, which is released by D&D of plant facilities. Asbestos emissions are controlled by a system of work practices in accordance with Ohio EPA regulations. The amount of asbestos removed and disposed of is reported to Ohio EPA. In 2014, no asbestos-containing materials were shipped from PORTS (DOE 2016a).

Prevention of significant deterioration (PSD) regulations (40 *CFR* 52.21) limit the maximum allowable incremental increases in ambient concentrations of SO<sub>2</sub>, NO<sub>2</sub>, and PM<sub>10</sub> above established baseline levels. The PSD regulations, which are designed to protect ambient air quality in Class I and Class II attainment areas, apply to major new sources and major modifications to existing sources. The nearest Class I PSD areas are Otter Creek Wilderness Area in West Virginia, about 177 miles east of PORTS; Dolly Sods Wilderness Area in West Virginia, about 193 miles east of PORTS; and Mammoth Cave National Park in Kentucky, about 200 miles southwest of PORTS. These Class I areas are not located downwind of the prevailing winds at PORTS.

**Greenhouse Gas Emissions.** Operations at PORTS contribute to greenhouse gas emissions and specifically carbon dioxide ( $CO_2$ ) emissions. Historically and currently, the majority of  $CO_2$  emissions from PORTS operations have been associated with the generation of electricity that is supplied to the site. EPA requires annual reporting of greenhouse gas emissions from PORTS ( $CO_2$ , methane, and nitrous oxide). In 2014, DOE reported emissions of 15,958 metric tons of  $CO_2$ , 0.3 metric ton of methane, and 0.03 metric ton of nitrous oxide. These emissions resulted from combustion of natural gas used at the X-690 Boilers (DOE 2016a).

Another source of  $CO_2$  emissions at PORTS is employee transportation. EPA estimates that each gallon of gasoline produces 19.4 lb of  $CO_2$  emissions (EPA 2008). Assuming that each PORTS worker drives 30 miles round trip to work in a vehicle with a fuel economy rating of 20 miles per gal of gasoline, each worker would generate approximately 29 lb of  $CO_2$  in their daily commute to work. Assuming a 5-day workweek and 50 working weeks per year, the annual amount of  $CO_2$  emissions generated by each worker would be 7,300 lb (about 3.6 tons). Based on current site employment (approximately 2,650 including DOE and site tenants), approximately 9,650 tons of  $CO_2$  would be emitted annually from employee transportation. The total amount of  $CO_2$  emissions from PORTS would be approximately 27,240 tons annually. Total  $CO_2$  emissions in the state of Ohio in 2013 were approximately 252,430,000 tons (U.S. Energy Information Administration 2016). Consequently, operations at PORTS contribute approximately 0.01 percent of the state-wide  $CO_2$  emissions in Ohio.

**Radiological Air Quality.** DOE collects samples from 15 ambient air monitoring stations and analyzes them for the radionuclides that could be present in ambient air due to the site activities. These radionuclides are isotopic uranium (uranium-233/234, uranium-235, uranium-236, and uranium-238), technetium-99, and selected transuranic radionuclides (americium-241, neptunium-237, plutonium-238, and plutonium-239/240). The ambient air monitoring stations measure radionuclides released from point sources, fugitive air emissions (emissions that are not associated with a specific release point such as a stack), and background levels of radiation (radiation that occurs naturally in the environment and is not associated with the site operations) (DOE 2016a).

DOE's annual site environmental reports evaluate airborne discharges of radionuclides from the site against EPA's dose limits specified in 40 *CFR* Part 61, Subpart H, and National Emission Standards for Hazardous Air Pollutants. No transuranic radionuclides were detected at the PORTS ambient air monitoring stations in 2014. Technetium-99 was detected at each of the 15 ambient air stations. The maximum activity of technetium-99 in ambient air was 0.030 picocurie per cubic meter (pCi/m<sup>3</sup>) at a monitoring station north of the plant on Shyville Road, which is 0.003 percent of the DOE derived concentration standard of 920 pCi/m<sup>3</sup> (DOE 2011). Uranium-233/234 and uranium-238 were detected at each of the monitoring stations. The maximum activity of uranium-238 in ambient air (0.00010 pCi/m<sup>3</sup>) was detected at a station north of the plant on Shyville Road. These activities are 0.02 percent and 0.008 percent, respectively, of the DOE derived concentration standards for uranium-233/234 (1.1 pCi/m<sup>3</sup>) and uranium-238 (1.3 pCi/m<sup>3</sup>) (DOE 2011). Potential impacts to human health from PORTS emissions are discussed in Section 3.10.

# 3.2.1.3 Noise

The *Noise Control Act* of 1972, along with its subsequent amendments (*Quiet Communities Act* of 1978; 42 *USC* 4901–4918), delegates authority to the states to regulate environmental noise and directs government agencies to comply with local community noise statutes and regulations. The State of Ohio and Pike County, where PORTS is located, have no quantitative noise-limit regulations (DOE 2004b).

EPA has recommended a maximum noise level of 55 A-weighted decibels [dB(A)] as the day-night sound level to protect individuals against outdoor activity interference and annoyance. This level is not a regulatory goal, but is "intentionally conservative to protect the most sensitive portion of the American population" with "an additional margin of safety." For protection against hearing loss in the general population from nonimpulsive noise, the EPA guideline recommends a 24-hour period limit of 70 dB(A) or less.

The noise-producing activities within PORTS are associated with demolition and construction activities similar to those at any other typical industrial site. Daily notifications are also transmitted through a public address system throughout the site. Another noise source is associated with traffic (including rail) in and out of PORTS. In particular, train whistle noise, at a typical noise level of 95 to 115 dB(A), is intentionally high at public grade crossings. Rail traffic noise is not currently a factor in the local noise environment because rail traffic is infrequent (DOE 2004b). The site also conducts periodic siren testing.

PORTS is in a rural setting, and no residences or other sensitive receptor locations (e.g., schools, hospitals) exist in the immediate vicinity of any noisy on-site operations. Ambient sound level measurements around the site are not available; the ambient noise level around the site is relatively low, however, except for infrequent vehicular noise. In general, the background environment is typical of rural areas; the day-night sound level based on the population density in Pike County is estimated to be about 40 dB(A) (EPA 1974). Other than nearby residences, no sensitive receptor sites, such as schools, picnic areas, recreation areas, playgrounds, active sports areas, parks, motels, or hotels, are in the immediate vicinity of the site (DOE 2004b).

## **3.2.2 Environmental Consequences**

## 3.2.2.1 Proposed Action

Regardless of the amount of land transferred and ultimately developed, the use of heavy equipment during site preparation and construction would generate engine exhaust containing air pollutants associated with diesel combustion. Similar air emissions would be generated by delivery vehicles bringing supplies and equipment to the construction site and by construction workers commuting in

personal vehicles. These emissions would be short-term, sporadic, and localized (except for emissions associated with the personal vehicles of construction workers and vehicles transporting construction materials and equipment). Dispersion would decrease concentrations of pollutants in the ambient air as distance from the construction site increases. The quantities of air pollutants produced by vehicles and equipment associated with construction would not substantially contribute to the total emissions from mobile sources already operating in the area, and would not be expected to adversely affect local air quality.

In addition, construction activities could generate an increase in fugitive dust (i.e., airborne particulate matter that escapes from a construction site) from earthmoving and other construction vehicle operation. Not all of the area available for construction would be under construction at any one time. Rather, earthwork would likely be undertaken in increments. Increases in fugitive dust concentrations would probably be noticeable on the site and in the immediate vicinity, and ambient concentrations of particulate matter could rise in the short-term. However, control measures for lowering fugitive dust emissions (i.e., covers and water or chemical dust suppressants) would minimize these emissions. As discussed in Section 3.2.1.2, the air quality around PORTS is in attainment for all criteria pollutants (40 *CFR* §81.336), and would be expected to remain as such during any construction activities.

Construction noise would cause a temporary and short-term increase of the ambient sound environment within the site and in the area immediately surrounding the property. Sensitive noise receptors in the vicinity of PORTS include residences located within 500 ft of the site boundary. Noise levels from construction of new facilities would not cause harm to these residents, but may cause some annoyance. These nearby residents may be disturbed if the noise is greater than 60 decibels (dB) at their homes. At 60 dB, speech communication outdoors and sleep indoors may be affected. However, construction activities normally would be limited to daytime hours, and thus would not impact existing background noise levels at night. Noise levels from operation of new facilities would not be expected to cause harm to nearby residents, but may cause some annoyance. Nearby residents may be disturbed if the noise is greater than 60 dB at their homes. Noise compatibility is generally a consideration in planning for development, and can be a factor in obtaining the appropriate construction permits and operating licenses as part of applicable zoning regulations, to which developers would be subject.

Specific details about atmospheric pollutants that may be emitted by companies locating within the proposed development are not available. However, the types of commercial businesses and industries that are anticipated to be recruited could produce air emissions (e.g., volatile organic compounds [VOCs], particulates, etc.) typical of standard industrial and research operations. These minor emissions are typically controlled within the facility using conventional treatment technologies such as scrubber systems and particulate filters, and external impacts are negligible. New facility operations that have air contaminant sources would be required to obtain an air pollution permit-to-install and permit-to-operate from Ohio EPA. The terms and conditions of the permits would include emission limits and would outline specific monitoring, operating conditions, and record-keeping requirements for the source. Exceptions for small air pollution sources, called de minimus sources, and permit-by-rule exemptions can be granted by Ohio EPA. Major sources of air emissions typical of heavy industries and subject to a Title V permit from Ohio EPA are possible, but unlikely. If required, the appropriate permits would be obtained by the transferee. Therefore, due to this regulatory process, no violations of air quality standards and no adverse impacts to air quality are expected. For facilities licensed by the NRC or the State of Ohio, radiological air emissions would be limited to the conditions of the license and would need to meet regulatory requirements for human health exposures.

Increased activities at PORTS would increase emissions of greenhouse gases associated with site operations. Because the majority (97 percent) of greenhouse gas emissions are associated with electricity generation needed to support site activities, new activities that consume large quantities of electricity would have the highest impact on future greenhouse gas emissions. Greenhouse gases associated with employee transportation contribute less than 3 percent of the emissions from PORTS activities. Consequently, employment changes at PORTS would have a minor impact on future greenhouse gas emissions. On a state-wide level, the  $CO_2$  emissions from PORTS contribute a negligible amount (approximately 0.01 percent) of the  $CO_2$  emissions in Ohio.

Forestry/wildlife management and conservation uses would have negligible air quality and noise impacts in the developed and undeveloped areas.

# 3.2.2.2 No Action Alternative

Under the No Action Alternative, property would not be transferred and no development would occur that could potentially affect climate, air quality, or noise. No additional impacts to air quality or noise would occur other than those expected from implementing the D&D and remedial action program.

## 3.3 GEOLOGY AND SOILS

This section provides descriptions of the existing geological formations and soils on the PORTS site and in its vicinity. These descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on geology and soils.

## 3.3.1 Affected Environment

## 3.3.1.1 Geology

PORTS is situated within the Appalachian Plateau Physiographic Province of the Appalachian Highland region near its northwestern terminus at the Central Lowlands Province. The Appalachian Plateau is characterized by deeply dissected valleys and even, crested ridge tops. Just east of the Scioto River, the summits of the main ridges rise to an altitude of more than 1,160 ft above mean sea level, with relief of up to 490 ft from the bottom of the valleys.

Surface and near-surface geology at the site have been heavily influenced by glaciation and the associated meltwaters. PORTS is located in an abandoned river valley that was later filled with lake sediments deposited during the existence of prehistoric Lake Tight. Bedrock at the site is composed of sedimentary rocks, primarily shale and sandstone, deposited in a broad shallow sea during the Paleozoic Era more than 230 million years ago. The geologic units of interest at the site are, in ascending order, Ohio Shale, Bedford Shale, Berea Sandstone, Sunbury Shale, Cuyahoga Shale, Gallia Sand, and Minford Clay. Figure 5 shows the relationship of the geologic units to the site and the region.



Figure 5. Schematic Block Diagram Showing Geological Relationships at PORTS

The Ohio Shale is 300 to 400 ft thick at the site. It is black and thinly bedded and may contain noncommercial quantities of natural gas or oil. The Bedford Shale consists of interbedded thin sandstone and shale. The Berea Sandstone has a larger sand content than the Bedford Shale but is otherwise similar. The Sunbury Shale is a black carbonaceous shale; this unit thins from east to west and is absent in western portions of the site (DOE 2016b). The Teays Formation overlies the Sunbury Shale and Cuyahoga Shale and is made up of Gallia Sand and Minford Clay, in ascending order. These unconsolidated deposits have a fluvial origin and occupy ancient channels of the Teays River System. The Gallia Sand member is a silty to clayey, coarse to fine-grained sand with a pebble base. The Minford Clay member contains interbedded silts and clays and is divided into two zones: an upper zone of clay and a lower zone of silty clay.

Geologic studies conducted to determine the potential seismic hazard for PORTS have determined that only one fault is located within 25 miles of the site. This fault lies approximately 18 miles to the west of the facility. No seismicity has been recorded on this fault, and few seismic events have occurred within 25 miles of PORTS during the historic period (past 100 years). Based on data from ODNR, 21 earthquakes occurred within 50 miles of the site between January 1900 and April 2016, and only a few of those were likely felt in the vicinity of PORTS (ODNR 2016). The largest event occurred on May 17, 1901, with an epicenter approximately 20 miles from the site and an estimated magnitude of 4.3. Since 1978, two Ohio earthquakes with a magnitude greater than 3.0 occurred within 50 miles of the site.

Since 1978, three Kentucky earthquakes with a magnitude greater than 3.0 also occurred within 50 miles of the site (Hansen 2007). It should be noted that all of the earthquakes in the area since 1978 were less than 3.6 in magnitude. On August 23, 2011, an earthquake with a magnitude of 5.8 occurred in east-central Virginia (approximately 285 miles from PORTS) and was felt throughout Ohio. In December 2014 an earthquake with a magnitude of 2.0 occurred approximately 4.3 miles southeast of PORTS (this event is listed in the ODNR database but not in the USGS earthquake database), and in February 2015 an earthquake with a magnitude of 2.6 occurred approximately 16 miles northeast of PORTS.

The Kentucky River Fault Zone and the Lexington Fault System (formerly the Bryant Station-Hickman Creek Fault) are located farther from the site; the latter fault is approximately 60 miles to the southwest. These faults bound the southern part of a north-northeast trending area of seismicity in central and eastern Ohio. Soil testing for a proposed gas centrifuge enrichment plant indicated the potential for earthquake-induced soil liquefaction at PORTS is relatively low (Law Engineering 1978). The potential for soil-structure interaction (ground motion magnification) is also slight.

## 3.3.1.2 Soils

According to the soil survey of Pike County, 22 soil types occur within the PORTS property boundary. The predominant soil type at the site is Omulga Silt Loam (USDA 1990). Most of the area within the active portion of PORTS is classified as Urbanland-Omulga complex with a 0 to 6 percent slope, which consists of urban land and a deep, nearly level, gently sloping, moderately well-drained Omulga soil in preglacial valleys. The urban land is covered by roads, parking lots, buildings, and railroads, making identification of the soil series difficult. The soil in these areas is so obscured or disturbed that assignment of specific soil series is not feasible. Other dominant soil types found in the upland areas surrounding the industrial complex include the Rarden, Coolville, Latham, and Wharton series.

The Omulga series is characterized as deep, nearly level, moderately drained soils formed in loess and alluvium in preglacial valleys (USDA 1990). The surface layer of Omulga Silt Loam is dark grayish-brown, friable, and approximately 10 in. thick. The subsoil is approximately 54 in. thick and is composed of three portions: a yellow-brown, friable silt loam; a fragipan (brittle, compacted subsurface soil) of yellow-brown, mottled, firm, and brittle silty clay loam; and a yellow-brown, mottled, friable silt loam approximately 20 in. thick. Generally, the root zone is restricted to the zone above the fragipan. Well-developed soil horizons may not be present in all areas inside Perimeter Road because of cut and fill operations related to construction.

The remaining soil series (Rarden, Coolville, Latham, and Wharton) are similar because they are characterized as deep soils formed in shale and siltstone residuum on ridgetops and hillsides in upland areas (USDA 1990). These soils are chiefly inorganic silt and clay with some fat clay (clay of high plasticity). They have a pH ranging from 3.6 to 6.5 units, whereas the Omulga soils have a slightly higher pH (4.5 to 7.3 units). The soils developed on shale residuum are characterized as having slow permeability and low available water capacity.

Soil samples are collected annually from ambient air monitoring locations and analyzed for transuranic radionuclides (americium-241, neptunium-237, plutonium-238, and plutonium-239/240); technetium-99; total uranium; and uranium isotopes (uranium-233/234, uranium-235, uranium-236, and uranium-238). No transuranics or technetium-99 were detected in any of the soil samples collected during 2014 (DOE 2016a). Uranium, uranium-233/234, uranium-235/236, and/or uranium-238 were detected at each of the sampling locations. Uranium and uranium isotopes are usually detected at similar levels at

all of the soil sampling locations, including the background location, which suggests that the uranium detected in these samples is due to naturally-occurring uranium (DOE 2016a).

# 3.3.2 Environmental Consequences

# 3.3.2.1 Proposed Action

Regardless of the amount of land transferred and ultimately developed, site clearing, grading, and contouring would alter the topography of the property in the areas that would be developed. However, the geologic formations underlying those sites should not be adversely affected. The potentially affected bedrock is generally stable and is adequate to support structures using standard construction techniques. Geotechnical studies would most likely be conducted prior to any construction. Seismic hazards are relatively low in the PORTS area, and structures should be designed to conform to appropriate seismic standards.

Construction would disturb soils, and some topsoil might be removed in the process. However, construction activities involving ground disturbance would be conducted incrementally to limit the potential for soil erosion. Construction projects that disturb 1 acre or more of land require a permit from Ohio EPA under the National Pollutant Discharge Elimination System (NPDES) program. The permit process also requires a storm water pollution prevention plan for the development footprint. This plan includes erosion, sediment, and storm water management controls such as use of silt fences, sediment basing, and erosion control matting to minimize the potential for adverse impacts. It is also expected that topsoil would be replaced as construction activities are completed, and disturbed areas would be revegetated. Impacts to geology and soils would be minimal.

Changes to the developed and undeveloped portions of the site for forestry/wildlife management and conservation could involve land-disturbing activities, and the potential impacts and mitigating measures described above for industrial use would still apply. That is, requirements would protect against soil erosion during the disturbances, and measures to stockpile and reuse top soil would be expected.

# 3.3.2.2 No Action Alternative

Under the No Action Alternative, property would not be transferred and would remain under DOE control. It is assumed that the land would remain as it exists, and no other development is currently being considered. No additional impacts to geology or soils would occur other than those expected from implementing the D&D and remedial action program.

# 3.4 WATER RESOURCES

This section describes the existing water resources on the PORTS site and in its vicinity. These descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on surface water and groundwater.

# 3.4.1 Affected Environment

This section describes the existing bodies of surface water on the PORTS site and in its immediate vicinity. These include the various streams, drainage ditches, holding ponds, and lagoons on the site. The major drainage artery in the vicinity is the Scioto River.

# 3.4.1.1 Surface water

PORTS is located within the Lower Scioto River watershed about 2 miles east of the confluence of the Scioto River and Big Beaver Creek. The Scioto River flows 235 miles through nine counties in Ohio, and through the cities of Columbus, Circleville, Chillicothe, and Portsmouth. At Portsmouth, in Scioto County, the river empties into the Ohio River. Surface water features on the PORTS site

include streams, ditches, holding ponds, and lagoons (Figure 6). The PORTS site has one lagoon, seven holding ponds, several unnamed tributaries and drainage pathways, and eight named streams and ditches (USEC 2004). The named streams and ditches are Little Beaver Creek, Big Run Creek, Northwest Tributary, North Drainage Ditch, Northeast Drainage Ditch, East Drainage Ditch, Southwest Drainage Ditch, and West Drainage Ditch.

The largest stream on the site is Little Beaver Creek, which drains the northern portion of the site and discharges into Big Beaver Creek, which then discharges into the Scioto River. Upstream of the plant, Little Beaver Creek flows intermittently during the year. Little Beaver Creek receives treated wastewater from the X-230J7 Holding Pond (via the East Drainage Ditch) and storm water runoff from the northwestern and northern sections of the site via several storm sewers, water courses, and the X-230L North Holding Pond.

The next largest stream, Big Run Creek, drains the east-central and southern portions of the site. Big Run Creek receives effluent from the X-230K South Holding Pond and flows off site to the southwest where it joins the Scioto River, approximately 4 river miles from the site. Storm sewers in the southern end of the site discharge to the X-230K South Holding Pond. The West Drainage Ditch, which drains the west-central portion of the site and receives surface water from existing open drainage swales and the X-230J5 West Holding Pond and X-2230N West Holding Pond, flows for 4 stream miles before discharging into the Scioto River. The Southwest Drainage Ditch, which drains the southwestern portion of the site, is a small, intermittent watercourse leading from the X-2230M Southwest Holding Pond to the Primary Headwater Habitat (PHWH) stream systems in the upland areas of PORTS. In April 2012, a Level 1 Assessment of the physical habitat and geomorphic characteristics of several streams in the northeastern portion of PORTS (related to a siting study for an OSWDF) was performed by DOE. A total of eight PHWH stream systems were initially identified during the Level 1 Assessment, and a total of 22 individual streams were present within the area of study. There were no field indicators of predominant groundwater influence. In conclusion, no streams have been assigned a provisional Class IIIB PHWH classification, which is the most biologically diverse, continuous, spring-fed PHWH stream type.

Storm water at the site is collected by a series of storm water sewers and open culverts. The site has eight specific collection areas which transmit storm water flow to one of the on-site streams or ditches. All of the streams and ditches transport surface water, including storm water, from the site to the Scioto River.

The *Ohio Administrative Code* (*OAC*) for the Scioto River drainage basin (*OAC* 3745-1-09) classifies the designated uses of the surface waters within and surrounding PORTS as aquatic life habitat, water supply, or recreational use. The most stringent criteria associated with any one of the use designations assigned to a water body will apply to that water body. The surface water features that drain the site, as well as the Scioto River, and their designated uses in accordance with *OAC* 3745-1-09 are as follows:

- Little Beaver Creek: State Resource Water, Warm Water Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation
- Big Run Creek: Warm Water Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation



Figure 6. Surface Water Features in the PORTS Vicinity

- Piketon DOE Tributary (also known as the Southwestern Drainage Ditch): Limited Resource Water, Agricultural Water Supply, Industrial Water Supply, and Secondary Contact Recreation
- West Ditch: Warm Water Habitat, Agricultural Water Supply, Industrial Water Supply, Secondary Contact Recreation
- Scioto River: Warm Water Habitat, Public Water Supply, Agricultural Water Supply, Industrial Water Supply, Primary Contact Recreation.

The designated uses of the rivers, streams, and ditches aid in defining the parameters associated with the NPDES permits issued by the State of Ohio. There are three NPDES permits at PORTS with a total of 19 permitted outfalls (DOE 2016a). Historically, all of these NPDES permits have maintained very high compliance rates.

Three municipal water supply facilities are located in the segment of the Scioto River between the town of Higby, which is located approximately 8 miles upstream (northeast) of Waverly, and the confluence with the Ohio River; three other water suppliers use groundwater wells. Both Waverly and Piketon use groundwater wells. The PORTS water supply comes from two well fields located near the Scioto River to the east of PORTS which draw groundwater from the Scioto River alluvium. The City of Portsmouth uses water from the Ohio River through an intake at the Ohio River upstream from the mouth of the Scioto River.

**Surface Water Quality.** Surface water monitoring is conducted in conjunction with groundwater assessment monitoring to determine if contaminants present in groundwater are detected in surface water samples. Surface water is collected quarterly from 14 locations (DOE 2016a) as shown on Figure 7.

Trihalomethanes, a category of VOCs that are byproducts of water chlorination, include bromoform, bromodichloromethane, chloroform, and dibromochloromethane. These compounds are detected at most of the surface water sampling locations because the streams receive discharges that contain chlorinated water from the site's NPDES outfalls. These detections were well below the applicable Ohio EPA water quality criteria for the protection of human health in the Ohio River drainage basin (DOE 2016a).

Since the 1990s, trichloroethene has been detected regularly at low levels in samples collected from the Southwestern Drainage Ditch (UND-SW01, located inside Perimeter Road). In 2014, trichloroethene was detected at 0.2 to 4.3  $\mu$ g/L in each of the four samples collected from the Southwestern Drainage Ditch at UND-SW01. *Cis*-1,2-dichloroethene was also detected at an estimated concentration of 0.27  $\mu$ g/L in the second quarter sample collected at UND-SW01. VOCs, including trichloroethene and *cis*-1,2-dichloroethene, were not detected in the samples collected from the Southwestern Drainage Ditch at UND-SW02. Detections of trichloroethene were well below the Ohio EPA nondrinking water quality criterion (810  $\mu$ g/L) for the protection of human health in the Ohio River drainage basin (DOE 2016a).

Trichloroethene was detected at elevated concentrations (up to 43 µg/L) in samples collected in the first and second quarters of 2014 from the East Drainage Ditch and Little Beaver Creek. Additional activities were immediately initiated near the X-237 Groundwater Collection System, including sampling surface water and groundwater and collecting groundwater elevation measurements in the vicinity of the X-237 Groundwater Collection System. The X-237 north and south pumping wells (X237-NPW and X237-SPW) were cleaned in April 2014. After cleaning, concentrations of trichloroethene detected in East Drainage Ditch and Little Beaver Creek returned to typical levels. All detections of trichloroethene



Source: DOE 2016a



were well below the Ohio EPA nondrinking water quality criterion (810  $\mu$ g/L) for the protection of human health in the Ohio River drainage basin (DOE 2016a).

Surface water samples (filtered and unfiltered) are collected quarterly from four locations in the drainage basins downstream from the depleted uranium cylinder storage yards and analyzed for polychlorinated biphenyl compounds (PCBs). PCBs were not detected in any of the surface water samples (filtered or unfiltered) collected during 2014 (DOE 2016a).

Samples collected were analyzed for selected transuranics (americium-241, neptunium-237, plutonium-238, and plutonium-239/240). Plutonium-239/240 was detected at 0.128 pCi/L in the second quarter 2014 sample collected at Little Beaver Creek sampling location LBC-SW03. This is 0.09 percent of the DOE derived concentration standard for plutonium-239/240 in water of 140 pCi/L (DOE 2011). No other transuranics were detected in the surface water samples collected during 2014.

Technetium-99 was detected at levels up to 18.3 pCi/L in samples collected from the East Drainage Ditch (EDD-SW01) and Little Beaver Creek (LBC-SW01, LBC-SW02, LBC-SW03, and LBC-SW04). Technetium-99 is occasionally detected in samples collected from the East Drainage Ditch and Little Beaver Creek. These detections are within the historical range of technetium-99 detected in Little Beaver Creek, and are 0.04 percent or less of the DOE derived concentration standard for technetium-99 in water of 44,000 pCi/L (DOE 2011, DOE 2016a).

Technetium-99 was detected in the second quarter samples collected from Big Run Creek: BRC-SW01 (8.63 pCi/L), BRC-SW02 (60.2 pCi/L), and BRC-SW05 (76.5 pCi/L). Technetium-99 was also detected in the first and second quarter samples collected from West Drainage Ditch sampling locations WDDSW01 and WDD-SW03 at a maximum activity of 11.6 pCi/L. The technetium-99 detections in Big Run Creek and West Drainage Ditch are 0.2 percent or less of the DOE derived concentration standard for technetium-99 in water of 44,000 pCi/L (DOE 2011) (DOE 2016a).

Uranium was routinely detected in the 2015 surface water samples at levels similar to those detected in previous years (DOE 2016b). Concentrations of uranium isotopes in surface water were 1 percent or less of the derived concentrations standards (680 pCi/L for uranium-233/234, 720 pCi/L for uranium-235, and 750 pCi/L for uranium-238) (DOE 2011). Because uranium occurs naturally in rocks and soil, some or all of the uranium detected in these samples may be due to naturally-occurring uranium.

## 3.4.1.2 Groundwater

Two water-bearing zones are present beneath PORTS: the Gallia and Berea formations. The Gallia is the uppermost water-bearing zone and contains most of the groundwater contamination at the site. The Berea is deeper than the Gallia and is usually separated from the Gallia by the Sunbury shale, which acts as a barrier to impede groundwater flow between the Gallia and Berea formations. The direction of groundwater flow beneath the site is controlled by a complex interaction between the Gallia and Berea units. The flow patterns are also affected by the presence of building sumps and storm sewer drains, and by the reduction in recharge caused by the presence of buildings and paved areas. Groundwater flow patterns in both the Gallia and Berea units are characterized by an east-west-trending groundwater divide. The direction of groundwater flow is generally to the south in the southern sections of PORTS and to the north in the northern sections (DOE 2004b).

In the vertical direction, almost all wells exhibit a downward gradient from the Gallia to the Berea unit. The extent of the gradient is influenced by the thickness of the Sunbury Shale. Where the Sunbury Shale is thick, the downward gradient is large. Only in places where the Sunbury Shale is absent are upward gradients observed. Three main discharge areas exist for the groundwater system beneath Portsmouth: Little Beaver Creek to the north and east, Big Run Creek to the south, and the West Ditch and Southwestern Drainage Ditch to the west (DOE 2004b).

Groundwater monitoring at the site is required by a combination of state and federal regulations, legal agreements with Ohio EPA and EPA, and DOE Orders. The Integrated Groundwater Monitoring Plan (IGWMP) has been developed to establish groundwater monitoring requirements for PORTS. Groundwater monitoring performed at PORTS is completed in accordance with the IGWMP and an annual report provides the results of such monitoring. In the future, groundwater monitoring will also include the OSWDF area.

Five groundwater contamination plumes have been identified on site at PORTS in the following areas: X-749 Contaminated Materials Disposal Facility/X-120 Former Training Facility (Quadrant I), Quadrant I Groundwater Investigative (5-Unit) Area, Quadrant II Groundwater Investigative (7-Unit) Area, X-701B Former Holding Pond (Quadrant II), and X-740 Former Waste Oil Handling Facility (Quadrant III). The main contaminants are VOCs and radionuclides (uranium and technetium-99) and the primary contaminant is trichloroethene. Two of the areas (Quadrant II Groundwater Investigative Area and the X-701B Former Holding Pond area) have trichloroethene concentrations exceeding 100,000  $\mu$ g/L. Other monitoring areas may have groundwater contaminated with metals, or may be monitored to comply with regulatory requirements for closed landfills. Remediation of groundwater is being conducted primarily under Ohio EPA's RCRA Corrective Action Program. During recent sampling, trichloroethene was not detected in groundwater beyond the DOE property boundary at concentrations that exceed the EPA drinking water standard of 5  $\mu$ g/L (DOE 2016a).

The IGWMP also addresses monitoring of residential water supplies near the site to verify that site contaminants have not migrated to off-site drinking water wells. Results of this program indicate that contaminants from the site have not migrated to off-site drinking water wells (DOE 2016a).

DOE has filed a deed notification at the Pike County Auditor's Office to restrict the use of groundwater beneath DOE property. As such, groundwater directly beneath the site is not used as a domestic, municipal, or industrial water supply, and contaminants in the groundwater beneath the site do not affect the quality of the water in the Scioto River Valley buried aquifer (DOE 2016a).

**Water Supply Monitoring.** Routine monitoring of residential drinking water sources is completed at PORTS in accordance with the requirements of Section VIII in the September 1989 Consent Decree between the State of Ohio and DOE and the Residential Groundwater Monitoring Requirements contained in the IGWMP. The purpose of the program is to determine whether residential drinking water sources have been adversely affected by plant operations. Six residential drinking water sources participated in the program in 2015. Wells are sampled semiannually by collecting a regular sample and a duplicate sample from each well. The site's water supply is also sampled as part of this program. Sampling locations may be added or deleted if requested by a resident and as program requirements dictate. Typically, sampling locations are deleted when a resident obtains a public water supply (DOE 2016b).

**Groundwater Treatment Facilities.** In 2015, a combined total of approximately 33.7 million gal of water were treated at the site's Groundwater Treatment Facilities. Approximately 26 gal of trichloroethene were removed from the water. All processed water is discharged through NPDES outfalls before exiting PORTS (DOE 2016b). Treatment facility information is summarized in Table 3.

Facility	Water Treated (gal)	Trichloroethene Removed (gal)
X-622	19,877,210	2
X-623	30,245	0.01
X-624	2,875,600	10
X-627	10,946,405	14
Total	33,729,460	26

# Table 3. Summary of Trichloroethene Removed by PORTS GroundwaterTreatment Facilities in 2015

Source: DOE 2016b

DOE = U.S. Department of Energy

# **3.4.1.3** Floodplains and wetlands

**Floodplains.** Floodplains are land areas adjacent to streams or rivers susceptible to being inundated by stream-derived waters. PORTS occupies an upland area bounded on the east and west by ridges of low-lying hills that have been deeply dissected by present and past drainage features. The facilities on the site are located at a nominal elevation of 670 ft above mean sea level, which is about 100 ft above the historical flood level for the Scioto River in the area. The highest recorded flood elevation of the Scioto River in the vicinity of the site was 570 ft above mean sea level in January 1913 (USEC 2004). Figure 8 depicts the 100-year floodplains for the vicinity surrounding the site (Federal Emergency Management Agency [FEMA] 2009). As shown on that figure, the entire site is located outside of the 100-year floodplain, with the exception of a small area in the northwest portion of the site that is associated with Little Beaver Creek.

**Wetlands.** The U.S. Army Corps of Engineers (USACE) defines wetlands as "those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands usually include swamps, marshes, bogs, and similar areas. In identifying a wetland, three characteristics should be met. First is the presence of hydrophytic vegetation that has morphological or physiological adaptations to grow, compete, or persist in anaerobic soil conditions. Second, hydric soils are present and possess characteristics that are associated with reducing soil conditions. Third, site hydrology, meaning the area is inundated or saturated to the surface at some time during the growing season of the prevalent vegetation, must be present (DOE 2004b).

The Ohio State Division of Natural Areas and Preserves has listed two wetland areas, located outside of the PORTS boundaries but near the site, as significant wetland communities: a palustrine forested wetland about 5 miles east of the site, and Givens Marsh, a palustrine wetland with persistent emergent vegetation about 2.5 miles northeast of the site (DOE 2004b). (Palustrine wetlands are inland wetlands in which the vegetation is predominantly trees and shrubs, and are typically associated with shallow, nonflowing water.)

A wetlands survey of PORTS was conducted in 1995 (Lockheed Martin Energy Systems, Inc. [LMES] 1996). The results of that survey found that PORTS contains 45 wetlands (41 jurisdictional and four nonjurisdictional) totaling about 34 acres, excluding retention ponds and streams. Jurisdictional wetlands are those that fall under the protection of Section 404 of the *Clean Water Act*; DOE and State of Ohio regulations, as well as Executive Order 11990, protect both jurisdictional and nonjurisdictional wetlands. Most of the wetlands are associated with wet fields, areas of previous disturbance, drainage



Figure 8. 100-Year Floodplains Near PORTS

ditches, or wet areas along roads and railroad tracks. Palustrine forested wetlands occur along Little Beaver Creek (DOE 2004b).

A wetlands study was completed in 2013 for the northeastern portion of PORTS, related to a siting study for a potential OSWDF. The wetlands survey used methods described in USACE's *Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*: *Eastern Mountains and Piedmont Region* (Version 2.0). The results of that study are presented in the Waste Disposition Remedial Investigation/Feasibility Study (RI/FS) report (DOE 2014a). Potential wetlands were identified in the field and then assessed using the *Ohio Rapid Assessment Method for Wetlands*, (Version 5.0) to categorize the wetlands based on the Ohio EPA Anti-Degradation Designation. Wetlands assigned to Category 1 support minimal wildlife habitat and minimal hydrological and recreational functions. They do not provide critical habitat for threatened or endangered species or contain rare, threatened, or endangered (RTE) species. Such wetlands are categorized as limited quality waters under the Ohio EPA antidegradation rule, *OAC* 3745-1-05.

Wetlands assigned to Category 2 support moderate wildlife habitat or hydrological or recreational functions and may include wetlands dominated by native species, but generally without the presence of, or habitat for, RTE species. Wetlands assigned to Category 3 support superior habitat or hydrological or recreational functions and may be typified by high levels of diversity or a high proportion of native species. The survey did not identify any high-quality Category 3 wetlands. There was good correlation to the jurisdictional wetlands found in the area in the earlier 1996 study, but generally the wetlands are now smaller.

An Ohio University habitat mapping study (Ohio University 2012b) also evaluated wetland habitats. This study mapped approximately 38 acres of wetland habitat within the PORTS property boundary (but outside Perimeter Road). All wetlands mapped during this project were classified as palustrine (associated with shallow, topographically retained basins). Many of the wetland habitat areas mapped during this project coincided with previously identified wetlands.

Wetland field assessments inside Perimeter Road were updated in the fall of 2014 (Wastren Advantage Inc. [WAI] and Stantec Consulting Services, Inc. 2015). This wetland assessment followed the same methodology used in the previous study of the northeastern portion of PORTS. Field surveys identified 69 total wetlands, totaling less than 15 acres, inside Perimeter Road. Thirty-six of the wetlands were categorized as Category 1, 10 were categorized as Category 2, and the remaining 23 wetlands were classified as Category 1 or 2 or Modified Category 2. Similar to the previous study, no high-quality Category 3 wetlands were identified. The locations and categories of the wetlands that have been identified at PORTS in previous studies and maintained in a database are presented in Figure 9. The wetland assessments have identified 148 wetlands covering approximately 36 acres. Most of the acreage (approximately 23 acres) is identified as Category 2.



Figure 9. Wetlands Identified at PORTS

This page is intentionally left blank.

## 3.4.2 Environmental Consequences

## 3.4.2.1 Proposed Action

Surface Water. Surface water resources on the property are limited to holding ponds, ditches, and low-flow streams, and potential adverse impacts, while expected, should be minimal. Construction activities on transferred real property (developed or undeveloped) would likely involve areas of disturbed or newly uncovered soil, which would increase the potential for runoff to carry sediment to drainage channels. Construction activities would be required to follow the appropriate regulatory process, including obtaining a construction storm water NPDES permit from Ohio EPA. The permit process requires a storm water pollution prevention plan for construction activities that exceed more than 1 acre of disturbed earth. The potential indirect impacts to surface water resources would be minimized by using best management practices, including standard erosion controls such as siltation fences and buffer zones of natural riparian vegetation, during construction activities. Grass would be planted in cleared areas to minimize the time soils are exposed, stabilize the soils, and control erosion. The potential for adverse impacts would exist until disturbed areas are stabilized. Thus, minor, short-term impacts to surface water resources would be expected from construction under the proposed action. Construction would also involve the presence of heavy equipment with the potential for leaks and spills of fuels or other petroleum products that could be carried away by runoff or sink into the ground. Spills of fuel and/or hazardous material could also have an adverse impact on surface waters if not controlled or contained.

The addition of new impervious surfaces would increase the rate and volume of storm water runoff within the affected area. Because the streams and drainage areas are small, changes in runoff could have significant impacts on the amount of water that would reach Little Beaver Creek and Big Run Creek, but changes to the amount of water in the Scioto River would be negligible. Increases in surface water runoff as a result of new construction would be attenuated through the use of temporary or permanent storm water controls such as detention or retention basins and other structures, use of permeable pavement, and stabilization of disturbed areas through landscaping and vegetation. The use of these measures would also increase groundwater recharge through direct percolation, offsetting the loss of pervious surface due to construction and minimizing downstream impacts. Storm water runoff after construction activities are completed and any discharge from facility operations to surface water would be in accordance with limitations established under the applicable NPDES permit.

For NRC- or State of Ohio-licensed facilities, radiological water effluents would be limited to the conditions of the license and would need to meet regulatory requirements for human health exposures.

Use of the real property (developed and undeveloped areas) for forestry/wildlife management and conservation would involve less impact to surface water over the long term than industrial uses. Nonindustrial uses would likely involve more natural conditions than industrial or commercial uses, with more vegetation and less runoff, less potential for adverse impacts to surface water quality, and less overall water use.

**Groundwater.** No impacts to groundwater are anticipated from any construction activities or normal facility operations. Use of groundwater directly beneath DOE property would be prohibited as a condition of the deed for title transfer. The deed restriction would ensure the protection of human health by preventing exposure to contaminants that could potentially be present in the groundwater. Impacts to groundwater quality could occur as a result of a fuel or hazardous material spill and subsequent migration of contaminants through the soil profile to the groundwater table, but the causes of these impacts are not limited to transferee activities. However, it is expected that the quantities of materials with the potential to affect groundwater would be transported or stored on-site using the proper containers and according to

all applicable regulations. The use of local, state, or federal permits, safety procedures, spill prevention plans, and spill response plans in accordance with applicable laws would minimize the severity of potential impacts from accidents.

Forestry/wildlife management and conservation uses of the PORTS site could have minimal impact on groundwater, but because impacts would be limited to increased recharge (correlating to decreased runoff), they would be considered beneficial impacts.

**Floodplains.** Because the entire site is located outside the 100-year floodplain, with the exception of a small area in the northwest portion of the site associated with Little Beaver Creek, no significant floodplain impacts should be associated with any property transfers or ultimate development.

**Wetlands.** The potential for, and degree of, adverse impacts would depend on how the future owners and/or occupants develop and use the property. Activities associated with development could have beneficial impacts or adverse impacts on wetlands. Beneficial impacts include any actions that would improve the quality of wetlands or actions that would enhance the ability of wetlands to perform wetland functions. Adverse impacts include any activity that would adversely affect the survival, quality, and natural and beneficial values of wetlands. Impacts on wetlands might result from activities occurring directly in wetlands or might result indirectly from activities that occur in areas adjacent to wetlands. The consequences of wetland alteration might last for decades (long-term impacts) or may be minor enough that wetlands could recover in a few years (short-term impacts).

Ohio EPA and the USACE jointly regulate wetlands-related activities. Any proposed activities that would affect wetlands or other waters of the United States or the State of Ohio would require a Section 404 permit from the USACE and a Section 401 Water Quality Certification from the state. It would be the responsibility of the new owners and/or occupants to secure these prior to initiating work in any wetlands. As construction on real property is planned, any available opportunities to minimize or avoid unnecessary impacts to wetlands would be taken to the degree practicable. However, if wetlands cannot be avoided, the development and implementation of appropriate mitigation measures for adverse impacts would be warranted. Permit conditions would stipulate which activities could occur in or around the affected wetlands. Regulatory permits would also specify all required mitigation measures, including potential compensation. The need to comply with the regulatory permits would be noted in the deed.

Forestry/wildlife management and conservation uses at the PORTS site could involve minimal development in wetlands. Any proposed construction in a wetland, such as a footbridge or bird blind, would involve permitting and certification requirements, which would minimize impacts.

# 3.4.2.2 No Action Alternative

Under the No Action Alternative, property would not be transferred and would remain under DOE control. It is assumed that the land would remain as it exists, and no other development is currently being considered. Because the real property would essentially remain in its current condition, the amount of runoff from the site and water uses would be similar. There would be no impacts to groundwater, surface waters, floodplains, or wetlands other than those expected from implementing the D&D and remedial action program.

# 3.5 ECOLOGICAL RESOURCES

This section describes the existing ecological environment on the PORTS site and in its vicinity. It includes descriptions of terrestrial resources (flora and fauna), aquatic resources, RTE species, and environmentally sensitive areas. The descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on ecological resources.

## 3.5.1 Affected Environment

## **3.5.1.1** Terrestrial resources

**Flora.** Ten terrestrial habitat types have been identified at PORTS (DOE 1997, DOE 2014a). These include:

- Old field areas Early successional stage of disturbed areas dominated by tall weeds, shade-intolerant trees, and shrubs
- Scrub thicket Later successional stage covering old field areas dominated by dense thickets of small trees
- Managed grassland Open areas actively maintained (mowed) and dominated by grasses
- Upland mixed hardwood forest Mesic to dry upland areas dominated by black walnut, black locust, honey locust, black cherry, and persimmon
- Pine forest Advanced successional stage following scrub thicket; the overstory is dominated by Virginia pine.
- Pine plantation Nearly pure stands of Virginia pine
- Oak-hickory forest Well-drained upland soils; white oak and shagbark hickory are the most dominant of the oaks and hickories.
- Riparian forest Periodically flooded, low areas associated with streams; dominated by cottonwood, sycamore, willows, silver maple, and black walnut.
- Beech-maple forest Undisturbed areas dominated by American beech and sugar maple
- Maple forest Dominated by sugar maple and other shade-tolerant species.

The most common type of vegetation on PORTS is managed grassland, which makes up approximately 30 percent of the total area of the site; also common are oak-hickory forest, which comprises approximately 17 percent, and upland mixed hardwood forest, which covers approximately 11 percent of the site (DOE 1997). The areas covered by each habitat type are presented in Table 4. These numbers do not account for the recent removal of approximately 200 acres of upland mixed hardwood forest for construction of the OSWDF.

	Approximate Total Area	Approximate Number of	Percent of
Habitat Type	(acres)	Communities	Total Area"
Managed grassland	1,102	Numerous <sup>b</sup>	29.2
Oak-hickory forest	632	14	16.7
Old field	420	10	11.1
Upland mixed hardwood forest	400	20	10.6
Riparian forest	153	10	4.1
Maple forest	128	7	3.4
Scrub thicket	79	10	2.1
Pine forest	69	10	1.8
Beech-maple forest	5	1	0.1
Old white pine plantation with mixed hardwoods	5	1	0.1

## **Table 4. Terrestrial Habitat Types at PORTS**

Source: DOE 1997

<sup>a</sup>Total site area is approximately 3,777 acres. Approximately 629 acres (16.7 percent) of the total area is covered by buildings, parking lots, and roads.

<sup>b</sup>This habitat is present in many areas interspersed between buildings and paved areas across the plant site.

DOE = U.S. Department of Energy

**Fauna.** Terrestrial habitats on PORTS support a relatively high diversity of terrestrial and aquatic wildlife species. Species observed on PORTS include 27 mammal species, 114 bird species (year-round residents, winter residents, and migratory species), 11 reptile species, and 6 amphibian species (DOE 2014a).

The most abundant mammals include the white-footed mouse (*Peromyscus leucopus*), short-tailed shrew (*Blarina brevicauda*), opossum (*Didelphis virginiania*), eastern cottontail (*Sylvilagus floridanus*), and white-tailed deer (*Odocoileus virginianus*). Common birds found at the reservation include year-round residents, winter residents, and migratory species. These include red-tailed hawk (*Buteo jamaicensis*); water birds such as the mallard (*Anas platyrhynchos*) and wood duck (*Aix sponsa*); game birds such as wild turkey (*Meleagris gallopavo*); and nongame birds such as nuthatches (*Sitta* sp.) and wrens (*Troglodytes* sp.). The most common of the 11 reptile species and 6 species of amphibians observed on the site include the eastern box turtle (*Terrapene carolina*), black rat snake (*Elaphe obsolete*), northern black racer (*Coluber constrictor constrictor*), American toad (*Bufo americanus*), and northern dusky salamander (*Desmognathus fuscus*) (DOE 2014a).

Common species occurring in open grassland areas include eastern cottontail (*Sylvilagus floridanus*), meadow vole (*Rodentia muridae*), and eastern meadowlark (*Sturnella magna*). Small wooded areas support numerous woodland and forest edge species such as raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), red-headed woodpecker (*Melanerpes erythrocephalus*), cardinal (*Cardinalis cardinalis*), white-breasted nuthatch (*Sitta carolinensis*), and yellow-rumped warbler (*Dendroica coronata*). Species that occur in the open grasslands and forest edges that are either actively managed (mowed) or adjacent to developed areas are tolerant of human activities and disturbances (DOE 2014a).

PORTS is within the natural range of the Indiana bat (*Myotis sodalis*), but no members of this federally-listed endangered species have ever been identified in bat surveys of the site. An area of

deciduous sugar maple forest along the Northwest Tributary stream corridor was previously identified as the only area at PORTS that may be suitable habitat (in summer months) for the Indiana bat. However, the most recent habitat study by Ohio University indicates that moderately to highly suitable bat habitat is present across most of the PORTS site outside of Perimeter Road (Ohio University 2012b). PORTS is also within the range of the northern long-eared bat (*Myotis septentrionalis*), which is a federally-listed threatened species. The northern long-eared bat roosts and forages in upland forests during late spring and summer (from early April through the end of September). However, in the winter the bats hibernate elsewhere.

# 3.5.1.2 Aquatic resources

The aquatic habitats on PORTS include the various holding ponds, intermittent streams, and streams that flow from or through the site. The aquatic habitats include Little Beaver Creek, the West Drainage Ditch, and the DOE Piketon Tributary, all of which discharge into the Scioto River. Little Beaver Creek and the West Drainage Ditch are designated warm water habitats. Warm water habitats are capable of supporting and maintaining a balanced, integrated, adaptive community of warm water aquatic organisms having a diverse species composition and functional organization. The aquatic habitat associated with Little Beaver Creek supports good to exceptional fish communities downstream of the X-230-J7 discharge from PORTS, and fair fish communities upstream due to intermittent stream flow (DOE 2014a).

Various species of reptiles and amphibians are associated with streams and other surface water on the site. The most common of the 34 total fish species and four hybrids found in Little Beaver Creek are the bluntnose minnow (*Pimephales notatus*), central stoneroller (*Campostoma anomalum*), creek chub (*Semotilus atromaculatus*), rainbow darter (*Etheostoma caeruleum*), spotfin shiner (*Cyprinella spiloptera*), and striped shiner (*Luxilus chrysocephalus*) (DOE 2007, DOE 2014a).

# 3.5.1.3 Rare, threatened, and endangered species

The Endangered Species Act of 1973 provides federal protection to species, and their habitats, that are listed as federal threatened or endangered species. A federal threatened species is defined as any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. A federal endangered species is defined as any species in danger of extinction throughout all or a significant portion of its range (50 *CFR* 17). Ohio Statutes 1518 and 1531 provide protection for state-listed threatened and endangered species. The ODNR defines a state endangered species as "a native species or subspecies threatened with extirpation from the state." A state threatened species is defined as "a species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists." A species of concern is defined as "a species or subspecies which might become threatened in Ohio under continued or increased stress." A special interest species is defined as "a species that occurs periodically and is capable of breeding in Ohio."

The potential existence of federal and state RTE species, as well as candidate species, in the vicinity of PORTS was determined through a review of previously prepared NEPA documents, by reviewing the results of previous studies, and through prior consultation with U.S. Fish and Wildlife Service (USFWS) and the ODNR, Division of Wildlife and Division of Natural Areas and Preserves. Previous consultation with the USFWS has indicated that the Indiana bat is the only federally-listed endangered species whose home range includes PORTS. However, no occurrence of the Indiana bat or any other federally-listed endangered plant or animal species has been documented on the PORTS site (DOE 2004b, DOE 2007, DOE 2015b). The northern long-eared bat is a federally-listed threatened species that has been documented on the PORTS site.

An additional review of previous documents and studies indicated that the northern long-eared bat, sharp-shinned hawk (*Accipiter striatus*), Carolina yellow-eyed grass (*Xyris difformis*), Virginia meadow-beauty (*Rhexia virginica*), and rough green snake (*Opheodrys aestivus*) may occur at PORTS. Isolated sightings of some of these state-listed species have occurred in the past on the PORTS site, but no recent sightings have been reported with the exception of the northern long-eared bat. In addition, there has been evidence of barn owls (*Tyto alba*) nesting in one of the process buildings at PORTS. The barn owl is a state-listed threatened species. Another species that has been identified in the region, but not observed on PORTS, is the timber rattlesnake. Table 5 lists the federally- and state-listed endangered, threatened, potentially threatened, and special concern species in the vicinity of PORTS.

		Status <sup>a</sup>	
Common Name	Scientific Name	Federal	State
	<b>Faunal Species</b>		
Indiana bat	Myotis sodalis	Е	Е
Northern long-eared bat	Myotis septentrionalis	Т	Т
Rough green snake	Opheodrys aestivus	NL	S
Sharp-shinned hawk	Accipiter striatus	NL	S
Barn owl	Tyto alba	NL	Т
Timber rattlesnake	Crotalus horridus	S	Е
	<b>Floral Species</b>		
Virginia meadow-beauty	Rhexia virginica	NL	Р
Carolina yellow-eyed grass	Xyris difformis	NL	Е
Lopsided rush	Juncus secundus	NL	Р
Balsam groundsel	Packera paupercula	NL	Т
Blackseed speargrass	Piptochaetium avenaceum	NL	Е
Running buffalo clover	Trifolium stoloniferum	E	E

Table 5 Federally- and	State-listed	Terrestrial RTE	Species in	the PORTS <b>'</b>	Vicinity
$1 a \mu c J$ , $1 c u c a n y = a n u$	Dialo-Insicu	I UI I USUI IAI INI LI	Species in		V ICIIIIC V

<sup>*a*</sup>E = endangered; P = potentially threatened; S = species of concern; T = threatened; NL = not listed.

Past and recent consultations with the USFWS indicate that some of the riparian areas on PORTS may be suitable summer habitat for the Indiana bat. Roosting and nursery sites may include forested areas with loose barked trees and standing dead trees. Potential summer habitat for the Indiana bat has been identified within the corridors along Little Beaver Creek in the northern portion of the plant and along the Northwest Tributary stream. Ohio University conducted a detailed habitat mapping study in 2012. Findings from this study, using updated guidelines, indicate that Indiana bat habitat may be more extensive than indicated in prior studies. The primary trees that produce exfoliating bark and nesting cavities (e.g., sycamore and shagbark hickory) are abundant in the older forest habitats (Ohio University 2012b). In 1994 and 1996, DOE conducted on-PORTS surveys to identify suitable bat habitat and then conducted mist netting in those areas to determine if Indiana bats were present. The surveys identified these two potential habitat areas for Indiana bats, and the mist netting resulted in the documentation of four different species of bats in these two riparian areas, but no Indiana bats were found at PORTS (DOE 2007). Another bat mist-net survey was conducted in May 2011. During this survey, 4 nights of sampling resulted in the capture of eight bats, but no Indiana bats were observed (EnviroScience 2011). Based on USFWS approval of a mist net plan, a second mist net survey was conducted in the northeastern portion of PORTS in July and August 2013 over 10 nights. No Indiana bats were found, but nine northern long-eared bats were captured, inventoried, and released, along with four other species (DOE 2014a).

The Virginia meadow-beauty has been found near the X-611A Old Lime Sludge Lagoons, and Carolina yellow-eyed grass has been tentatively identified at the X-611B Sludge Lagoon. The Virginia meadow-beauty is associated with the wetlands of the former sludge lagoon, and its preferred habitat is wet, sandy soils, particularly in sandy swamps. The Carolina yellow-eyed grass was observed in 1994; however, formal documentation of the species could not be performed because the grass was not in fruit or flower. Carolina yellow-eyed grass prefers wet peaty or sandy soils typically found in marshes or bogs. Several additional state-listed plant species have been preliminarily identified during the recent habitat mapping project by Ohio University.

Thirteen additional state-listed RTE plant species were preliminarily identified on the PORTS site during the 2012 Ohio University habitat study. These plant species identifications did not meet the multi-level criteria (three-season survey) necessary to definitively identify the presence of an RTE plant species. It should also be noted that these identifications were performed during the habitat identification and characterization work and were not part of a comprehensive, site-wide effort aimed specifically at identifying all RTE plant species on the PORTS site. Some of these species were identified in formally established sampling plots, but others were identified along the way during pedestrian transit from one sampling plot to another. The state listing statuses of these 13 RTE plant species, plus those of the previously identified Virginia meadow-beauty and Carolina yellow-eyed grass, are presented in Table 6 (Ohio University 2012b). Through on-going consultation, the USFWS notified DOE that running buffalo clover (*Trifolium stoloniferum*) has been listed as an endangered floral species in Pike County (this species was not identified at PORTS during the Ohio University habitat study).

Common Name	Scientific Name	State Listing Status <sup>a</sup>
American sweetflag	Acorus americanus	Р
Anisescented goldenrod	Solidago odora	Т
Blackjack oak	Quercus marilandica	Р
Bulbous woodrush	Luzula bulbosa	Т
Carolina yellow-eyed grass	Xyris difformis	Е
Coastal plain willow	Salix caroliniana	Р
Common marsh bedstraw	Galium palustre	Е
Common pondweed	Potamogeton natans	Р
Porter's reedgrass	Calamagrostis porteri	Т
Potato dwarfdandelion	Krigia dandelion	Т
Procession flower	Polygala incarnata	Е
Smooth rose	Rosa blanda	Р
Sparselobe grapefern	Botrychium biternatum	Е
Virginia meadow-beauty	Rhexia virginica	Р
White thoroughwort	Eupatorium album	Т

#### Table 6. State-listed RTE Plant Species Identified at PORTS

Source: Ohio University 2012b

 ${}^{a}E$  = endangered; P = potentially threatened; T = threatened

Ohio EPA previously determined that two state-endangered fish species and four state-threatened fish species exist near PORTS, but they are restricted to the Scioto River. Little Beaver Creek, the main body of water running through the PORTS site, does not provide sufficient habitat to support threatened or endangered species of fish (USEC 2004).

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

## 3.5.1.4 Invasive species

An invasive species is defined as "an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health." An alien species means "with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem." Approximately 52 ODNR-designated invasive floral species have been identified in Pike County. Those classified as targeted invasive species pose the most concern because they are aggressive and difficult to control. ODNR has targeted these species as the highest priorities for control and elimination efforts.

Invasive floral species on the PORTS site are known as a result of data collected during the recent Ohio University study (Ohio University 2012b) of ecological habitats on the site and in its vicinity. In addition, a number of invasive floral species were identified during the 1995 survey of wetlands on the PORTS site (LMES 1996). As a result of these two studies, 26 invasive species of flora have been identified on the PORTS site. Of these 26 species, 20 are ODNR-designated invasive species. Four of these 20 (garlic mustard [*Alliaria petiolata*], amur honeysuckle [*Lonicera maackii*], Japanese honeysuckle [*Lonicera japonica*], and multiflora rose [*Rosa multiflorum*]) are classified as targeted invasive species.

Most of the 26 species of invasive flora on the PORTS site are associated with terrestrial habitat edge areas and areas of soil disturbance, which is normal and expected. According to the Ohio University study, invasive aquatic plant species occur at a very low frequency in and around wetland habitats and ponds on the PORTS site.

Invasive faunal species on the PORTS site and in Pike County are few when compared to the invasive plant species. Four species of invasive fauna are known to be present in Pike County. These include the grass carp (*Ctenopharyngodon idella*), zebra mussel (*Dreissena polymorpha*), emerald ash borer beetle (*Agrilus planipennis*), and the gypsy moth (*Lymantria dispar dispar*) (ODNR 2012, Ohio Department of Agriculture 2016).

# 3.5.1.5 Environmentally sensitive areas

No environmentally sensitive areas are present in the 5-mile area surrounding PORTS. Such areas would include state and national parks, conservation areas, wild and scenic rivers, and other areas of recreational, ecological, scenic, or aesthetic importance (USEC 2004).

Several potential environmentally sensitive areas are located within the PORTS boundary including wetland areas, riparian areas along Little Beaver Creek and its Northwest Tributary, and areas where state-listed RTE plant species have been observed. No sensitive areas with federally-listed plant species have been observed on the PORTS site. The sensitive areas that were identified are as follows:

- The Northwest Tributary stream corridor is considered a sensitive area because it represents some of the best potential Indiana bat and northern long-eared bat habitat at PORTS, although recent studies indicate such habitat is far more extensive in areas outside of Perimeter Road than previously indicated (Ohio University 2012b).
- Several jurisdictional and nonjurisdictional wetlands are present on the PORTS site. Recent wetland surveys have been conducted, and many of the identified wetlands coincide with the previously identified wetlands. The recent surveys will be considered during planning and development.

- The area near the X-611B Sludge Lagoon should be considered a sensitive area because of the possible presence of Carolina yellow-eyed grass, which was observed at PORTS in 1994 (DOE 1996).
- The area near the X-611A Old Lime Sludge Lagoons is a sensitive area because the Virginia meadow-beauty plant species was identified at the base of the dike. Some of the previously mentioned wetlands also are present near this area.
- The recent habitat study by Ohio University has identified additional on-site locations that harbor 13 state-listed potentially RTE plant species (Ohio University 2012b).

# 3.5.2 Environmental Consequences

# 3.5.2.1 Proposed Action

Development of transferred property would have direct or indirect impacts on plants and animals. Construction impacts would include direct mortality or injury to biota and the elimination or fragmentation of the existing habitat. Potentially affected wildlife and plants are common to the area and some animal species would be able to relocate to other nearby areas that offer the same type of habitat mix. Impacts would be greater in areas that are relatively undeveloped and have a greater diversity of undisturbed habitat. Impacts within the centrally developed area would be negligible because of the heavily disturbed nature of the area and lack of suitable habitat.

Direct adverse impacts to aquatic resources would be minimal. Similar to surface water resources, minor, short-term impacts to aquatic resources would be expected from construction under the proposed action. Minimizing the amount of disturbance and blending development with the natural setting of the area would reduce the impacts to biological resources. Natural habitat around areas of development should be left as a buffer zone between the developed areas and undeveloped portions of the site. Areas disturbed during development, but not used for new facilities, should be revegetated after construction is completed. The use of native species for revegetation would have a positive impact. Normal facility operations should not have any adverse impacts to wildlife or pose any unacceptable ecological risk.

The Indiana bat and northern long-eared bat are the only federally-listed threatened and endangered faunal species whose home ranges include the PORTS site. Construction-related activities could adversely impact suitable Indiana bat and northern long-eared bat habitat areas on the PORTS site. If potential bat roost trees with exfoliating bark are present in areas that would be impacted during construction, the USFWS recommends saving these trees and the other trees surrounding them wherever possible.

Specific ways to either avoid or minimize impacts to the bats are identified below:

- Seasonal clearing Tree clearing activities will be conducted between October 1 and March 31 to avoid impacts to the bats by removing the trees while the bats are in hibernation elsewhere.
- Water resource protection The PORTS streams will be kept as clear of sediment as possible during construction, which preserves drinking water quality and prey production for the bats.
- Land conservation USFWS encourages habitat preservation for the northern long-eared bat and DOE is evaluating the opportunities for habitat preservation in one area of the PORTS reservation as part of a larger mitigation effort for streams, wetlands, and bats at PORTS.

Also under the proposed action, invasive floral or faunal species could enter PORTS in shipments of equipment and materials necessary to support construction and development. The greatest potential for invasive species to enter PORTS and impact the existing environment would result from the purchase and use of commercially available seed and plants to restore vegetation in areas of soil disturbed by construction activities. Invasive species impacts on PORTS would be avoided by administratively restricting vegetation restoration and landscaping to the use of native plant species and the seeds of such species. With the implementation of avoidance, purchasing, and administrative measures, potential impacts from invasive species at PORTS and other locations in its region of influence (ROI) would be minimal.

Operation of industrial facilities on transferred land would pose very little additional impact on ecological resources beyond construction-related activities.

Forestry/wildlife management or conservation uses in the developed areas of the site would have minimal impact, and could have a beneficial impact by increasing the quality of ecological resources. Potential impacts to ecological resources in the undeveloped area would depend on where specific types of activities would occur in relation to existing wildlife habitat, but impacts are estimated to be negligible.

# 3.5.2.2 No Action Alternative

There would be no additional impacts to ecological resources under the No Action Alternative other than those expected from implementing the D&D and remedial action program. PORTS would remain DOE property, and the current land use would remain unchanged until any future disposition could be decided. Absent active management, natural succession of vegetation would continue to occur within the existing habitats, which would be a positive impact.

# 3.6 CULTURAL RESOURCES

Descriptions of the cultural resources environment at PORTS and in its vicinity are provided in this section. These descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on these resources.

# **3.6.1** Affected Environment

Cultural resources include any prehistoric or historic district, site, building, structure, or object resulting from, or modified by, human activity. Some cultural resources may be designated as historic properties pursuant to the National Historic Preservation Act of 1966 (NHPA) (16 USC 470 et seq.). Historic properties are cultural resources listed in, or eligible for listing in, the National Register of Historic Places (NRHP) because of their significance and integrity. Under federal regulations (36 CFR 800), federal agencies must assess the impacts their actions have on historic properties and, if appropriate, must avoid, minimize, or mitigate adverse impacts.

PORTS and its surrounding area have the potential to yield both prehistoric and historic cultural resources. Beginning in 1996 and continuing until 2012, DOE has conducted a number of cultural resource surveys to identify historic properties. In addition to archeological resources, an inventory was conducted to identify architectural resources (DOE-built resources) at PORTS.

**Archaeological Resources.** A Phase I archaeological survey of PORTS was performed in 1996 and 1997. Collection of information about potential archaeological sites continued through 2013. A combined total of 117 archaeological resources have been identified within PORTS; of these, 99 prehistoric and historic-era archaeological sites have been assigned state trinomial site numbers by the Ohio Historic Preservation Office (OHPO). Eighteen sites are isolated artifact find locations,

but because they lack archaeological integrity, no trinomial site numbers were assigned. At these ground locations only one artifact (either prehistoric or historic) was found and there were no other signs of past human occupation. The surveys identified four of the 117 sites to be eligible for the NRHP, and two of these are located in the vicinity of the OSWDF. With the exception of four prehistoric archaeological sites (now three, as discussed below and in Section 3.6.2.1), all of the other archaeological sites at PORTS have been determined to be ineligible for listing on the NRHP.

DOE has developed mitigation measures for the adverse impact of the OSWDF to the one historic property where avoidance or minimization is not practicable. As a mitigation measure, DOE has performed a Phase III data recovery effort of the affected site, in coordination with the Tribal Nations and the OHPO. Recorded artifacts will be preserved at a recognized federal repository by a curation professional. A technical report documenting the data recovery processes and results will be prepared and shared with the OHPO. A summary-level report intended for a general audience will also be prepared in addition to the technical report as an aspect of public outreach. A second site is located in the vicinity of the project area and will be avoided.

**Architectural Resources.** Numerous architectural resources have been identified on PORTS. In 1996 and 1997 an architectural inventory of buildings, facilities, and structures on PORTS was conducted to comply with Section 110 of the NHPA, as amended, which requires federal agencies to inventory the cultural resources present on their lands. This inventory identified 196 architectural resources consisting of plant buildings and other man-made structures. These properties included various buildings, facilities, and structures identified to be within the scope of the DOE D&D Program (DOE 2015a). Based on their relationship with the historic Cold War mission of PORTS, 33 of the 196 PORTS buildings are considered historic properties. DOE has committed to the final comprehensive mitigation measures in the Process Buildings D&D ROD. Examples of these mitigation measures are listed below.

DOE is developing a Historic Context Report for preservation purposes that will document the history of the operations and facilities at PORTS from 1952 through the end of the Cold War. DOE also maintains the PORTS Virtual Museum, which provides multimedia documentation of PORTS and its history, operations, oral histories, and cleanup program, and includes links to published NHPA reports. DOE will expand the virtual museum to include information on the prehistoric activities in the area around PORTS by Native Americans.

The following mitigation activities are being performed to document and comprehensively interpret the archaeological and architectural resources and environment at PORTS:

- Collect and evaluate items recovered from PORTS facilities for potential future display by DOE or others.
- Conduct public outreach to local school districts and others. Public outreach efforts are ongoing and will continue until the DOE EM mission at PORTS is complete.
- The Comprehensive Summary Report summarizing all NHPA-related studies (prehistoric, historic-era, and DOE-era) enables a better understanding of the breadth of history at PORTS. This report was developed and submitted to the Ohio State Historic Preservation Officer in December 2015.
- Panoramic photographs are being taken at regular intervals during and after demolition, and these will be archived with panoramic photos that were taken during plant construction.

• Pursuing placement of two State of Ohio historic markers that will offer information on PORTS history and prehistory. DOE will coordinate with the OHPO on the content of the markers.

# 3.6.2 Environmental Consequences

# 3.6.2.1 Proposed Action

Section 106 of the NHPA requires that projects undertaken, funded, licensed, or permitted by federal agencies be reviewed to determine if they could affect properties that are listed in the NRHP or are eligible for listing in the NRHP. There is a potential for impacts that could occur either indirectly or directly, depending on future development activities and locations. Only two archaeological historic properties may be transferred in the future. DOE would include restrictions in the deed to avoid adverse impacts and indicate that, should a transferee propose adverse impacts, the Section 106 process would be followed.

Using the PORTS site for forestry/wildlife management and conservation use would not likely involve significant construction, if any. Therefore, these uses would present the least potential for impacts to cultural resources.

# 3.6.2.2 No Action Alternative

The no action alternative would have adverse impacts resulting from the D&D and waste disposition activities, but those impacts will be mitigated pursuant to commitments made in their respective RODs. The current land use would remain unchanged until any future disposition could be decided.

# 3.7 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

Socioeconomics is the study of the interrelation between social and economic factors. For analysis under NEPA, these factors include employment and income, demographics, availability of housing and community services, and community fiscal status. A description of the socioeconomic environment at PORTS and its vicinity is provided in this section, along with descriptions of the distributions of minority and low-income populations in the vicinity of PORTS. The descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on socioeconomics and environmental justice.

# 3.7.1 Affected Environment

# 3.7.1.1 Socioeconomics

The economic ROI for this analysis includes Jackson, Pike, Ross, and Scioto counties in Ohio. This region encompasses the area in which workers are expected to spend most of their salary and in which a significant portion of site purchase and nonpayroll expenditures from construction, manufacturing, and operations is expected to take place. Selection of the counties included in the ROI is primarily based on the current residential locations of the workers at PORTS. At present approximately 92 percent of these workers reside in the four-county ROI. Figure 1 shows a map of the counties surrounding PORTS that comprise the ROI, along with major population centers.

**Population.** Pike County, the home of PORTS, is primarily rural in nature. The remaining counties in the ROI are also largely rural in character, except near the towns of Portsmouth in Scioto County and Chillicothe in Ross County. Based on 2010 population figures, over the last 20 years population within the ROI has grown at a higher rate than in the state of Ohio. The ROI population is projected to grow at a smaller rate compared to state of Ohio rates during the current decade, increasing 0.2 percent between 2010 and 2020. Historic and projected populations in the ROI and in the state are presented in Table 7.

	1990	2000	2010	2020	2030
Jackson County	30,230	32,641	33,225	33,630	34,010
Pike County	24,249	27,695	28,709	29,000	29,420
Ross County	69,330	73,345	78,064	79,850	81,510
Scioto County	80,327	79,195	79,499	77,430	75,520
ROI	204,136	212,876	219,497	219,910	220,460
Ohio	10,847,115	11,353,140	11,536,504	11,574,870	11,615,100

#### Table 7. Historic and Projected Populations for the ROI and Ohio

Source: ODSA 2016a, U.S. Census Bureau 2016a

ODSA = Ohio Development Services Agency ROI = region of influence

The population of the ROI in 2010 was 219,497 (U.S. Census Bureau 2016a). In 2000, 37 percent of the population of the ROI resided in Scioto County. Between 2000 and 2010, each of the counties in the ROI experienced a small (0.4 to 6.4 percent) increase in population.

Chillicothe, in Ross County, is the largest population center in the ROI with a 2010 population of 21,901. Other population centers include Portsmouth in Scioto County and Jackson in Jackson County, with 2010 populations of 20,226 and 6,397, respectively. The largest town in Pike County is Waverly, and the closest town to PORTS is Piketon. The 2010 populations of these towns were 4,408 and 2,181, respectively (U.S. Census Bureau 2016a).

**Employment.** Table 8 shows employment by sector in 2013. The service sector (education and health services plus financial and business services) provides the highest percentage of the employment in the ROI at approximately 31 percent, followed by the government sector, the trade, transportation, and utilities sector, and the manufacturing sector, with 20.4 percent, 17.4 percent, and 13.9 percent, respectively. The past decade has seen a slight employment shift from the manufacturing and construction sectors toward the service and government sectors within the ROI.

	Jackson (%)	Pike (%)	Ross (%)	Scioto (%)	ROI (%)
Mining	2.0	0.4	0.3	0.2	0.6
Construction	3.4	5.9	2.4	3.0	3.2
Manufacturing	31.2	7.6	15.5	6.6	13.9
Trade, Transportation, and Utilities	15.9	15.4	19.3	16.8	17.4
Financial and Business Services	9.5	26.5	7.3	8.4	10.5
Education and Health Services	12.1	17.7	17.9	29.4	20.8
Government	14.5	15.8	23.7	21.1	20.4
Others	11.4	10.6	13.7	14.4	13.2

#### Table 8. 2013 Employment by Sector (Percent) for PORTS

Source: ODSA 2016a

ODSA = Ohio Development Services Agency

ROI = region of influence

The ROI has experienced a decrease in the labor force since 2010. The labor force dropped from 92,600 in 2010 to 86,700 in 2015 (ODSA 2016b), for a negative growth rate of -6.4 percent for that period. Employment for the ROI slightly increased from 80,700 in 2010 to 81,000 in 2015, for an increase of 0.4 percent for that period. The ROI unemployment rate, which was 12.9 percent in 2010, dropped to 6.8 percent by 2015 as shown in Table 9. The average unemployment rate for the State of Ohio was 6.8 percent in 2015, a decrease from 12.9 percent in 2010 (ODSA 2016b). The unemployment rate in the ROI is higher than that of the state as a whole.

	Employment		Unemp (per	loyment cent)
	2010	2015	2010	2015
Jackson County	12,500	12,100	12.5	8.6
Pike County	9,900	9,500	14.8	7.4
Ross County	30,000	32,000	11.9	5.3
Scioto County	28,300	27,400	13.3	7.6
ROI	80,700	81,000	12.9	6.8
Ohio	5,247,000	5,423,000	10.3	4.9

#### **Table 9. ROI Employment and Unemployment Rates**

Source: ODSA 2016b

ODSA = Ohio Development Services Agency ROI = region of influence

**DOE Employment.** As of April 30, 2016, there were 2,635 non-DOE government personnel supporting PORTS (including 208 Centrus personnel and one non-DOE subcontractor supporting both DOE and Centrus) (Restoration Services Inc. 2016).

**Personal Income.** The ROI per capita income was \$28,553 in 2010, which was 22 percent lower than the Ohio per capita income of \$36,377 for the same year. As presented in Table 10, the ROI and the four counties have a lower per capita income than the state of Ohio and the United States. In 2010, the ROI per capita income was \$28,553, or 71 percent of the national per capita income of \$40,277. In 2014, the ROI per capita income increased to \$32,067, but slightly decreased to 70 percent of the national per capita income. During the same period, the per capita income in Ohio increased from \$36,377 to \$42,236, which is approximately 92 percent of the national per capita income.

			Percent U.S. Per Capita	Percent U.S. Per Capita
	2010	2014	Income 2010	Income 2014
Jackson County	28,915	32,701	72	71
Pike County	27,191	32,093	68	70
Ross County	28,532	32,228	71	70
Scioto County	28,913	31,627	72	69
ROI	28,553	32,067	71	70
Ohio	36,377	42,236	91	92
United States	40,277	46,049	100	100

#### Table 10. Per Capita Income of the ROI and Ohio

Source: ODSA 2016b

All per capita income dollar amounts presented are in nominal dollars (i.e., current dollars, not adjusted for inflation), as reported by the U.S. Bureau of Economic Analysis.

ODSA = Ohio Development Services Agency ROI = region of influence

Housing. Detailed housing characteristics for the ROI are presented in Table 11. In 2014, housing density in the ROI averaged 43 units per square mile and the median home value was \$97,639. In contrast, the Ohio state average housing density is 114.8 units per square mile, and the median home value is \$129,600 for the state (U.S. Census 2016a).

	Number of Owner-Occupied	Number of	Percent Vacancy Rate Rental	
	Units	<b>Rental Units</b>	Units	Median Value
Jackson County	8,934	4,354	8.6	\$89,600
Pike County	7,803	3,056	12.9	\$96,200
Ross County	20,533	7,775	11.3	\$111,100
Scioto County	20,484	8,968	13.5	\$88,200
ROI	57,754	24,153	11.6	\$97,639

## Table 11. ROI Housing Characteristics, 2014

Source: ODSA 2016a (county profiles)

ODSA = Ohio Development Services Agency

ROI = region of influence

Schools. The ROI has 33 public school districts with a total of 86 schools. These schools served a student population of 33,286 in the 2013-2014 school year (Table 12) (National Center for Education Statistics [NCES] 2016a). Several schools within the ROI have student/teacher ratios lower than the state average of 16.3 (NCES 2016b). The ROI overall has a student/teacher ratio of 15.0.

	Number of Schools	Student Enrollment	Number of Teachers	Student/Teacher Ratio
Jackson County	12	5,230	334	15.7
Pike County	15	4,765	284	16.8
Ross County	26	11,142	793	14.0
Scioto County	33	12,149	801	15.2
ROI	86	33,286	2,212	15.0
Ohio	3,699	1,719,929	105,703	16.3

## Table 12. 2013–2014 School Year Public Education Inventory for the ROI

Source: NCES 2016a, 2016b

NCES = National Center for Education Statistics

ROI = region of influence

**Health Care Facilities.** Adena Pike Medical Center, the hospital closest to PORTS, is located on Dawn Lane northwest of State Route 104, approximately 7.5 miles north of PORTS and just south of Waverly. The Adena Urgent Care facility is located on State Route 104 near the Adena Pike Medical Facility. PORTS has an on-site medical center and the X-1007 Fire Station maintains a first aid room and provides ambulance service for emergency conditions. Adena Pike Medical Center has 25 licensed beds (ODSA 2016a). No other acute care facilities are located in Pike County. Adena Health Center and Southern Ohio Medical Center both operate an urgent care facility in Waverly, approximately 8 miles north of PORTS. Piketon and Waverly Family Health Centers, both located north of PORTS, are also available during working hours for minor emergencies (DOE 2007).

Law Enforcement, Fire Fighting, and Other Public Services. Several state, county, and local police departments provide law enforcement in the ROI. Pike County, where PORTS is located, has 16 officers and provides law enforcement services to the PORTS site. The other counties in the ROI have a total of approximately 101 full-time officers: 14 in Jackson County, 44 in Ross County, and 43 in Scioto County (*Crime in the United States* 2016).

According to the U.S. Fire Administration (USFA) National Fire Department Census Database, there are 46 career and volunteer fire departments in the ROI (USFA 2010). The career fire departments include the Portsmouth Fire Department, which has three engine houses containing four engines, two ladder vehicles, and one rescue vehicle (Portsmouth 2016). In addition, the Chillicothe Fire Department consists of three units with a total authorized staff of 49 people (Chillicothe Fire Department 2016). PORTS also has an on-site fire department. The department has several firefighting vehicles and associated equipment to contain most fires that would occur at PORTS. Mutual aid agreements with local off-site fire department.

**Fiscal Characteristics.** Each of the counties in the ROI assesses a 7.25 percent total sales tax, which includes a 1.5 percent local assessment and a 5.75 percent state assessment (Ohio Department of Taxation 2016). The State of Ohio also imposes an income tax and a commercial activity tax, a portion of which is returned to the county of origin (Ohio Department of Taxation 2016).

## 3.7.1.2 Environmental justice

On February 11, 1994, the President signed Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which directs all federal agencies to develop strategies for considering environmental justice in their programs, policies, and activities. Environmental justice is described in the Executive Order as "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." On December 10, 1997, the Council on Environmental Quality issued Environmental Justice Guidance Under the National Environmental Policy Act (CEQ 1997a). The Council developed this guidance to "…further assist federal agencies with their National Environmental Policy Act procedures."

Minority populations included in the federal census are identified as Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, other race, of two or more races, and Hispanic or Latino (CEQ 1997a). A minority population exists where either the minority population of the affected area exceeds 50 percent or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. Low-income populations are identified using statistical poverty thresholds from the U.S. Census Bureau. The 2014 poverty threshold was defined as a 2014 annual income less than \$12,316 for an individual and \$24,008 for a family of four (two adults and two children) (U.S. Census Bureau 2016a).

The minority and low-income population data presented in this section were obtained from the U.S. Census Bureau. They include data on minority populations and estimated low-income population data from the American Community Survey (2010-2014) (U.S. Census Bureau 2016b). These data were obtained for each census tract (a geographical subdivision within a county) in the four-county PORTS ROI. Table 13 presents these data by census tract and identifies the county in which each census tract is located. The minority and low-income population data are presented by census tract because this is the geographic subdivision at which disproportionate impacts on minority and low-income populations would be most noticeable.

	Minority			Low-income	
-		Percent			Percent Below
Census Tract	Location	Minority	Census Tract	Location	Poverty Level
9572	Jackson County, Ohio	4.3	9572	Jackson County, Ohio	19.9
9573	Jackson County, Ohio	2.9	9573	Jackson County, Ohio	28.2
9574	Jackson County, Ohio	2.7	9574	Jackson County, Ohio	24.5
9575	Jackson County, Ohio	4.1	9575	Jackson County, Ohio	21.8
9576	Jackson County, Ohio	1.3	9576	Jackson County, Ohio	22.9
9577	Jackson County, Ohio	2.9	9577	Jackson County, Ohio	25.1
9578	Jackson County, Ohio	2.6	9578	Jackson County, Ohio	24.2
9522	Pike County, Ohio	4.2	9522	Pike County, Ohio	27.6
9523	Pike County, Ohio	3.8	9523	Pike County, Ohio	23.8
9524	Pike County, Ohio	6.3	9524	Pike County, Ohio	14.6
9525	Pike County, Ohio	0.3	9525	Pike County, Ohio	23.2
9526	Pike County, Ohio	3.3	9526	Pike County, Ohio	28.0
9527	Pike County, Ohio	3.9	9527	Pike County, Ohio	22.7
9555	Ross County, Ohio	3.2	9555	Ross County, Ohio	12.8
9556.01	Ross County, Ohio	2.6	9556.01	Ross County, Ohio	14.3
9556.02	Ross County, Ohio	43.5	9556.02	Ross County, Ohio	23.1
9556.03	Ross County, Ohio	2.5	9556.03	Ross County, Ohio	21.2
9557	Ross County, Ohio	5.5	9557	Ross County, Ohio	16.6

Table 13. Minority and Low-income Populations in the PORTS ROI

Minority			Low-income		
		Percent			Percent Below
Census Tract	Location Poss County Obio	<u>Minority</u> 5.7	Census Tract	Location Poss County Obio	10.8
9550	Ross County, Ohio	12.0	9550	Ross County, Ohio	7.0
9559	Ross County, Ohio	7.0	9559	Ross County, Ohio	7.0
9560	Ross County, Ohio	11.5	9560	Ross County, Ohio	27.1
9561	Ross County, Ohio	11.5	9561	Ross County, Ohio	17.7
9562	Ross County, Ohio	24.4	9562	Ross County, Ohio	24.2
9563	Ross County, Ohio	13.8	9563	Ross County, Ohio	20.1
9564	Ross County, Ohio	8.2	9564	Ross County, Ohio	31.4
9565	Ross County, Ohio	12.6	9565	Ross County, Ohio	33.6
9566	Ross County, Ohio	3.0	9566	Ross County, Ohio	10.9
9567	Ross County, Ohio	5.7	9567	Ross County, Ohio	13.6
9568	Ross County, Ohio	4.3	9568	Ross County, Ohio	22.4
9569	Ross County, Ohio	3.8	9569	Ross County, Ohio	22.2
0021	Scioto County, Ohio	2.7	0021	Scioto County, Ohio	20.4
0022	Scioto County, Ohio	16.7	0022	Scioto County, Ohio	22.5
0023	Scioto County, Ohio	3.6	0023	Scioto County, Ohio	32.4
0024	Scioto County, Ohio	1.5	0024	Scioto County, Ohio	23.0
0025	Scioto County, Ohio	1.5	0025	Scioto County, Ohio	19.3
0026	Scioto County, Ohio	3.1	0026	Scioto County, Ohio	22.3
0027	Scioto County, Ohio	2.1	0027	Scioto County, Ohio	6.8
0028	Scioto County, Ohio	5.1	0028	Scioto County, Ohio	30.9
0029	Scioto County, Ohio	3.2	0029	Scioto County, Ohio	17.6
0030	Scioto County, Ohio	1.1	0030	Scioto County, Ohio	30.6
0031	Scioto County, Ohio	1.6	0031	Scioto County, Ohio	33.0
0032	Scioto County, Ohio	3.5	0032	Scioto County, Ohio	38.7
0033	Scioto County, Ohio	15.1	0033	Scioto County, Ohio	17.8
0034	Scioto County, Ohio	11.5	0034	Scioto County, Ohio	30.3
0035	Scioto County, Ohio	4.2	0035	Scioto County, Ohio	45.5
0036	Scioto County, Ohio	9.4	0036	Scioto County, Ohio	57.9
0037	Scioto County, Ohio	22.0	0037	Scioto County, Ohio	37.7
0038	Scioto County, Ohio	3.9	0038	Scioto County, Ohio	15.2
0039	Scioto County, Ohio	6.1	0039	Scioto County, Ohio	17.3
0040	Scioto County, Ohio	1.7	0040	Scioto County, Ohio	16.2
NA	Ohio	17.4	NA	Ohio	15.9
NA	United States	26.2	NA	United States	15.6

## Table 13. Minority and Low-income Populations in the PORTS ROI (Continued)

Source: U.S. Census Bureau 2016b

Notes:

Shaded rows indicate census tracts with minority or low-income populations that exceed the percentages of minority or low-income populations in Ohio. For this analysis, individual census tracts are assumed to contain disproportionately high percentages of minority or low-income persons in the tract exceeds the state percentage.

Percentages have been rounded to one decimal place.

NA = not applicable
Fifty census tracts are present in the four-county ROI. PORTS is located in the far western portion of Census Tract 9522. Other census tracts in close proximity to PORTS are Census Tract 9523 to the north, Census Tract 0022 to the south, Census Tract 0023 to the southwest, and Census Tract 9527 to the west.

Table 13 also lists minority and low-income population statistics for Ohio and the United States. The significance thresholds for environmental justice impacts are established at the state level. For a determination of baseline conditions in the affected environment, an individual census tract is assumed to contain disproportionately high percentages of minority or low-income populations if the percentage of minority or low-income persons in the tract exceeds the state percentage. The percentage of minority populations in Ohio in 2014 was 17.4 percent, and the percentage of persons below the poverty level in Ohio in the same year was 15.9 percent.

In the 2014 data, three census tracts in the ROI had minority population percentages that exceeded the percentage of minority populations in the state of Ohio: Census Tract 9556.02 in Ross County, Census Tract 9562 in Ross County, and Census Tract 0037 in Scioto County. These census tracts are shaded in Table 13.

For the period 2010–2014, 43 of the 50 census tracts in the ROI had percentages of their overall populations living below the poverty level that exceeded the percentage of the population living below the poverty level in Ohio. These census tracts are shaded in Table 13. With the exception of Census Tract 9524 located in northern Pike County, all of the census tracts that border Census Tract 9522 (the census tract containing PORTS) had residents living below the poverty level, and the percentages of these residents exceeded the state percentage.

#### 3.7.2 Environmental Consequences

#### 3.7.2.1 Proposed Action

This section assesses the potential socioeconomic impacts of the transfer of real property at PORTS. These impacts would depend on a number of factors, among them the success of the chosen recruiting strategy and the types of commercial businesses and industries recruited. Given the competitive nature of business and industrial recruiting, the willingness of commercial companies to locate at the new development is not assured, although it has been assumed for the analysis below. The characteristics of the actual occupants would be unknown, but examples of commercial and industrial uses considered are presented in Section 2.1.

Socioeconomic impacts are not only important in themselves, but also for the secondary environmental or distributional impacts they may have. For example, certain types of economic growth can attract enough new people to an area that it places pressure on housing, schools, water supply, and other infrastructure. Environmental impacts of any new construction, facility improvements required, or infrastructure overloads that result from such a population increase should also be evaluated as induced impacts of the development. The purpose here is not to forecast economic activity, but to make sure reasonably foreseeable indirect impacts are appropriately identified and considered.

Major employers in the Southern Ohio region are engaged in medical services and telecommunications (Joint Economic Development Initiative of Southern Ohio 2016). For this analysis, employment numbers for two hypothetical businesses, a retail store employing 100 workers or a large paper manufacturing company employing 1,500 workers, were used. This analysis assumes that the Proposed Action could create 100 to 1,500 long-term jobs. It is also assumed that all direct and indirect jobs created would be filled by employees who reside within the ROI. This represents an upper bound on potential impacts.

It is anticipated that socioeconomic impacts from forestry/wildlife management and conservation uses would be less than those from industrial uses because of the small number of jobs necessary to support these uses. Any socioeconomic impacts from construction-related activities related to these land uses would be short in duration. The number of employees required to support these uses would be small compared to the historical workforce, and this would be a negative impact compared to the industrial uses.

**Employment and Income.** This analysis assumes that the Proposed Action could create 100 to 1,500 long-term jobs during operations. These figures represent an increase of less than 0.2 percent to 2 percent compared to the 2010 total employment shown in Table 9. There would also be indirect, positive impacts which would depend, to a large extent, on the specific businesses recruited and the extent to which the ROI can supply the goods and services those industries use. For example, the U.S. Bureau of Economic Analysis reports target industries could result in an employment multiplier between 1 and 2.6 times the actual employment. Ohio University conducted an economic impact analysis (Ohio University 2011) for various possible future use scenarios at PORTS. Their modeling indicated an employment multiplier of 1.1 to 1.6 depending on the scenario. Therefore, assuming the Proposed Action could create 100 to 1,500 direct, long-term jobs as discussed above and using the multipliers from the Ohio University analysis, approximately 10 to 900 indirect jobs may be created for a total of 110 to 2,400 jobs. This figure represents a less than 0.2 percent to almost 3 percent change from the 2010 ROI employment. Changes in regional income from the Proposed Action would depend on the actual compensation paid, but are expected to be proportional to the number of jobs generated.

**Population.** Based on the number of estimated jobs created and the assumption that all direct and indirect jobs created would be primarily filled by employees in the ROI labor force, the impact on population would be minimal.

**Fiscal Impacts.** Beneficial impacts include increased local revenue from real estate, commercial activities, or sales taxes if the land is sold to private, taxable corporations. The actual size of the impact is unknown at this time. However, it should result in positive, yet limited changes in regional employment and income. The positive impacts will be somewhat offset by the decrease in employment as D&D and environmental cleanup at PORTS is completed.

Pike County would generate additional revenue from the transfer of the property and from the improvement of the property. The ROI would benefit from the additional jobs. The State of Ohio and Pike County would receive additional revenue through state income and sales taxes.

**Environmental Justice.** Although current assumptions suggest there would be no high and adverse human health or environmental impacts, the actual circumstances would depend on specific choices made at the time of development. There are three census tracts within the ROI where the minority population exceeds the percentage of minority populations for the state (see Table 13). Census tract 0037, located in Scioto County, is approximately 17 miles south of PORTS, and Census tracts 9562 and 9956.02 are located in Ross County, approximately 25 miles north of PORTS. No disproportionate impacts on minority populations are anticipated.

Many of the tracts in the ROI meet the definition of low-income populations, especially the tracts nearest the site in Pike County. However, these populations are also scattered among higher income populations. Any impacts that affect the low-income tracts are also likely to affect the higher income populations. This EA has not identified any human health or environmental impacts that would adversely affect minority or low-income populations. The Proposed Action would not result in disproportionately high

and adverse impacts on minority or low-income populations, but rather would generate potentially positive impacts through job creation for all population sectors.

Impacts to environmental justice populations from forestry/wildlife management and conservation use would be negligible. During any construction related to these land uses, it is anticipated that environmental, health, and occupational safety impacts would be minimal, temporary, and confined to the PORTS site. Therefore, there would not be disproportionately high and adverse human health impacts or environmental impacts to minority or low-income populations.

### 3.7.2.2 No Action Alternative

Under the No Action Alternative, there would be no major change in anticipated population, employment, income, or fiscal characteristics, and no disproportionate impact on minority or low-income populations within the ROI. The D&D action will restore PORTS to a condition potentially suitable for industrial land use and the future use could create jobs to offset the loss of D&D jobs at PORTS (DOE 2014b). D&D will take several years and the initial beneficial socioeconomic impacts will diminish as the D&D work is completed. The waste disposal action and remediation of the site will have a short-term socioeconomic impact associated with the hiring of workers for remediation, construction, and operation of an on-site waste facility.

#### 3.8 INFRASTRUCTURE AND TRANSPORTATION

Descriptions of the infrastructure and support services environment at PORTS and in its vicinity are provided in this section. These descriptions are followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on infrastructure and support services.

## **3.8.1** Affected Environment

#### **3.8.1.1 Public utilities**

Potable water is supplied to the public in the vicinity of the property by Pike Water, Inc. The Pike Water Treatment Facility is located near Jasper on the west side of the Scioto River. The treatment capacity of the plant is 3.2 million gal/day, and the current daily demand is 1.5 million gal/day. The water system storage capacity is 3.4 million gal. An 8-in. main is located along Wakefield Mound Road west of the site, and there is a 10-in. main north of State Route 32 along Shyville Road.

Electricity is supplied to the area by American Electric Power, and natural gas is supplied by Pike Natural Gas.

## 3.8.1.2 Site utilities

PORTS has access to large, reliable supplies of water. The site is the largest industrial user of water in the vicinity and it obtains its water supply from the on-site X-611 Water Treatment Facility, which draws water from two well fields located along the Scioto River. The well fields draw groundwater from the Scioto River buried aquifer and are located in the Scioto River alluvium within the Scioto River floodplain. Recharge of the aquifer occurs from river and stream flow as well as precipitation. The maximum potential production associated with the well fields is 13 million gal/day. Production is approximately 2.5 to 3 million gal/day.

Electricity is supplied to the site by Ohio Valley Electric Corporation (OVEC). Its combined generating capacity is comparable to the site design load of 2,260 megawatts. Electrical power from the OVEC external 345-kV power grid flowed through switchyards to substations around the site where the electrical power was stepped down in voltage to 13.8 kV for distribution to the process and other support buildings. One switchyard, the X-533 switchyard, was demolished in 2010/2011 under the American Recovery and Reinvestment Act. The plant currently uses between 20 and 40 megawatts hourly.

Natural gas service is available from the Pike Natural Gas Company main gas line near Zahn's Corner, Ohio, approximately 5 miles north of the site. A natural gas main (6-in.-diameter pipe rated at 350 to 400 lb/sq in. gauge) was installed from the main line near Zahn's Corner to the East Access Road reducing station to support a hot water boiler system in the X-3002 building. Another line was installed for a natural gas boiler system that replaced the X-600 Steam Plant.

#### 3.8.1.3 Transportation

Activities at PORTS are supported by a network of roads, rail, barge, and airports, as discussed below.

**Roads.** Two of southern Ohio's major highway systems, U.S. Route 23 and State Route 32/124, provide access to PORTS (Figure 1). Both routes are four lanes, with U.S. Route 23 traversing north-south and State Route 32 traversing east-west. The plant is 3.5 miles from the U.S. Route 23 and State Route 32/124 interchange. State Route 32 runs approximately 190 miles east-west from Cincinnati through Piketon to Parkersburg, West Virginia. To the west, State Route 32 provides access to Cincinnati's three interstate highways (I-71, I-74, and I-75). To the east, State Route 32 and U.S. Route 50 provide access to I-77. Approximately 70 miles north of the plant, U.S. Route 23 intersects I-70, I-71, and I-270. Vehicles also may access I-64 approximately 35 miles southeast of Portsmouth.

The main access road for PORTS has a four-lane interchange with U.S. Route 23. The main access road connects to Perimeter Road, which encircles the fenced portion of the plant. Perimeter Road can also be accessed via county roads such as Shyville Road from the north, Dutch Run Road from the east, Big Run Road from the south, and Wakefield Mound Road to the west. Smaller roads that intersect with Perimeter Road from four directions provide access to inner portions of the plant. The buildings and facilities are serviced with a system of roads and streets, which generally follow a north-south grid. This system is in generally good condition.

As discussed above, there are two access roads to PORTS, U.S. Route 23 and State Route 32. Table 14 provides the annual average daily traffic (ADT) for these roads. Load limits on these routes (85,000 lb) are controlled by the *Ohio Revised Code* gross vehicle weight.

Access Road	Annual Average Daily Traffic
U.S. Route 23, entrance to PORTS	14,490
State Route 32 and U.S. Route 23	7,700

Source: ODOT 2011

ODOT = Ohio Department of Transportation PORTS = Portsmouth Gaseous Diffusion Plant

Except during plant shift changes, traffic levels on the site access roads and Perimeter Road are low. Peak traffic flows occur at shift changes, and the principal traffic problem areas during peak morning/afternoon traffic are locations where parking lot access roads meet Perimeter Road.

**Rail.** Two railroad carriers, CSX and Norfolk Southern, serve Pike County. The Norfolk Southern system has direct access to PORTS and provides access to other rail carriers. Railroad tracks in the vicinity of Piketon allow a maximum train speed of 60 mph.

A railroad system located at PORTS connects with the Norfolk Southern railroad via a main rail spur entering the northwest portion of PORTS. Approximately 17 miles of track lie within the boundaries of PORTS. However, only approximately one-third of the tracks are currently in service. Several track configurations (switching capabilities) are possible within the site. The on-site railroad system is used infrequently (DOE 2004b).

**Barge.** The PORTS facility can be served indirectly by barge transportation on the Ohio River. However, use of the Ohio River barge terminals would require initial transportation of loads over public roads leading from PORTS to the barge terminal in the city of Portsmouth. The bulk materials handling facility at the Portsmouth Barge Terminal is available for transporting bulk materials and heavy unit loads. All heavy-unit loading is done by mobile crane or barge-mounted crane at the open-air terminal. The Ohio River provides barge access to the Gulf of Mexico via the Mississippi River or the Tennessee-Tombigbee Waterway. Travel time to New Orleans is 14 to 16 days. A barge trip to St. Louis takes 7 to 9 days, and a trip to Pittsburgh takes 3 to 4 days.

**Airports.** Because of the relatively isolated location of PORTS, commercial air service is limited. The nearest airport is the Greater Portsmouth Regional Airport, located approximately 15 miles south of the site. This airport, which has dual runways and T-hangers and is operated by Chasteen Aviation, Inc., mostly serves private aircraft owners and business travelers. There are no regularly scheduled commercial flights; however, charter service is available. Another nearby airport, the Pike County Airport, is located just north of Waverly. This facility is similar in size and makeup to the Greater Portsmouth Regional Airport. Three international airports are located within a two-hour drive of the site: Cincinnati/Northern Kentucky International Airport, Dayton International Airport, and Port Columbus International Airport.

#### **3.8.2 Environmental Consequences**

#### 3.8.2.1 Proposed Action

**Utilities.** New development on transferred property would most likely connect to existing municipal or site systems. Existing utility systems at PORTS that are owned by DOE may also be transferred. In that case, DOE would become the customer and the transferee would provide the utility services to DOE to meet their needs, typically via a contract. Some new utility infrastructure construction is expected in order to provide utility service to new facilities that may be built. Removal of the existing site utilities is currently planned under the D&D program. However, under the Proposed Action, DOE and a transferee may work together to identify utility systems, or portions of utility systems, that could remain. In that case, new utility infrastructure would be limited to connections with the existing electrical, water, and gas lines located on the site. Utility impacts associated with any new development are not expected to exceed the capacities of any of the existing utility systems. The Pike Water Treatment Facility has a treatment capacity of 3.2 million gal/day and current daily demand, at 1.5 million gal/day, is less than half of that.

**Transportation.** Materials and equipment associated with any construction activities to accomplish any proposed development would be transported over regional and local roadways to the site. Development would also likely be phased over time, and no adverse impacts are expected. The additional vehicle and truck traffic from operations associated with any new development would have a negligible impact on existing traffic since the affected roadways presently have sufficient design capacity. A minor increase in the amount of traffic should also not substantially increase the chance of accidents.

Use of the PORTS site for forestry/wildlife management and conservation uses would mean less utility use and less traffic on local roadways. Impacts to infrastructure and transportation for these uses in either the developed or undeveloped areas of the site would be negligible.

#### 3.8.2.2 No Action Alternative

Under the No Action Alternative, there would be impacts to utilities as site utilities are planned to be removed under the D&D program. Little or no change is expected from the baseline level of vehicle trips or the potential for accidents involving vehicles in the vicinity of the property until the D&D and environmental cleanup is completed. At the baseline level of activity, traffic volume is considered to be well within the capacity of the existing transportation infrastructure.

#### **3.9 WASTE MANAGEMENT**

A description of waste management at PORTS is provided in this section. This description is followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on waste management.

#### **3.9.1** Affected Environment

The DOE Waste Management Program directs the safe storage, treatment, and disposal of waste generated by past and present operations. Decontamination, decommissioning, and cleanup activities are the primary source of waste at PORTS. Waste managed under the program is divided into seven categories, which are defined as follows:

- *Low-level (radioactive) waste (LLW)* radioactive waste not classified as high level or transuranic waste
- *Hazardous (RCRA) waste* waste listed under RCRA or waste that exhibits one or more of the four RCRA hazardous characteristics: ignitability, corrosivity, reactivity, and toxicity. Universal waste, which includes common items such as batteries and light bulbs, is a subset of RCRA waste that is subject to reduced requirements for storage, transportation, and disposal or recycling.
- *PCB wastes* waste containing PCBs, a class of synthetic organic chemicals. Disposal of PCB-contaminated materials is regulated under the Toxic Substances Control Act of 1976 (TSCA).
- *RCRA/low-level (radioactive) mixed waste* waste containing both hazardous and radioactive components. The waste is subject to RCRA, which governs the hazardous components, and to the Atomic Energy Act, which governs the radioactive components.
- *PCB/low-level (radioactive) mixed waste* waste containing both PCB and radioactive components. The waste is subject to the TSCA regulations that govern PCB components, and to the Atomic Energy Act, which governs radioactive components.
- *PCB/RCRA/low-level (radioactive) mixed waste* waste containing PCB and radioactive components that are also RCRA hazardous waste. The waste is subject to the RCRA regulations, the TSCA regulations that govern PCBs, and the Atomic Energy Act, which governs radioactive components.
- *Solid waste* Waste that includes construction and demolition debris, industrial waste, and sanitary waste, as defined by Ohio regulations. These wastes can include waste from construction or demolition activity and office waste. Waste contaminated with asbestos may also be included in this category if it is not included in any of the categories listed above (PCB, RCRA, and/or LLW).

In 2014, approximately 8,900 tons of material from DOE activities at PORTS were shipped to off-site facilities for treatment, disposal, recycling, or reuse (DOE 2016a). Approximately 10 tons of PCB waste was generated in 2014 and 2 tons of PCB waste was shipped for disposal in 2014. Wastes contaminated

with PCBs were generated during 2014 through activities in the X-330 and X-333 Process Buildings and other areas (DOE 2016a).

DOE evaluated the waste anticipated to be produced by D&D of buildings and structures at PORTS, including the three major process buildings (the X-326, X-330, and X-333) that previously enriched uranium. The Waste Disposition RI/FS report concluded that without disposal of the waste from the buildings and structures at PORTS, there would be an unacceptable future risk to human health, safety, and the environment; therefore, an action was needed. Under the selected alternative (DOE 2015b), the majority of D&D wastes would remain at PORTS in a state-of-the-art OSWDF designed to safely isolate the contaminants present in the waste and to prevent them from being released to the environment. Any waste that cannot meet the waste acceptance criteria for the OSWDF would be sent off site for disposal. The on-site facility will be designed to have a total waste capacity of approximately 5 million cubic yards. About 100 acres will be dedicated to the OSWDF (DOE 2015b).

#### 3.9.2 Environmental Consequences

#### 3.9.2.1 Proposed Action

Specific details about the wastes that may be generated by companies locating at any transferred property are not available; however, the types of uses that are anticipated would produce wastes typical of other industrial, research, commercial, and office park operations in the region. These wastes would be handled by the individual companies or by contracted waste management services providers and would not enter into existing PORTS waste management systems, except possibly process wastewater that would meet pretreatment standards. The companies would also be expected to practice waste minimization, source reduction, recycling, etc. Quantities of solid, nonhazardous waste generated by the companies would be recycled or transported to off-site sanitation landfills (privately contracted landfills) for disposal. This solid waste could also include construction and demolition debris such as construction materials for buildings, concrete and asphalt rubble, and land-clearing debris.

Only minor quantities of hazardous waste and hazardous materials are anticipated to be handled or generated. If individual companies generate sufficient quantities to require reporting status, they would likely qualify as conditionally exempt, small-quantity generators. If a future use included a waste or chemical treatment facility that handles sufficient quantities of potentially hazardous materials, that facility would be subject to appropriate permitting or licensing. In any instance, the transferees will obtain their own permits. These wastes would be handled and stored according to applicable state and federal regulations and transported to an approved, licensed facility for further treatment and/or disposal. It is also possible that some companies may stabilize, test, and treat these wastes on-site as part of their operations. Petroleum, oils, lubricants, and chemicals would be managed in accordance with permits or licenses issued by the State of Ohio and in a way that would minimize the potential for contamination and adverse environmental impacts. For facilities licensed by the NRC or the State of Ohio, radioactive materials and wastes to the manufacturer, when required, or stabilizing, testing, and transporting them to a licensed off-site facility for disposal.

Impacts from accidental spills would be addressed by individual operating entities through their safety procedures and spill prevention plans. If required by state or federal law, companies locating within the development would have a spill prevention, control, and countermeasures plan and/or an emergency response plan, should a release of hazardous materials to any environmental medium—air, surface water, groundwater, or soils—occur.

Forestry/wildlife management and conservation uses would generate less waste than industrial and commercial uses. Therefore, these uses would not have adverse impacts on the waste management capabilities of the site or the region.

#### 3.9.2.2 No Action Alternative

Under the No Action Alternative, property would not be transferred and would remain under DOE control. There would be no additional waste management impacts other than those anticipated from the D&D and remedial action program activities.

### 3.10 HUMAN HEALTH AND SAFETY

#### 3.10.1 Affected Environment

Past activities at PORTS have resulted in releases of radionuclides and chemicals to the environment. DOE releases a site environmental report each year on the surveillance of radiological and nonradiological contaminants in the environment around the site. The 2014 annual site environmental report is the most recent report publicly available (http://energy.gov/pppo/downloads/ portsmouth-annual-site-environmental-reports). A description of existing radiological and chemical exposures at PORTS and in its vicinity is provided in this section. This description is followed by an assessment of the potential impacts the Proposed Action and No Action Alternative would have on such exposures.

Radionuclides that are most likely to be sources of exposure include isotopes of uranium and technetium-99. Present at much lower levels are transuranic radionuclides (americium-241, plutonium-238, and plutonium-239/240). Thorium-230 is also potentially present in soil near the enrichment facilities and in debris generated from demolition. Some of these radionuclides might be present in the area due to historic atmospheric fallout from nuclear testing. Some of the chemicals that could most likely be present across the site and during D&D include hydrogen fluoride, VOCs, and PCBs. The 2014 annual site environmental report (DOE 2016a) indicates that current levels of these contaminants in the environment around PORTS are low.

Environmental monitoring at PORTS measures both radiological and chemical parameters in air, water, soil, sediment, and biota (animals, vegetation, and crops). Data collected for environmental monitoring programs in 2014 are consistent with data collected in previous years and indicate releases of chemicals, metals, and radionuclides have a minimal effect on human health and the environment (DOE 2016a). This impact from radionuclides, called a dose, can be caused by radionuclides released to air and/or water, or radiation emanating directly from buildings or other objects at the site. Under DOE Order 458.1, *Radiation Protection of the Public and the Environment*, the dose limit for a member of the public from all exposure pathways and all radionuclide releases from PORTS cannot exceed a 100-mrem effective dose equivalent in a calendar year.

The maximum dose a member of the public could have received from radiation released by PORTS in 2014 or detected by environmental monitoring programs is 0.91 mrem/year. This dose is based on a maximum dose of 0.017 mrem from airborne radionuclides, 0.0015 mrem from radionuclides released to the Scioto River, 0.81 mrem of external radiation as measured at monitoring station A29 (located near OVEC), and 0.077 mrem based on exposure to radionuclides detected at off-site monitoring locations in 2014. This dose (0.91 mrem) is significantly less than the 100-mrem/year limit set by DOE for the dose to a member of the public from radionuclides from all potential pathways.

Nonradiological (chemical) environmental monitoring at PORTS includes air, water, sediment, and fish. Discharges of chemical air pollutants, primarily sulfur dioxide and nitrogen oxides, from

PORTS-permitted emission sources have decreased over the past few years due to demolition of the steam plant complex in 2013. Surface water discharges in 2014 were similar to previous years (DOE 2016a). The overall compliance rate for the permitted discharges exceeded 99 percent. More than half of the exceedances at permitted discharges were exceedances of total suspended solids and total dissolved solids related to precipitation events. Trihalomethanes and VOCs are sporadically detected in surface water and groundwater as part of the exit pathway monitoring program. The detections of trichloroethene in the exit pathway monitoring wells were well below the drinking water standard (5  $\mu$ g/L) (DOE 2016a).

None of the detections of PCBs in sediment around PORTS were above the risk-based regional screening level for PCB. PCBs were detected in fish collected from the Scioto River at concentrations ranging from 24.4 to 47.6  $\mu$ g/kg and also in a bluegill sample from Little Beaver Creek at 235  $\mu$ g/kg. The concentrations of PCBs detected in the samples collected from the Scioto River are less than the unrestricted limit (50  $\mu$ g/kg). The concentration of PCBs detected in the bluegill caught on site in Little Beaver Creek was above the 1/week maximum limit (220  $\mu$ g/kg).

Current activities at PORTS include surveillance and maintenance of facilities; D&D of buildings including demolition of above- and below-grade structures; environmental restoration/cleanup activities, and conversion of  $DUF_6$ . The types of accidents that have occurred in recent years include trips, falls, cuts, contusions/ abrasions, sprains, chemical exposures, burns, heat exhaustion, insect bites, and allergic reactions to poison ivy exposure.

#### 3.10.2 Environmental Consequences

#### 3.10.2.1 Proposed Action

Construction workers would be subject to typical hazards and occupational exposures faced at other industrial construction sites. Falls, spills, vehicle accidents, confined-space incidents, and injuries from tool and machinery operation could occur. Similar accidents could occur at facilities during operation. Accidents could result from operator error, equipment malfunction, or from natural phenomena (e.g., earthquakes, tornadoes, flooding, fire, etc.). Potential hazards from the operation of facilities could include electrical energy, flammable material, toxic/corrosive/reactive materials, and radiation sources. Other hazards include kinetic energy and stored energy. Examples of kinetic energy hazards include elevated structures and equipment, stacked drums, and boxes. Workers would be expected to receive applicable training, be protected through appropriate controls and oversight, and be afforded the same level of safety and health protection found at similar developments. The property developers and the individual companies that would operate on the property would also be required to follow applicable Occupational Safety and Health Act of 1970 requirements.

The potential for fires and any resulting adverse impacts would likely be mitigated by the following: (1) most new building construction would consist of steel frames, concrete floors, noncombustible exterior walls, and metal roofs; (2) building design and materials would comply with all applicable National Fire Protection Association codes and standards; (3) buildings would be equipped with fire detection systems and fire-suppression equipment as applicable (e.g., fire alarms, portable fire extinguishers, and sprinkler systems); and (4) appropriate fire safety and emergency policies and procedures, including proper training, would be implemented.

It is expected that commercial businesses and industries would have occupational hazards, emissions, and effluents common to other industrial sites. These businesses and industries would be required to

follow appropriate environmental regulations and obtain applicable permits that are intended to protect human health and the environment.

No unique occupational health and safety hazards are expected, and it would be the responsibility of each company to operate in a safe and protective manner. Issues related to public and worker exposures to effluents and emissions from industrial operations would be addressed by permits and regulations under the State of Ohio. If required by state and federal law, companies would be required to have an emergency response plan for the accidental release of hazardous materials. The *Emergency Planning and Community Right-To-Know Act* of 1986, also referred to as the *Superfund Amendments and Reauthorization Act* Title III, requires reporting of emergency planning information, hazardous chemical inventories, and releases to the environment.

For industries that could handle radioactive material (e.g., radioactive waste treatment and metals decontamination/recycling), no unique radiological emissions would be anticipated. The NRC and the state of Ohio would regulate and inspect these facilities for compliance with the terms and conditions of their radioactive materials licenses, if applicable.

Intentionally destructive acts could occur at industries that would operate at PORTS. The potential consequences of intentional destructive acts would be highly dependent on the specific industries, the types and amounts of hazardous materials that would be used, and the distance to the site boundary and the surrounding population. Because of uncertainties associated with these factors, consequences cannot be quantified. However, security features would be incorporated in facility design and operation, as necessary and relevant, to prevent and reduce the impacts of intentionally destructive acts.

Use of PORTS real property for forestry/wildlife management and conservation would involve very little construction, if any. Human health risks for this use would be those associated with the maintenance of these areas and, for the public, those risks associated with outdoor activities. DOE does not expect there would be any unique occupational health and safety hazards for these types of land uses.

#### 3.10.2.2 No Action Alternative

There would be no impact to human health and safety under the No Action Alternative, other than that anticipated from the implementation of the D&D and remedial action program activities, since property would not be transferred and developed. DOE would continue to own the property, and changes associated with transferee activities would not occur.

#### 3.10.2.3 Intentionally destructive acts

In each EA or EIS it prepares, DOE is required to consider the potential environmental impacts from intentional destructive acts ranging from vandalism and theft to sabotage and acts of terrorism. The most likely intentional destructive acts to occur with regard to the Proposed Action would be vandalism and theft. Physical barriers (e.g., fences) and security measures at PORTS would discourage incidences of both. While it is possible that random acts of vandalism could happen (as in any other location), DOE expects future industrial or commercial users would implement physical barriers and security measures typical of small industrial parks and other commercial developments. Therefore, environmental impacts from vandalism of equipment would be minimal.

## 4. CUMULATIVE IMPACTS

The CEQ regulations that implement the procedural provisions of NEPA define cumulative impacts as the "impact on the environment which results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 *CFR* 1508.7). Therefore, the cumulative impacts of an action can be viewed as the total impacts on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity is taking the actions. The cumulative impact analysis in this section is based on continued DOE EM program activities at PORTS, other actions associated with the site, and the Proposed Action.

#### 4.1 METHODOLOGY AND ANALYTICAL BASELINE

The analysis has been conducted in accordance with CEQ NEPA regulations and the CEQ handbook, "Considering Cumulative Effects under the National Environmental Policy Act" (CEQ 1997b) on the preparation of cumulative impact assessments. The cumulative impact assessment is based on both geographic (spatial) and time (temporal) considerations. Historical and ongoing impacts at PORTS are captured in the existing No Action Alternative. Future impacts will be analyzed for the same timeframe as the alternatives analyzed in this EA, which assumes all property transfers would generally occur within an approximately 30-year period and all construction associated with any future uses would also generally occur within that period.

## 4.2 POTENTIALLY CUMULATIVE ACTIONS

This section describes current actions as well as reasonably foreseeable future actions considered pertinent to the analysis of cumulative impacts for the Proposed Action. The potentially cumulative actions discussed below are those that may contribute to cumulative impacts on or in the vicinity of PORTS.

**PORTS D&D and Remediation Project.** DOE has developed and issued a ROD for the D&D of more than 250 buildings and/or structures and infrastructure systems at PORTS (DOE 2015a). Most are located within the centrally developed area of PORTS inside Perimeter Road. The D&D project includes the removal of stored waste, materials, hazards, and equipment within the buildings and includes demolition of the buildings and structures (including slabs and residual soils) and infrastructure; demolition of subsurface features and infrastructure, if required; and packaging of the waste for final disposition. The potential environmental impacts from this D&D remedial action have been documented in the Process Buildings RI/FS report (DOE 2014b). Other, less contaminated facilities at PORTS are being remediated as removal actions under Action Memoranda. Remediation of environmental media (e.g., soil and groundwater) will be implemented under RCRA decisions (a 1989 Ohio Consent Decree requires cleanup of environmental media at PORTS in accordance with RCRA). The goals of D&D and remediation are to reduce risk and make real property and associated assets available for transfer.

**OSWDF.** Under the Site-wide Waste Disposition Evaluation Project, DOE evaluated alternatives for disposition of the wastes that would be generated by D&D of the process buildings and complex facilities at PORTS. The Waste Disposition ROD selected Alternative 2, which included the construction and operation of an engineered disposal facility with a waste capacity of up to 5 million cy. Any waste that cannot meet the waste acceptance criteria for this facility would be sent off site for disposal. DOE will follow all applicable or relevant and appropriate requirements including DOE Order 435.1, *Radioactive Waste Management*. The OSWDF has been selected for use as a reasonably foreseeable future action in the cumulative impacts assessment for this EA because it would be a large construction and waste

disposal project at PORTS. This project would proceed in parallel with the Proposed Action. The potential environmental impacts from this project are already known and have been documented in the Waste Disposition RI/FS report. The OSWDF construction will impact soils and geology, land use and visual resources, water resources, one historic property, and ecological resources. The footprint of the waste disposal facility and a buffer area around it (approximately 100 acres total) would not be available for transfer.

**DUF<sub>6</sub> Conversion Project.** The DUF<sub>6</sub> Conversion Facility became fully operational in October 2011. It will convert more than 250,000 metric tons of depleted uranium into uranium oxide (the most stable chemical form of uranium) and hydrofluoric acid. The uranium oxide will be repackaged for beneficial use, reuse, and/or disposal at a permitted waste disposal site. The hydrofluoric acid is produced in aqueous form and has commercial value (before it can be released it must meet the requirements of DOE Order 458.1, *Radiation Protection of the Public and the Environment*). It is estimated to take approximately 18 years to convert the existing inventory of depleted uranium at PORTS (DOE 2016c). This project is creating approximately 220 jobs in the Piketon area. The potential environmental impacts of the project were evaluated in the *Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio, Site* (DOE 2004b). The ROD was issued in July 2004.

This action was selected for the cumulative impact analysis because the  $DUF_6$  Conversion Facility was constructed in recent years and is now operating at PORTS. In addition, the environmental impacts from this action are already known and have been documented in an EIS.

**Regional Industrial Developments (Industrial Parks).** Several industrial parks and sites are under development throughout the PORTS ROI (Table 15). Many of these industrial developments are relatively new and are considered together as parts of a single project for the purposes of cumulative impacts assessment. Because industrial parks tend to fill up slowly over time rather than all at once, these collective developments outside of PORTS can be viewed primarily as current and reasonably foreseeable future projects. Potential reindustrialization of the PORTS site is another reasonably foreseeable future industrial development that is considered in the cumulative impacts assessment along with this group of off-site industrial developments.

County	Site Name	Number of Acres
Jackson	Sarah James Industrial Park	50
	Gettles Industrial Park	70
Pike	Zahn's Corner Industrial Park	320
	Pike County Manufacturing Center	400
Ross	Gateway Industrial Park	90
Scioto	Bob Walton Sr. Industrial Park	70
	Haverhill Industrial Park	1,065
	522 Site/Industrial Park	172

Table 15. Additional Indust	rial Parks in the PORTS ROI
-----------------------------	-----------------------------

If successful, the current and future resident industries in these developments would have the potential to increase employment and associated per capita income in the ROI. However, the full and specific potential for new job and income creation among all of the industrial developments is unknown at this

time. This would depend on the total number of jobs eventually created by these industries throughout the ROI and the wages paid by the industries that decide to locate in these developments.

The full range of potential cumulative impacts that could occur as a result of these regional industrial developments is not known. However, collectively, they represent the most significant economic activity that is occurring now and would be occurring during the foreseeable future, and they offer the potential for socioeconomic impacts that could combine with those from the Proposed Action to yield cumulative impacts on the regional economy and its underlying social structure.

#### 4.3 CUMULATIVE IMPACTS BY RESOURCE AREA

Land Use. The title transfer of up to 3,677 acres would remove this property from DOE ownership and make it available for new development. The  $DUF_6$  Conversion Facility is located within the industrialized portion of PORTS and has no impact to off-site land use; its industrial nature is consistent with the existing land use. Continued and future D&D at PORTS will have a positive cumulative land use impact by completing the remediation to the agreed-upon industrial use end state. Transfer of DOE real property reduces the need to develop new, undeveloped areas off site for industrial or commercial uses. The other regional industrial developments are in the process of being developed. Cumulative impacts from all actions on land use would be minimal.

**Visual.** The visual character of the portions of PORTS that are outside of Perimeter Road and consist primarily of mowed grass and scattered woodlands could change from largely undeveloped to developed industrial land use. Because all portions of PORTS are not equally developable, other complementary uses (e.g., open space, recreational elements) may be able to be incorporated in the future development. Cumulative changes to the visual environment at PORTS would occur as a result of building D&D and construction of the OSWDF. Continued and future D&D at PORTS would have a positive cumulative visual impact via the removal of aging and deteriorating facilities, making land available for transfer and reducing the need to develop other undeveloped areas in the site vicinity. The DUF<sub>6</sub> Conversion Facility is located within the industrialized portion of PORTS and its operations have created minimal visual impacts with its cylinder yards (many of the cylinder yards existed prior to the action). For the regional industrial developments, cumulative impacts on visual resources at off-site locations would also be minimal because the land use (industrial) would be similar to the current land use.

Air Quality. All six of the evaluated actions could contribute to cumulative fugitive dust emissions, but these emissions would be sporadic, temporary, and localized and would be mitigated. As a result, cumulative impacts from fugitive dust emissions would be minimal. However, cumulative impacts on air quality from heavy equipment, truck, and commuter vehicle emissions would occur as a result of all actions. Particulate emissions and greenhouse gas emissions would increase. With regard to greenhouse gases, a cumulative increase in the emission of  $CO_2$  would occur in the ROI, principally as a result of combined commuter vehicle emissions. Because current operations at PORTS from employee transportation contribute only approximately 0.01 percent of the state-wide  $CO_2$  emissions in Ohio, there would be no significant cumulative impact related to greenhouse gas emissions with projected future employment.

**Noise.** Cumulative impacts from noise would occur from the Proposed Action (primarily during construction of facilities), building and complex facilities D&D, and construction and operation of the OSWDF at PORTS. Construction and operation of the OSWDF at PORTS will increase the sound levels in the vicinity of the disposal facility, but the noise would be attenuated to acceptable levels at nearby residences due to distance and topography. The DUF<sub>6</sub> Conversion Facility is located within the

industrialized portion of PORTS and its operations have not created any significant new noise impacts. Development associated with the Proposed Action would add to the noise levels from site activities; however, noise levels from construction activities or operation of new facilities would not cause harm to these residents, but may cause some annoyance. Future industries on the PORTS site and those in the regional industrial parks would not contribute to these cumulative noise impacts because of their displacement in time and the distances of the industrial parks from PORTS. Overall, cumulative impacts from noise would be negligible to minimal.

**Geology and Soils.** The most frequent impact of surface disturbance with regard to soil in this region is accelerated erosion. Implementation of past, current, and reasonably foreseeable future projects would add to the total acreage of soil disturbed and would permanently alter the soil within the footprint of the projects. However, many of the actions are within areas where similar construction has occurred or has been planned. As long as all construction projects comply with state and federal laws and regulations, measures would be implemented to minimize erosion and sedimentation impacts. Revegetation of disturbed areas that would serve to stabilize soil on the projects has been completed. These actions would minimize the cumulative impacts of construction projects in the region that may otherwise result in accelerated erosion. As a result, cumulative impacts on geology would be minimal.

**Water Resources.** The most frequent impact of surface disturbance in this region associated with surface water is increased surface water runoff, which may affect downstream water bodies by contributing sediment (via erosion) or increasing flooding. The primary cumulative impacts on surface water would result from an increase in the acreage of earthmoving activities and increased impervious areas, which have the potential to increase sediment delivery and surface water runoff downstream. As long as construction projects comply with state and federal laws and regulations, measures would be implemented to minimize erosion from construction activities and sediment delivery to nearby surface water. This would minimize the cumulative impacts of construction projects in the region that may otherwise result in increase in the rate and volume of storm water flow; however, the overall change in existing land cover would be minimal. The use of temporary or permanent storm water controls such as detention or retention basins and other structures, and stabilization of disturbed areas through landscaping and vegetation, would attenuate increases in surface water runoff and increase groundwater recharge through direct percolation, thus offsetting the loss of pervious surface due to construction in the region and minimizing downstream cumulative impacts.

Construction of the DUF<sub>6</sub> storage yards at PORTS would affect the permeability of the surface soil and its ability to transmit water as groundwater recharge to the underlying aquifers. However, impacts to groundwater recharge would be negligible because the total area of land that would be permanently altered by construction of the cylinder yards would be very small (about 0.2 percent of the total site area). Impacts to groundwater could occur as a result of a fuel or hazardous material spill and subsequent migration of contaminants to the groundwater table. The use of permits, safety procedures, spill prevention plans, and spill response plans in accordance with applicable laws would minimize the severity of potential impacts from such accidents. Groundwater resources could also be degraded by disposal cell leachate that migrates to groundwater. Engineered controls, use of a leachate collection system, and monitoring would reduce the potential for impact to groundwater resources that could result from the disposal cell.

**Floodplains and Wetlands.** Because the entire site is located outside the 100-year floodplain, with the exception of a small area in the northwest portion of the site associated with Little Beaver Creek, no significant cumulative floodplain impacts should be associated with any actions, including property

transfers and ultimate development. Ohio EPA and USACE jointly regulate wetlands-related activities. Any proposed activities by a transferee that would affect wetlands or other waters of the United States or the State of Ohio would require a Section 404 permit from USACE and a Section 401 Water Quality Certification from the state. (Deeds of transfer include a clause that explains that compliance with all federal state and local laws and regulations is required on the transferred real property.) The new owners and/or occupants would be responsible for securing these prior to initiating work in any wetlands. The transferee's permit conditions would stipulate which activities could occur in or around the affected wetlands. Regulatory permits would also specify all mitigation measures required of the transferee.

**Ecological Resources.** The  $DUF_6$  Conversion Facility is located within the industrialized portion of PORTS and its operations have not created any significant new impacts on ecological resources. Future D&D at PORTS could have an ecological impact as wildlife may be displaced by noise and heavy equipment activity, but no other impacts to terrestrial biota or habitat are expected from building and facility demolition. Although there is a potential for species to infrequently roost in a building or man-made structure, enough alternate and preferable habitat (i.e., trees) is available. Construction of the OSWDF includes tree removal and this would damage or cause the death of vegetation such as grasses, displace wildlife, and impact small animals. This Proposed Action would remove property from DOE ownership, and the potential development of this land would impact ecological resources on the site. Avoiding development of the most sensitive ecological areas of the site, minimizing the amount of disturbance, and blending development with the natural setting would reduce impacts to biological resources. Natural habitat around areas of development could be left as a buffer zone between the developed areas and other undeveloped portions of the site to further minimize cumulative impacts. This is consistent with the eco-industrial park and sustainability interests of modern industrial park development, where natural areas are valued as amenities. Because of the abundance of forest and native non-RTE species in the vicinity of PORTS, these cumulative impacts would be minimal. Cumulative impacts on aquatic resources would be minimal.

**Cultural Resources.** The DUF<sub>6</sub> Conversion Facility is located within the industrialized portion of PORTS and its operations have not created any new impacts to historic properties. Future D&D and waste management activities at PORTS will be performed in accordance with the NHPA mitigation measures committed to in the CERCLA RODs (DOE 2015a, 2015b). The mitigation measures were designed to be comprehensive, considering the entire site as the area of potential affect. The Proposed Action of transfer of PORTS real property would be evaluated on a case-by-case (transfer-by-transfer) basis and would follow the NHPA Section 106 process wherein the proposed transfer is an undertaking per 36 *CFR* 800. Archaeological surveys have been performed for all of PORTS and four archaeological historic properties were identified. Three sites are extant; one was mitigated pursuant to the Waste Disposition ROD. Of the remaining three sites, one would not be appropriate for transfer due to its proximity to the OSWDF. Only two extant historic properties could be impacted by real property transfer. In those instances, DOE would include restrictions in the deed that would be protective of the historic property and would indicate to the transferee that, if they propose an action that would cause adverse impacts to the historic property, they would need to comply with the Section 106 process.

**Socioeconomics and Environmental Justice.** The Proposed Action and five other actions would have cumulative beneficial impacts on employment, per capita income, and tax revenues. Actual employment and income impacts from cumulative development would depend on the success of any developments and the overall rate at which development proceeds, both of which are uncertain. Developers may also scale back or advance plans for their projects based on current market conditions. Property tax revenue would depend on the value of the properties, future tax rates, and any tax abatements that may be negotiated. The transfer of DOE real property will create taxable real property, a socioeconomic

benefit. After a number of years, completion of PORTS D&D, waste disposal at the OSWDF, and  $DUF_6$  conversion activities would result in a cumulative loss of some of these benefits. Cumulative impacts on population growth and public services would be minimal. Collectively, the Proposed Action and the five other actions would have no disproportionately high and adverse cumulative impacts on minority or low-income populations.

**Infrastructure.** Addition of the identified reasonably foreseeable future projects would result in incremental increases in utility usage. PORTS D&D would remove a large portion of the site infrastructure. Some systems would remain to service the DUF<sub>6</sub> Conversion Facility and other remaining facilities. However, sufficient excess capacity currently exists with both public and DOE utility systems, if they can be utilized, to meet the demand. Continued upgrades and improvements in the local and regional utility systems would offset and accommodate any potential utility use increases. Development projects are also being implemented in phases over the course of several years, enabling the utilization of new, more energy-efficient technologies to minimize energy consumption and to provide sufficient opportunity for utility systems to meet demand through upgrades and improvements. As a result, the cumulative impact on local and regional infrastructure is expected to be minimal.

**Transportation.** Cumulative transportation impacts in the region could occur from increased development and growth. These potential impacts could be combined with future environmental restoration and D&D activities at PORTS. The main transportation impact of commercial and industrial development would be an increase in ADT volumes. Associated with increases in traffic is the potential for increased accidents, additional noise and air pollution, and road deterioration and damage. The increase in ADT volumes could result in inconveniences for other vehicles (personal and commercial) on affected routes and connecting roads. Commercial operations could suffer temporarily reduced business while customers avoid affected areas because of traffic delays. Increased pavement deterioration and damage could increase costs associated with maintaining or resurfacing roads and highways. Although noise associated with increases in traffic is normally not harmful to hearing, increased traffic noise is considered by the public to be a nuisance. Increased accidents put an additional strain on local emergency response personnel. Increased vehicular traffic also has the greatest potential to increase air pollution in the local area because emissions from motor vehicles are poorly regulated.

**Waste Management.** The cumulative activities within the region will generate solid waste requiring disposal. However, specific quantities of wastes cannot be estimated. The waste soil and sediment from the PORTS remediation combined with that from process buildings and complex facilities D&D would generate a large quantity of waste, but an OSWDF would be able to effectively manage the combined quantities of waste that would actually be generated at PORTS. Because the specific timing of some projects is unknown, the extent of project overlap that would occur between the potential cumulative actions and the Proposed Action in this EA is unclear. If projects occur in the same timeframe, there could be a potential adverse cumulative impact on other municipal and/or commercial landfills in the region. However, it is anticipated that the projects would be phased over a long period, and landfill capacity is assumed to be adequate to handle the anticipated amounts of solid waste requiring disposal. Therefore, this cumulative impact would be minimal.

**Human Health.** Cumulative public and occupational health impacts would be expected to be equal to or less than those that currently exist in and around PORTS. Actions that involve environmental remediation and D&D usually have a positive impact by eliminating or reducing potential exposures to existing contamination. However, a certain amount of risk and potential exposure is involved for the workers who participate in the implementation of such actions. Emissions and effluents released from new industrial developments are not expected to be major sources of potential exposures and would be

controlled through the use of proper engineering and administrative controls and the requirements of any permits that would need to be obtained by the transferee. Standard industrial accidents would increase proportional to the increase in new facilities in the area.

Prior to any transfer of DOE property, the CERCLA 120(h) due diligence process would be completed and the transfer(s) would need to be protective of human health and the environment (e.g., within the CERCLA risk range for industrial worker exposures). Further development of surrounding land could cause an increase in the number of people who could be exposed to off-site releases from large accidents. However, the potential accidents from previous and existing conditions (e.g., cylinder yards, feed and withdrawal operations, and waste management activities) should be reduced from environmental restoration and D&D activities at PORTS and the operation of the DUF<sub>6</sub> Conversion Facility. The human health and safety impacts of the Proposed Action would not contribute to cumulative impacts on human health and safety in the ROI. This page is intentionally left blank.

#### 5. **REFERENCES**

CEQ 1997a, *Environmental Justice Guidance Under the National Environmental Policy Act*, Council on Environmental Quality, Executive Office of the President, December.

CEQ 1997b, Considering Cumulative Effects under the National Environmental Policy Act, Council on Environmental Quality, Executive Office of the President, January.

Chillicothe Fire Department 2016, Chillicothe Fire Department Information, Chillicothe Fire Department, Chillicothe, Ohio, http://www.chillicothefd.com/, accessed October 2016.

*Crime in the United States* 2016, Table 80, Ohio, Full-time Law Enforcement Employees, *Crime in the United States (CIUS)*, https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-012/tables/80tabledatadecpdf/.

DOE 2016a, U.S. Department of Energy, Portsmouth Gaseous Diffusion Plant, Annual Site Environmental Report – 2014, Piketon, Ohio, DOE/PPPO/03-0688&D1, U.S. Department of Energy, Piketon, OH, March.

DOE 2016b, 2015 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/PPPO/03-0746&D1, U.S. Department of Energy, Piketon, OH, March.

DOE 2016c, *DUF*<sub>6</sub> Conversion, U.S. Department of Energy, Portsmouth/Paducah Project Office, http://www.energy.gov/pppo/duf6-conversion, accessed May 13, 2016.

DOE 2015a, Record of Decision for the Process Buildings and Complex Facilities Decontamination and Decommissioning Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/PPPO/03-0425&D2, U.S. Department of Energy, Piketon, OH, July.

DOE 2015b, Record of Decision for the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/PPPO/03-0513&D2, U.S. Department of Energy, Piketon, OH, June.

DOE 2014a, *Remedial Investigation and Feasibility Study Report for the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0246&D3, U.S. Department of Energy, Piketon, OH, February.

DOE 2014b, Remedial Investigation and Feasibility Study Report for the Process Buildings and Complex Facilities Decontamination and Decommissioning Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/PPPO/03-0245&D3, U.S. Department of Energy, Piketon, OH, June.

DOE 2011, *Derived Concentration Technical Standard*, DOE-STD-1196-2011, U.S. Department of Energy, Washington, D.C., April.

DOE 2007, DOE GNEP Detailed Site Report, Portsmouth Reservation, Piketon, Ohio, Affected Environment and Regulatory and Environmental Permitting/Licensing Requirements, Piketon Initiative for Nuclear Independence, May 1, 2007. DOE 2004a, *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements*, 2<sup>nd</sup> edition, U.S. Department of Energy, December.

DOE 2004b, Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at Portsmouth, Ohio Site, DOE/EIS-0360, U.S. Department of Energy, June.

DOE 1997, Final Threatened and Endangered Species Report – Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/OR/11/1668&D0, Lockheed Martin Energy Systems, Inc., Piketon, OH.

DOE 1996, Baseline Ecological Risk Assessment, Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/OR/11-1316/V1&D2, U.S. Department of Energy, Oak Ridge, TN.

EnviroScience 2011, Indiana Bat Survey, Geosyntec; Portsmouth Gaseous Diffusion Plant (PGDP), Piketon, Pike County, Ohio, ES EnviroScience, Inc., Stow, OH, May.

EPA 2008, *Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks*, EPA420-F-08-024, Office of Transportation and Air Quality, U.S. Environmental Protection Agency (October).

EPA 1974, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, Office of Noise Abatement and Control, U.S. Environmental Protection Agency (March), http://www.nonoise.org/library/levels74/levels74.html.

FEMA 2009, *Flood Insurance Rate Map for Pike County, Ohio*, FEMA Website, Federal Emergency Management Agency, available at http://www.fema.gov/hazard/map/firm.shtm.

Hansen, Michael C. 2007, *Earthquakes in Ohio*, Ohio Division of Geological Survey, Educational Leaflet No. 9.

Joint Economic Development Initiative of Southern Ohio 2016, JEDISO website, available at http://choosesouthernohio.com/doing-business-here/major-employers/.

Law Engineering 1978, *Final Report Gas Centrifuge Enrichment Plant Geotechnical Investigation, Piketon, Ohio*, Law Engineering, Marietta, GA.

LMES 1996, *Wetland Survey Report for the Portsmouth Gaseous Diffusion Plant*, POEF-LMES-106, Lockheed Martin Energy Systems, Inc., Piketon, OH.

NCES 2016a, Public School District Data 2013-2014 School Year (County), National Center for Education Statistics, http://nces.ed.gov/ccd/districtsearch/, accessed July.

NCES 2016b, Public School District Data 2013-2014 School Year (State), National Center for Education Statistics, http://nces.ed.gov/ccd/districtsearch/, accessed July.

NOAA 2016, *Storm Events*, National Oceanic and Atmospheric Administration, National Center for Environmental Information, available at https://www.ncdc.noaa.gov/stormevents/.

ODNR 2016, *Catalog and Maps of Ohio Earthquakes*, Ohio Department of Natural Resources, Division of Geological Survey, available at http://www.dnr.state.oh.us/tabid/8302/Default.aspx, accessed May 4, 2016.

ODNR 2012, *Invasive Species in Pike County, Ohio*, e-mail message from Jennifer Windus (Ohio Department of Natural Resources) to Tracy Brown (VETCO, LLC), October 9.

ODOT 2011, *Pike County Traffic Survey Report for 2007*, Ohio Department of Transportation, http://www.odotonline.org/techservapps/traffmonit/countinformation/default.htm, accessed July 26, 2011.

ODSA 2016a, *Ohio County Profiles (for Jackson County, Pike County, Ross County, and Scioto County)*, Ohio Development Services Agency, Office of Research, accessed May 2016.

ODSA 2016b, *Ohio County Indicators*, Ohio Development Services Agency, Office of Research, July 2016.

Ohio Department of Agriculture 2016, *Plant Health Division – Emerald Ash Borer*, Emerald Ash Borer Program, Ohio Department of Agriculture, http://www.agri.ohio.gov/eab/, accessed July 26, 2016.

Ohio Department of Taxation 2016, Total State and Local Sales Tax Rates, by County, Effective January 2016, Taxpayer Services Division, Ohio Department of Taxation, http://www.tax.ohio.gov/Portals/0/tax\_analysis/tax\_data\_series/sales\_and\_use/salestaxmapcolor.pdf, accessed May 16, 2016.

Ohio EPA 2010, *National Ambient Air Quality Standards - Attainment Status*, Ohio Environmental Protection Agency, http://www.epa.ohio.gov/dapc/general/naaqs.aspx.

Ohio University 2012a, *PORTSfuture Public Outreach Report*, PORTS*future* Project, Voinovich School of Leadership and Public Affairs, Ohio University, Athens, OH, February.

Ohio University 2012b, Habitat Mapping of the Land and Vicinity of the United States Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant, Portsmouth, Ohio (PORTS), Portsfuture Project, Voinovich School of Leadership and Public Affairs, Ohio University, Athens, OH, November.

Ohio University 2011, *PORTSfuture: Economic Impact Analysis of Scenario Options*, PORTS*future* Project, Voinovich School of Leadership and Public Affairs, Ohio University, Athens, OH, September.

Portsmouth 2016, Portsmouth Fire Department Information, Portsmouth Fire Department, Portsmouth, Ohio, http://www.portsmouthfd.org/, accessed October 2016.

Restoration Services Inc. 2016, *Headcount Information*, e-mail message from Sara Cunningham (Restoration Services Inc.) to Bruce Phillips (Strata-G, Inc.), May 11.

U.S. Census Bureau 2016a, Census Population Tables, U.S. Census Bureau, http://www.census.gov, accessed May 2016.

U.S. Census Bureau 2016b, American Community Survey (2010-2014), U.S. Census Bureau, http://www.census.gov, accessed September 2016.

USDA 1990, Soil Survey of Pike County, Ohio, U.S. Department of Agriculture, Washington, D.C.

USEC 2004, *Environmental Report for the American Centrifuge Plant in Piketon, Ohio*, United States Enrichment Corporation, NRC Docket No. 70-2004, Revision 3, August.

U.S. Energy Information Administration 2016, Rankings: Total Carbon Dioxide Emissions 2013, http://www.eia.gov/state/rankings/?sid=OH#series/226, accessed May 2016.

USFA 2010, National Fire Department Census Database, U.S. Fire Administration, http://www.usfa.dhs.gov/applications/census/, accessed December 2010.

WAI and Stantec Consulting Services, Inc. 2015, *Technical Memorandum – Wetland Assessment Inside Perimeter Road, Groundwater Plumes and Landfills, Soil and Groundwater Remediation, Portsmouth Gaseous Diffusion Plant (PORTS), Pike County, Ohio, Wastren Advantage Inc., Piketon, OH, April.* 

WRCC 2016, *Waverly, Ohio, National Climatic Data Center*, Western Regional Climate Center, available at http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?oh8830, accessed May 2016.

APPENDIX A: PUBLIC PARTICIPATION AND COMMENT RESPONSE DOCUMENT

This page is intentionally left blank.

## CONTENTS

#### Page

A.1.	INTRODUCTION	A-3
A.2.	PUBLIC COMMENT PERIOD	<b>A-</b> 4
A.3.	RESPONSES TO COMMENTS	A-4

#### **TABLES**

A.1.	Reviewers Providing Comments on the Draft Environmental Assessment		3
A.2.	Public Comments with Responses	.A-9	)

This page is intentionally left blank.

#### A.1. INTRODUCTION

This appendix presents the comments received during the comment period for the *Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio* (Environmental Assessment [EA]), with the U.S. Department of Energy (DOE) responses next to the comment so readers can see the comments in the context of the full comment submittal. Since several of the comments and issues are similar, DOE has provided a "general response" to those comments that address a similar issue. These "general responses" are provided in Section A.3. Generally, if comments were statements or opinions, those comments did not require a response. In preparing this Final EA, DOE considered all comments, to the extent practicable, received by, or that were postmarked by, the close of the comment period. Table A.1 provides a list of names of commenters and Table A.2 provides all the comments with responses.

Comment		
<b>Document No.</b>	Name	Organization (if applicable)
1	Blackburn, Lee	Stakeholder
2	Foster, Jason	Seal Township Trustees
3	Blackburn, Lee	Stakeholder
4	Wagner, Jeff	Fluor-BWXT Portsmouth, LLC
5	Morgan, Jim	Innovative Solutions Unlimited LLC (Insolves)
6	Colley, Vina	PRESS/ National Nuclear Workers for Justice (NNWJ)
7	Marida, Patricia A.	Sierra Club
8	Head-Dylla, Candace	Bluewater Valley Downstream Alliance
9	Peya, George	Sierra Club
10	Kester, Jason	Joint Economic Development Initiative of Southern Ohio (JEDISO)
11	Sayre, Harold	Southern Ohio Port Authority (SOPA)
12	Allen, Derek	Portsmouth City Manager
13	Davis, Paul	Security, Police, Fire Professionals of America Local #66
14	Douthitt, Ralph	Village of Piketon
15	Rubadue, Michael	Ohio Department of Health
16	Galloway, Craig	Resident of Piketon, Ohio
17	Sparks, Stephen C.	Resident of Franklin Furnace, Ohio
18	Cahall, Diana	Resident of Sardinia, Ohio
19	Lamerson, Elizabeth	Fenceline Neighbor
20	Minter, Daniel	Lifetime resident of Pike County and former fence line resident SODI Vice Chairman Board of Directors (20 years) SSAB Board Member (7 years) Local Union Workforce Representative (15 years)
21	Warner, Rick	Innovative Solutions Unlimited LLC (Insolves)
22	Carver, Lisa	Portsmouth Area Chamber of Commerce
23	Foster, Fred; Beekman, Blaine; Montgomery, Tony	Pike County Board of Commissioners
24	Tipton, Regina	Scioto County Health Coalition
25	Cole, Robert E.	Business Manager, Local 577
		United Association of Journeymen

 Table A.1. Reviewers Providing Comments on the Draft Environmental Assessment

Comment		
<b>Document No.</b>	Name	Organization (if applicable)
26	Davis, Bryan;	Scioto County Commissioners
	Crabtree, Mike;	
	Coleman, Cathy	
27	Hall, Jerry	Jackson County Commissioners Office
28	Heath, Randy R.	Mayor, City of Jackson
29	Jacobs, Jennifer	Jackson County Economic Development Partnership
30	Heath, Randy	Executive Director - Jackson Area Chamber of Commerce
31	Settas, Matthew	Glockner Superstore, Portsmouth
32	Kelley, William	Glockner Superstore, Portsmouth
33	Arms, Kara	Glockner Superstore, Portsmouth
34	Glockner, Tim	Glockner Superstore, Portsmouth
35	Glockner, Andy	Glockner Superstore, Portsmouth
36	Ferrell, Neal	Glockner Superstore, Portsmouth
37	Thompson, Brenda	Glockner Superstore, Portsmouth
38	Gulker, Gregory	Glockner Superstore, Portsmouth
39	Ramey, Todd	Glockner Superstore, Portsmouth
40	Krick, Tony	Glockner Superstore, Portsmouth
41	Cartee, Ralph	Glockner Superstore, Portsmouth
42	Wallbrown, Franklin J.C.	Stakeholder
43	Tague, Kerry	Business Development & Physician Relations, Kings Daughters Medical Center
44	Shoemaker, Josh	Central Office Administrator, Scioto County Career Technical Center
45	Shultz, Susan	Executive Director - Alcohol, Drug, Addiction, Mental Health Services (ADAMHS) Board
46	Adams, Aaron	Medical Director - Kings Daughter's Medical Center
47	Cahall, Diana	Resident of Sardinia, Ohio

Table A.1. Reviewers Providing Comments on the Draft Environmental Assessment (Continued)

#### A.2. PUBLIC COMMENT PERIOD

The Draft EA was initially published for a 45-day public review from January 4, 2017, to February 18, 2017. The public notification indicated the various methods the public could provide comments on the Draft EA including via e-mail, U.S. mail, and by phone. In addition, a manned kiosk related to the EA was available following a decontamination and decommissioning (D&D) project update meeting held on January 24, 2017 at Piketon High School in Piketon, Ohio, where comments could be provided. On February 6, 2017, DOE received a request for an extension of the public review period and it was extended 60 days until April 19, 2017.

### A.3. RESPONSES TO COMMENTS

DOE reviewed all comments and has identified and addressed, as appropriate, each comment in this Final EA. Table A.2 contains the comments DOE identified along with DOE's responses.

A total of approximately 180 comments contained in 47 comment document submittals were received during the 105-day comment period. Comments were received from individuals, State agencies, local governments, and nongovernmental organizations such as businesses and environmental groups. Each comment document submittal was assigned a document number (1 through 47). For those documents containing multiple comments, each individual comment was delineated and assigned a unique identification number (noted in brackets in Table A.2). For example, the third comment from comment document no. 9 is noted as "[9-03]." This ensured that the comment tracking system tracked each comment, not just the document itself.

#### **GENERAL RESPONSES**

#### **1.** Reason for Preparing an EA Rather than an Environmental Impact Statement (EIS)

- a. The Proposed Action being evaluated, property transfer, does not fall within the "Classes of Actions" That Normally Require EISs" (10 Code of Federal Regulations [CFR] Part 1021, Appendix D to Subpart D to Part 1021). While decommissioning of uranium enrichment facilities is one of the classes of actions that normally require an EIS, the Proposed Action evaluated in this EA is not the decommissioning of a uranium enrichment facility, but rather, the potential future reuse of the land it occupies and associated adjoining parcels, by others. DOE has completed a Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) remedial investigation/feasibility study (RI/FS) evaluation for the decommissioning of the Portsmouth Gaseous Diffusion Plant (PORTS). Under DOE's CERCLA/National Environmental Policy Act of 1969 (NEPA) Policy (DOE Policies on Application of NEPA to CERCLA and RCRA Cleanup Actions, July 11, 2002), DOE relies on the CERCLA process to address NEPA values (such as analysis of cumulative, off-site, ecological, and socioeconomic impacts) to the extent practicable and includes a brief discussion of impacts in the CERCLA documents as appropriate. In addition to the required CERCLA evaluation criteria, the RI/FS report included an evaluation of NEPA values documenting potential impacts to the environment. In November of 2014, DOE issued a Proposed Plan for the process building decontamination and decommissioning (D&D) for a 120-day public review period. After evaluation of the public comments, the Record of Decision (ROD) was approved by the Ohio Environmental Protection Agency (Ohio EPA) in 2015 requiring decommissioning of PORTS facilities. Remedial actions under this ROD are currently being implemented on the site.
- b. 10 CFR Part 1021.321 allows DOE to "prepare an EA on any action at any time to assist the agency in planning and decision-making." This EA was developed in accordance with the Council on Environmental Quality (CEQ) and DOE-specific NEPA regulations. The Proposed Action is the potential transfer of up to 3,677 acres of PORTS real property. While the EA does not indicate that significant impacts would be expected to occur from the Proposed Action, as stated in Section 1.3 of the EA, DOE would obtain information from interested parties who are requesting real property and DOE would screen a potential transferee's proposed future uses against the uses evaluated in the EA. That screening would enable DOE to ascertain whether future uses are within the bounds and assumptions used in the EA analysis.
- c. NEPA reviews evaluating the consequences of property transfers have been conducted using Categorical Exclusions and Environmental Assessments at similar federal facilities, such as at the Paducah Gaseous Diffusion Plant in Paducah, Kentucky, the East Tennessee Technology Park in Oak Ridge, Tennessee, and the Hanford Site in Richland, Washington.

#### 2. Comments Not Related to the Scope of this EA

a. DOE has prepared this EA to assess the consequences of the potential transfer of PORTS real property. As stated in Section 1.3 of the EA, D&D and remediation of the PORTS site are independent of the analysis performed in this EA and cleanup under legal agreements with regulators will continue regardless of property transfer. DOE has completed two CERCLA RI/FS evaluations for both the decommissioning of the PORTS gaseous diffusion plant and site-wide waste disposition activities addressing final disposition of the waste generated during D&D. Under DOE's CERCLA/ NEPA Policy (*DOE Policies on Application of NEPA to CERCLA and RCRA Cleanup Actions*, July 11, 2002), DOE relies on the CERCLA process to address NEPA values (such as analysis of cumulative, off-site, ecological, and socioeconomic impacts) to the extent practicable and includes a brief discussion of impacts in the CERCLA documents as appropriate. In addition to the required CERCLA evaluation criteria, the RI/FS reports included an evaluation of NEPA values documenting potential impacts to the environment. In November of 2014, DOE issued Proposed Plans for both actions for a 120-day public review. RODs were approved by Ohio EPA for both actions in 2015 requiring decommissioning of PORTS facilities and the combined on-site and off-site disposal of D&D waste. Remedial actions under both RODs are currently being implemented on the site.

Additional information related to these two remedial actions can be found at the DOE Environmental Information Center located at the Ohio State Endeavor Center (Room 207) at 1862 Shyville Road, Piketon, Ohio, or at the following websites:

Process Building D&D Decision: https://energy.gov/pppo/downloads/portsmouth-decontamination-and-decommissioning-record-decision

Waste Disposition Decision: https://energy.gov/pppo/downloads/portsmouth-waste-disposition-record-decision

- b. DOE has prepared this EA to assess the consequences of the potential transfer of PORTS real property. As stated in Section 1.3 of the EA, D&D and remediation of the PORTS site are independent of the analysis performed in this EA (cleanup under legal agreements with regulators will continue regardless of property transfer). Also, as stated in Section 2.1.2, DOE must comply with the requirements of CERCLA Sect. 120(h) and make a determination that the condition of the property is protective of human health and the environment for its intended future use. DOE is obligated to perform remedial action for any hazardous substance released to the environment resulting from DOE activities at PORTS and will continue to conduct environmental media cleanup under legal agreements with regulators. DOE has initiated the evaluation of future soil and groundwater remediation under a separate regulatory driver (remediation of environmental media [e.g., soil and groundwater] will be implemented under Ohio EPA's Resource Conservation and Recovery Act of 1976, as amended, Corrective Action Program). Although there are provisions of CERCLA 120(h) that allow for the transfer of property prior to cleanup, that is not DOE's plan for PORTS.
- c. This EA, in evaluating the conveyance of real property, is evaluating an independent action. There are no similarities with other proposed agency actions that would provide a basis for evaluating their environmental consequences together. For example, D&D can be completed without the eventual transfer of real property. The DOE Environmental Management mission at PORTS is to accomplish the environmental remediation, waste management, depleted uranium hexafluoride (DUF<sub>6</sub>) conversion, and D&D at PORTS. The goal is to accelerate

cleanup, eliminate potential environmental threats, reduce the DOE footprint, and reduce the lifecycle cost. DOE will complete this mission with potential redevelopment of the site in mind and facilitate transfer of real property for reuse, but reindustrialization of the site is not part of DOE Environmental Management's mission. DOE cannot upgrade existing infrastructure solely for the purpose of reindustrialization by future users of the facility after transfer. The reasonably anticipated future land use, i.e., reindustrialization after transfer, is a component of the overall cleanup approach. DOE previously conducted NEPA reviews for the following projects mentioned in comments:

- <u>Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Conversion Project</u> this project was evaluated in an EIS (EIS-0360) which is available at the following website: http://web.evs.anl.gov/uranium/ documents/portdeis/index.cfm
- <u>Portsmouth Process Buildings and Complex Facilities D&D Project</u> A remedial action was selected through a CERCLA ROD (Process Building D&D ROD): https://energy.gov/pppo/ downloads/portsmouth-decontamination-and-decommissioning-record-decision).
- In addition to the required CERCLA evaluation criteria, the RI/FS report (Sections 8.1.2.2; 8.2.1.2.2; 8.2.2.2.2; and 8.3.2.2) included an evaluation of NEPA values documenting potential impacts to the environment.
- <u>Portsmouth Site-Wide Waste Disposition Project</u> A remedial action was selected through a CERCLA ROD (Waste Disposition ROD): https://energy.gov/pppo/downloads/portsmouth-waste-disposition-record-decision).

In addition to the required CERCLA evaluation criteria, the RI/FS report (Sections 9.1.2.2; 9.2.1.2.2; 9.2.2.2; 9.2.3.2.2; and 9.3.2.2) included an evaluation of NEPA values documenting potential impacts to the environment.

In addition, the U.S. Nuclear Regulatory Commission conducted a NEPA review and prepared an EIS for the American Centrifuge Project (NUREG-1834) which is available at the following website: https://www.nrc.gov/docs/ML0612/ML061250131.pdf.

This page is intentionally left blank.

Comment			
No.	Commenter	Comment	Response
1	Lee Blackburn	This is a comment on the above referenced environmental assessment.	See General Responses 1b, 1c, and 2a. In addition, the consideration of transfer of up to 3,677 acres
		"Under the Proposed Action, DOE could transfer up to 3,677 acres	was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred. The last paragraph of Section 1.2 of the EA states that
		of real property located within the EA study area (designated by the DOE site boundary on Figure 3). <sup>1</sup> " Footnoted as follows:	only 100 acres of the on-site waste disposal facility will be permanently committed as a waste disposal location. The footnote has been deleted. It is important to note
		"DOE acknowledges that significant portions of land within the 1,200-acre centrally developed area would not be transferred until after certain D&D and remedial actions are completed. Also, some property used for waste disposal locations will	that, as stated in Section 2.1.2, DOE must comply with the requirements of CERCLA Sect. 120(h). DOE will continue to conduct environmental media cleanup under legal agreements with regulators regardless of any proposed
		not be transferred. However, for the purposes of this analysis, the scope of this EA addresses the potential transfer of up to 3,677 acres of DOE-owned property."	future property transfers. A determination that the transfer is protective of human health and the environment for its intended future use must be able to be reached prior to property transfer.
		This is an extremely egregious statement to make as this would indicate the potential eventual transfer of property used for waste disposal without specifically identifying the property identified or its highly volatile and carcinogenic contents as well as the eventual transfer of property contaminated with trichloroethene (TCE), which the US EPA classifies as "carcinogenic to humans by all routes of exposure."	
		Indeed, the OSWDF alone will cover some 300 acres, so making such a cavalier and broad-stroke statement clearly indicates the need for an EIS.	
2	Jason Foster	While dropping off extra copies of the Environmental Assessment to the Seal Township Trustees Mr. Foster asked Jeff Wagner/FBP the following questions:	Emergency response and first responders would be similar to those of other industrial/commercial entities found in the county. Transferees will need to have their own plans for emergencies. It is anticipated that they will coordinate with
		Once the transferred land is occupied, how will emergency response be handled?	the County, local community response organizations, and DOE to make arrangements for mutual aid, which could include a fee structure for incident response.
		Will neighboring Townships be first responders or the site?	

# Table A.2. Public Comments with Responses

Comment			
Document	Commontor	Commont	Posponso
3	Lee Blackburn	[3-01] After final review of the above referenced EA, I am at a loss as to how such a document could in any way be considered sufficient for the potential transfer of all but 100 acres of the identified property. Nor can I determine why an EA with such a broad scope would even be done.	[3-01] See General Response 1b.
		[3-02] Under section 1.3 SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, it states: "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document" but it is impossible to separate the two. The land that is being proposed for transfer IS contaminated and not suitable for transfer until cleaned up. While the INTENT may be to EVENTUALLY transfer all but 100 acres of the site, IT MUST FIRST BE CLEANED UP.	[3-02] See General Responses 2a and 2b. The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred.
		In determining whether an EA or an EIS should be performed, DOE says an EIS is required for federal actions significantly affecting the quality of the human environment. DOE goes on to say: "In reaching a decision on the need for an EIS DOE first determines if the project is a type that is included in DOE's classes of actions that normally requires EISs as set out at Appendix D to Subpart D of 10 CFR Part 1021"	
		[3-03] Appendix D to Subpart D of 10 CFR Part 1021 is classes of actions that DOE says normally require EISs and D3 is uranium enrichment facilities.	[3-03] See General Response 1a.
		[3-04] If the intent is to transfer land to SODI, then the scope of the EA should be restricted to encompass that land only and only to the extent it can be demonstrated the land if free of any environmental contaminants.	[3-04] See General Response 2b. This is a programmatic, or site-wide, EA and was not prepared for a specific parcel. The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred.
4	Jeff Wagner	I fully support draft environmental assessment and encourage the Department of Energy to take the steps necessary to release this and future property to the Southern Ohio Diversification Initiative (SODI) for reuse.	Comment noted.

## Table A.2. Public Comments with Responses (Continued)

Comment			
No.	Commenter	Comment	Response
5	Jim Morgan	To Whom It May Concern;	Comment noted.
		<ul> <li>I support the transfer of property described in the Environmental Assessment to the SODI for their use in creating economic development opportunities through the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century. The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:</li> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Support to Educational attainment</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	
6	Vina Colley	To whom it may concern:	
		Assessment-EA PPPO-O3-3910704-17 Portsmouth/Piketon Resident For Environmental Safety and Security and (NNWJ) National Nuclear Workers for Justice oppose the transfer of land located on and off site of USEC A plant located in Piketon, Ohio. [6-01] We were not permitted to ask questions at the public meeting about the transfer of land from the public to the community. Also, we haven't been informed as to who property is going to be transferred to or who will be responsible for cleanup.	[6-01] DOE held a "D&D Project Update" meeting on January 24, 2017 to provide information on several projects occurring at PORTS, one of which was the future conveyance of real property. There were opportunities to discuss the projects and ask questions following the presentation. DOE had several information tables, or kiosks, around the meeting room to facilitate public discussion. As noted in Section 1.1, this EA evaluates the transfer of real property to the Southern Ohio Diversification Initiative (SODI) and/or other interested parties.

## Table A.2. Public Comments with Responses (Continued)

Comment Document				
No.	Commenter	Comment	Response	
		<ul> <li>[6-02] Many of the hazards that have been released at the site were not mentioned at the public meeting. Whoever takes the land becomes responsible for the contaminants. We need more information to give informed opinions and input.</li> <li>This was a weapons grade facility that was making Highly Enrichment Uranium Hex Fluorides with Plutonium mixed since 1953 which has a half life of over 24 thousand years or more.</li> <li>We ask that there be NO transfer at this time without real community input.</li> </ul>	[6-02] See General Response 2b.	
7	Patricia A. Marida	Comments regarding the January 2017 DOE/EA-1856 Draft Environmental Assessment for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. [7-01] The title of the Environmental Assessment document DOE/EA-1856 refers to the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (GDP). This title is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site and is not limited to the GDP. The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. That is all but 100 of 3,777 acres at the site. These 100 acres would be the final footprint of the onsite disposal cell, whose activities currently encompasses 300 or more acres.	[7-01] The entire 3,777 acres are referred to as the Portsmouth Gaseous Diffusion Plant. The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred. The last paragraph of Section 1.2 of the EA states that only 100 acres of the on-site waste disposal facility will be permanently committed as a waste disposal location with no alternate use in the future.	

## Table A.2. Public Comments with Responses (Continued)
Comment			
Document			
No.	Commenter	Comment	Response
		High-Level Radioactive Waste Contamination. While uranium	
		is radioactive and dangerous, much more serious contamination of	
		the site occurred as the Department of Energy, in an astonishingly	
		imprudent move, brought in what they termed "recycled uranium"	
		and ran it through the gaseous diffusion uranium enrichment	
		facility for many years. The Department also used the terms	
		"processed recycled uranium", "processed recycled feed	
		materials", "special nuclear material" and "reactor returns"	
		to describe this material which is officially termed <i>reprocessed</i>	
		nign-level radioactive waste. This waste is the irradiated (used)	
		wasta from various sources come into Portsmouth and two other	
		assecus diffusion facilities at Oak Ridge TN and Paducah KV	
		from as early as 1953 to as late as 1976 contaminating the	
		entirety of the gaseous diffusion process buildings at these sites	
		with technetium as well as transuranics and their decay elements	
		In turn high-level radioactive waste contamination would have	
		been transferred along with the DUF6 into cylinders that have	
		been run through the conversion process, as well as cylinders	
		that are currently stored on the site. That means that the DUF6	
		conversion plant and likely much of the site are also contaminated	
		with these more highly radioactive elements. The Department has	
		indicated that much of this higher-radioactivity contamination is	
		contained in the "heels" - heels being what remains in a cylinder	
		after its DUF6 has been converted. At this time, we are unsure of	
		the composition or the disposition of these heels. Transuranics are	
		some of the deadliest entities on earth and even a tiny particle has	
		the ability to cause illness and death. Testing of all parts of the	
		site for these elements is critical, but has not been proposed by	
		the Department. We consider this to be a serious public health	
		issue.	
		Waste was incinerated at PORTS up until the 1970s. This would	
		have spread radioactive contamination as well reinforcing the	
		need for testing of all areas at the site.	

Comment			
No	Commenter	Comment	Response
100.	Commenter	[7-03] We would like to ask why the Department would consider an EA of such a broad scope. Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.	[7-03] See General Responses 2a and 2b.
		[7-04] Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.	[7-04] See General Responses 2b and 1a. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process. Property would only be transferred after DOE satisfies the CERCLA 120(h) process and obtains agreement from the appropriate regulatory authorities.
		<ul><li>[7-05] While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight.</li><li>At this time the Southern Ohio Diversity Initiative is interested in obtaining 90 acres in a particular area at PORTS. Doing an EA for this particular delineated area would be appropriate at this time – but of course only to the extent it can be demonstrated that the land is free of chemical and radioactive contaminants.</li></ul>	[7-05] See Section 2.1 of the EA. DOE will evaluate PORTS property transfers on a parcel-by-parcel basis and each transfer would have to be found to be protective of human health and the environment for its intended future use in order to be determined to be suitable for transfer. Ohio EPA and U.S. EPA are involved in the CERCLA 120(h) process that determines whether property is suitable for transfer and protective of human health and the environment for its intended future use prior to transfer.

Comment			
Document			
No.	Commenter	Comment	Response
		[7-06] As the case with the above transfer, all transfers of any amount of land must require a separate EA or EIS as the particular case demands.	[7-06] The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred. As stated in Section 1.3 of the EA, DOE would obtain information from interested parties who are requesting real property and DOE would screen a potential transferee's proposed future uses against the uses evaluated in the EA. That screening would enable DOE to ascertain whether future uses are within the bounds and assumptions used in the EA analysis. If DOE determines there are significant impacts identified by future NEPA review of any specific future use proposal, it would evaluate whether a notice of intent and preparation of an EIS would be required at that time.
		[7-07] An important reality that the Department seems to have overlooked is the value of uncontaminated land in Pike County and in the area surrounding PORTS. Unless people were unaware of the dangerous nature of the contamination at PORTS, they would likely prefer to purchase uncontaminated land – even if the PORTS land were to be given away. Facilities at PORTS are old and outdated and are unlikely to have much attraction to a potential buyer. If the cost of remediation is large, then that bespeaks that the property is too contaminated to either legally or morally be taken out of government ownership and oversight. The only special value of land at PORTS would be the value added if the Department were to engage in research and development of renewable and sustainable energy sources and supporting technologies. We strongly recommend that the Department begin such a program as soon as possible. There are many new innovations in this burgeoning field. And the Department owner this to the people of Pike County.	[7-07] DOE's Proposed Action to transfer real property and reduce the footprint of the site is consistent with the goals of the President's Memorandum <i>Disposing of Unneeded Federal</i> <i>Real Estate – Increasing Sales Proceeds, Cutting Operating</i> <i>Costs, and Improving Energy Efficiency (June 10, 2010),</i> which would reduce the cost to maintain the site. DOE will continue to conduct environmental media cleanup under legal agreements with regulators regardless of any proposed future property transfers.

Comment			
No.	Commenter	Comment	Response
Document No. 8	<b>Commenter</b> Candace Head-Dylla	Comments regarding the January 2017 DOE/EA-1856 Draft Environmental Assessment for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. As people whose families have suffered the health effects of living next to a uranium contamination site and whose community has been sacrificed to the lack of real cleanup efforts, the Bluewater Valley Downstream Alliance joins with other affected communities in Ohio in asking the DOE to reconsider its current proposal, which is flawed in a number of ways. [8-01] As others have pointed out, the title of the Environmental Assessment document DOE/EA-1856 is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site. The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. This is not a real solution. It is acting for the sake of convenience without serious concern for long-term effects. [8-02] DOE/EA-1856 is extraordinarily broad_insufficient	[8-01] See General Response 1b. The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred.
		and premature. The EA also violates the Department's own requirements for an Environmental Impact Statement.	

Desponse
Response 8-03] See General Responses 2a and 2b.
8-0

Comment			
No.	Commenter	Comment	Response
		[8-04] Why consider such a broad EA? Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.	[8-04] See General Responses 2a and 2b.
		[8-05] Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.	[8-05] See General Responses 2b and 1a. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process. Property would only be transferred after DOE satisfies the CERCLA 120(h) process and obtains agreement from the appropriate regulatory authorities.
		<ul><li>[8-06] While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight.</li><li>Please reconsider your proposed actions at this site. Our nation is watching.</li></ul>	[8-06] See Section 2.1 of the EA. DOE will evaluate PORTS property transfers on a parcel-by-parcel basis and each transfer would have to be found to be protective of human health and the environment for its intended future use in order to be determined to be suitable for transfer. Ohio EPA and U.S. EPA are involved in the CERCLA 120(h) process that determines whether property is suitable for transfer and protective of human health and the environment for its intended future use prior to transfer.
9	George Peya	Comments regarding the January 2017 DOE/EA-1856 Draft Environmental Assessment for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. [9-01] The title of the Environmental Assessment document DOE/EA-1856 refers to the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (GDP). This title is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site and is not limited to the GDP.	[9-01] See General Response 1b. The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred.

Comment			
Document No.	Commenter	Comment	Response
		The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. That is all but 100 of 3, 777 acres at the site. These 100 acres would be the final footprint of the onsite disposal cell, whose activities currently encompasses 300 or more acres.	
		[9-02] DOE/EA-1856 is extraordinarily broad, insufficient and premature. The EA also violates the Department's own requirements for an Environmental Impact Statement.	[9-02] See General Responses 1a, 1b, 1c, and 2c.
		The property at PORTS is characterized by a wide variety of buildings, hazardous and radioactive landfill dump sites, uncharacterized landfill sites and other areas of unknown and uncharacterized radioactive contamination, including landfills which are not included in the current Environmental Cleanup Program. The Portsmouth Waste Disposition Record of Decision of June 2015 covers only those landfills within Perimeter Road, which add up to only 45% of total landfill areas. We have a concern with the landfills outside Perimeter Road, specifically, X-734, X-734A and X-7348, which contain known carcinogens, heavy metals and radioactively contaminated soils.	
		<b>The DUF6 Conversion Plant</b> is operated by a private entity. It has been estimated that it will take 20 years, if this facility works round the clock, to remove all the fluorine from the DUF6 on the site. This process has been complicated and stalled for 2 years by accidents and safety violations as well as by the Department's desire to "sell" the DUF6 waste to a private entity at Paducah. It would be many years before this facility could be decommissioned and demolished.	
		<b>The American Centrifuge Plant</b> is under a lease agreement. The ultimate disposition of this facility and the Department's legal ability to dismantle it will also be far in the future.	
		<b>The Gaseous Diffusion Plant</b> (GDP) is to be dismantled a process which has uncertain funding and is currently estimated to take 40 years to complete.	

Comment			
Document	Comments	Comment	Demense
N0.	Commenter	Comment	Kesponse
		High-Level Radioactive waste Contamination. While uranium	
		is factoractive and dangerous, much more serious containination of	
		improved as the Department of Energy, in an asionismight	
		and replicit through the generated diffusion provide and replication	
		facility for many years. The Department also used the terms	
		"processed recycled uranium" "processed recycled feed	
		processed recycled uranium, processed recycled reed	
		to describe this material which is officially termed remeasured	
		high land radioactive waste. This waste is the irradiated (used)	
		fuel rads of nuclear reactors. Penrocessed high level radioactive	
		waste from various sources came into Portsmouth and two other	
		gaseous diffusion facilities at Oak Ridge. TN and Paducah KV	
		from as early as 1953 to as late as 1976 contaminating the entirely	
		of the gaseous diffusion process buildings at these sites with	
		technetium as well as transuranics and their decay elements	
		In turn high-level radioactive waste contamination would have	
		been transferred along with the DUF6 into cylinders that have	
		been run through the conversion process as well as cylinders	
		that arc currently stored on the site. That means that the DUF6	
		conversion plant and likely much of the site are also contaminated	
		with these more highly radioactive elements. The Department has	
		indicated that much of this higher-radioactivity contamination is	
		contained in the "heels" – heels being what remains in a cylinder	
		after its DUF6 has been converted. At this time, we are unsure of	
		the composition or the disposition of these heels. Transuranics are	
		some of the deadliest entities on earth and even a tiny particle has	
		the ability to cause illness and death. Testing of all parts of the	
		site for these elements is critical, but has not been proposed by the	
		Department. We consider this to be a serious public health issue.	
		Works many instruments of at DODTC and until the 1070 million of 11	
		waste was incinerated at POKIS up until the 1970s. This would	
		have spread radioactive contamination as well, reinforcing the	
		need for testing of all areas at the site.	

Comment			
Document No	Commontor	Commont	Decrease
110.	Commenter	[9-03] We would like to ask why the Department would consider an EA of such a broad scope. Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.	[9-03] DOE has prepared this EA to assess the consequences of the potential transfer of PORTS real property. DOE's Proposed Action to transfer real property and reduce the footprint of the site is consistent with the goals of the President's Memorandum <i>Disposing of Unneeded Federal</i> <i>Real Estate – Increasing Sales Proceeds, Cutting Operating</i> <i>Costs, and Improving Energy Efficiency (June 10, 2010),</i> which would reduce the cost to maintain the site. As stated in Section 1.3 of the EA, remediation activities are independent of the analysis performed in this EA. DOE will continue to conduct environmental media cleanup under legal agreements with regulators regardless of any proposed future property transfers.
		[9-04] Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.	[9-04] See General Responses 2b and 1a. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process. Property would only be transferred after DOE satisfies the CERCLA 120(h) process and obtains agreement from the appropriate regulatory authorities.
		[9-05] While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight. At this time the Southern Ohio Diversity initiative is interested in obtaining 90 acres in a particular area at PORTS. Doing an EA for this particular delineated area would be appropriate at this time but of course only to the extent it can be demonstrated that the land is free of chemical and radioactive contaminants. As the case with the above transfer, all transfers of any amount	[9-05] See Section 2.1 of the EA. DOE will evaluate PORTS property transfers on a parcel-by-parcel basis and each transfer would have to be found to be protective of human health and the environment for its intended future use in order to be determined to be suitable for transfer. Ohio EPA and U.S. EPA are involved in the CERCLA 120(h) process that determines whether property is suitable for transfer and protective of human health and the environment for its intended future use prior to transfer.
		of land must require a separate EA or EIS as the particular case demands.	

Comment Document			
No.	Commenter	Comment	Response
		[9-06] An important reality that the Department seems to have overlooked is the value of uncontaminated land in Pike County and in the area surrounding PORTS. Unless people were unaware of the dangerous nature of the contamination at PORTS, they would likely prefer to purchase uncontaminated land even if the PORTS land were to be given away. Facilities at PORTS are old and outdated and are unlikely to have much attraction to a potential buyer. If the cost of remediation is large, then that bespeaks that the properly is too contaminated to either legally or morally be taken out of government ownership and oversight.	[9-06] DOE's Proposed Action to transfer real property and reduce the footprint of the site is consistent with the goals of the President's Memorandum <i>Disposing of Unneeded Federal</i> <i>Real Estate – Increasing Sales Proceeds, Cutting Operating</i> <i>Costs, and Improving Energy Efficiency (June 10, 2010),</i> which would reduce the cost to maintain the site. DOE will continue to conduct environmental media cleanup under legal agreements with regulators regardless of any proposed future property transfers.
		The only special value of land at PORTS would be the value added if the Department were to engage in research and development of renewable and sustainable energy sources and supporting technologies. We strongly recommend that the Department begin such a program as soon as possible. There are many new innovations in this burgeoning field. And the Department owes this to the people of Pike County.	
10	JEDISCO Jason D. Kester	The Joint Economic Development Initiative of Southern Ohio (JEDISO) fully supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. JEDISO is a joint initiative of Jackson, Pike, Ross, & Scioto Counties to jointly market and promote economic development in the 4-county region. We believe the reindustrialization of this site is key to economic survival of the region. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.	Comment noted.

Comment			
Document	-		
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an	
		avenue for the taxpayers to realize a return on their investment in	
		the development of this asset. Providing the SODI the opportunity	
		to reindustrialize the site addresses many of the issues important	
		to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> </ul>	
		<ul> <li>Driving force for pursuit of advanced educational and technical skills</li> </ul>	
		- Opportunities for small businesses	
		- Development of leaders to serve within our local communities	
		The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.	
		Very Respectfully, Jason D. Kester Secretary Joint Economic Development Initiative of So. Ohio jkester@jediso.com	

Comment			
Document No	Commenter	Comment	Response
11	SOPA	Environmental Assessment Comments	Comment noted.
	Harold R.	U.S. Department of Energy	
	Sayre	DE: Dublic Comment on DOE/EA 1856 Conveyence of	
		Real Property at the Portsmouth Gaseous Diffusion Plant	
		in Pike County, Ohio	
		To Whom It May Concern:	
		The Southern Ohio Port Authority (SOPA) fully supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the reindustrialization of the site. The port authority is the economic development office for the Scioto County. In our opinion, it is vital that the site be returned to the local community as quickly as feasible in order to properly market and reindustrialize this vital asset. This is the first of what we hope will be many transfers.	
		The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected. The transfer of the land from the DOE to the SODI provides an	
		avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	

Comment			
No.	Commenter	Comment	Response
		The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.	
		Very Respectfully, /s/ Harold R. Sayre Harold R. Sayre Chairman Southerm Obio Port Authority (SOBA)	
		Southern Onio Port Authority (SOPA)	
12	City of Portsmouth, City Manager's Office Derek K. Allen	February 15, 2017 Environmental Assessment Comments U.S. Department of Energy Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" We, The City of Portsmouth, Ohio support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	
		The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
		Sincerely, Derek K. Allen, ICMA-CM Portsmouth City Manager	
13	Paul Davis, President SPFPA Local #66	Security * Police * Fire Professionals of America Local #66 P. O. Box 264 Piketon, Ohio 45661	Comment noted.
		We the SPFPA Local #66, support the transfer of property to the SODI for their use in creating economic development opportunities centered on the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomics stability of the region for well over half a century.	

Comment			
No.	Commenter	Comment	Response
		The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation.	
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Support to Educational attainment</li> <li>Opportunities for small business</li> <li>Development of leaders to serve within our local communities</li> </ul>	
		The safe and environmentally sound transfer of property back to the communities that supported the Cold War efforts provides the opportunities for the Community Reuse Organization to re-industrialize the site and avoid the negative impacts resulting from the completed DOE missions.	
		Respectfully, Paul Davis, President SPFPA Local #66	
14	Ralph Y. Douthitt Council President, Village of Piketon	<ul> <li>(This comment submittal included several figures; a complete copy including figures is included in Appendix B.)</li> <li>February 15, 2017</li> <li>Joel Bradburne DOE Site Director Piketon Plant</li> </ul>	
		Dear Joel: The Village of Piketon, OH offers comments and recommendations concerning the U.S. Department of Energy (DOE) Environmental Assessment (EA) for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO in the enclosed document.	

Comment			
Document	Commontor	Commont	Dosponso
110.	Commenter	The Village of Piketon's position following review of the EA and supporting documents associated with the environmental investigations and remediations at PORTS as well as the socio-economic studies for the four-county area, is that DOE has not provided sufficient information in support of the proposed actions. Therefore, the Village of Piketon cannot support a Finding of No Significant Impact (FONSI), nor can it support a mitigated FONSI for this project. [14-01] Instead, The Village of Piketon recommends DOE comply with Title 10 - Energy, Part 1021 - National Environmental Policy Act Implementing Procedures Subpart D - Typical Classes of Actions, and complete an Environmental Impact Statement (EIS) for the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (PORTS) facility.	[14-01] See General Responses 1a, 1b, and 1c.
		Under the current plan, the community will have no redevelopment opportunities for decades. DOE is using the land best suited for immediate redevelopment opportunities as a nuclear waste dump and the current timeline and sequencing for cleanup and groundwater remediation does not make land available for gainful private reuse in this generation. Without a firm commitment from DOE to excavate the landfills and plumes, successful private redevelopment inside Perimeter Road is highly unlikely. Private redevelopment success is inversely proportional to distance from active D&D activities and nuclear waste. Redevelopment next to nuclear waste is limited to a small subset of nuclear-related industries.	
		<ul> <li>[14-02] The onsite disposal cell location brings nuclear waste as close to the community as you can possibly bring it, and it will negatively impact development in and around the Village of Piketon.</li> <li>Please call me with any questions.</li> <li>Sincerely, Ralph Y. Douthitt Council President, Village of Piketon</li> </ul>	[14-02] See General Response 2a.

Comment			
Document	Commontor	Commont	Despense
Document No.	Commenter	CommentVillage of Piketon Position on U.S. Department of Energy(DOE) Environmental Assessment (EA) for theCONVEYANCE OF REAL PROPERTY AT THEPORTSMOUTH GASEOUS DIFFUSION PLANTIN PIKE COUNTY, OHIO.The Village of Piketon, OH offers the following comments andrecommendations concerning the U.S. Department of Energy(DOE) Environmental Assessment (EA) for the CONVEYANCEOF REAL PROPERTY AT THE PORTSMOUTH GASEOUSDIFFUSION PLANT IN PIKE COUNTY, OHIO. The EAwas publically released by DOE on January 4, 2017 for publiccomment. DOE provided a 45 day public comment period thatexpires on February 18, 2017.The primary purpose for the EA as described on Page 1 is the conveyance of real property for economic development. DOE has indicated that the conveyance of property may also result in other outcomes such as public benefit, conservation, or mitigation. 	Response
		enanges in the DOD mission at 1 OK15.	

Comment			
Document			
No.	Commenter	Comment	Response
		[14-03] The Village of Piketon's position following review	[14-03] See General Responses 1a, 1b, and 1c.
		of the EA and supporting documents associated with the	
		environmental investigations and remediations at PORTS as	The EA used a bounding analysis (as described in
		well as the socio-economic studies for the four-county area,	DOE's guidance "Recommendations for the Preparation
		is that DOE has not provided sufficient information in support	of Environmental Assessments and Environmental Impact
		of the proposed actions. Therefore, the Village of Piketon	Statements" – December 2004), which is a common
		cannot support a Finding of No Significant Impact (FONSI),	approach, to evaluate the consequences of real property
		nor can it support a mitigated FONSI for this project.	transfer (the bounding analysis uses assumptions regarding
		Instead, the Village of Piketon recommends DOE comply	land uses and anticipated operations to estimate potential
		with Title 10 - Energy, Part 1021 - National Environmental	environmental impact) discussed in Section 3.7.2 of the EA.
		Policy Act Implementing Procedures Subpart D - Typical	In addition, the Council on Environmental Quality (CEQ)
		Classes of Actions, and complete an Environmental Impact	regulations (40 Code of Federal Regulations [CFR] §1508.14)
		Statement (EIS) for the conveyance of real property at the	state "that economic or social effects are not intended by
		Portsmouth Gaseous Diffusion Plant (PORTS) facility.	themselves to require preparation of an environmental impact
		Appendix D to Subpart D of Part 1021 - Classes of	statement." The EA, in Section 3.7.2, did not identify any
		Actions That Normally Require EISs, Item D2 Identifies	adverse impacts to the environmental resource areas of
		Slung/construction/operation/ decommissioning of nuclear	Action of transforming real memority. The Drangeed Action
		completion of an EIS. Similarly, Subboading D2 identifies	Action of transferring real property. The Proposed Action
		"Siting/construction/operation/ decommissioning of uranium	implemented specifically to address the negative impacts on
		enrichment facilities" as requiring the conduct of an FIS	communities caused by unemployment from related DOF
		and Subheading D10 also identifies "Siting/construction/	downsizing facility closeouts and workforce restructuring
		operation/decommissioning of major treatment storage	at defense nuclear facilities such as PORTS This regulation
		and disposal facilities for high-level waste and spent	establishes land transfer for economic development as
		nuclear fuel" for completing an EIS	means to address the adverse effects of these decisions
			and circumstances.
		[14-04] We note that high level waste is not defined in the	[14-04] See General Response 2a.
		regulation; however, the Village of Piketon considers low-level	
		nuclear waste and hazardous waste as defined by the Resource	High-level waste is defined in DOE Order 435.1 as
		Conservation and Recovery Act (RCRA) to be high level waste.	the highly radioactive waste material resulting from the
		Similarly, the Village considers the proposal to construct the	reprocessing of spent nuclear fuel and includes (1) liquid
		On Site Waste Disposal Facility on PORTS land to be a major	waste produced directly in reprocessing; (2) any solid
		treatment, storage, and disposal facility.	material derived from such liquid waste that contains
			fission products; and (3) other highly radioactive material
			that requires permanent isolation. High-level waste is
			prohibited from disposal in the on-site waste disposal
			facility in accordance with the waste acceptance criteria
			(WAC) as noted in Table 5 of the Waste Disposition ROD.

Comment			
Document			
No.	Commenter	Comment	Response
N0.	Commenter	<b>Comment</b> [14-05] The Village of Piketon also contends that the activities at the PORTS facility have had both a direct and indirect detrimental effect on the socio-economic condition of our residents. The Decontamination & Decommissioning (D&D) activities, the uncertainty with respect to achieving cleanup of the PORTS site to permit industrial redevelopment of land as well as DOE's plan to construct an approximately 100-acre low-level nuclear waste and hazardous waste landfill on PORTS land have had a detrimental effect on our Village's ability to attract business investment and new residents. Accordingly, we believe DOE must at a minimum reassess the socio-economic section of the EA report to document this adverse effect to the Village of Piketon and recommend measures to mitigate the damages caused. The Village of Piketon does recognize that pursuant to the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR parts 1501.3 (b), DOE may prepare an EA at any time in order to assist agency planning and decisionmaking. However, the approach taken by DOE for the PORTS site should not be a basis for issuing a FONSI. Rather, the EA should support the completion of an EIS in compliance with DOE NEPA regulation cited above and in compliance with NEPA (40 CFR parts 1501.4 (a)(1) "Determine under its procedures supplementing these regulations (described in §1507.3) whether the proposal is one which: (1) Normally requires an environmental impact attoment "	<b>Response</b> [14-05] NEPA values, including socioeconomic impacts, were evaluated in the RI/FS reports for the Process Building D&D and Waste Disposition decisions. As stated above, the CEQ regulations (40 <i>Code of Federal Regulations</i> [ <i>CFR</i> ] §1508.14) state "that economic or social effects are not intended by themselves to require preparation of an environmental impact statement." The EA, which evaluated the Proposed Action of real property transfer, did not identify any adverse impacts to the environmental resource areas of socioeconomics or environmental justice. Section 3.7.2 of the EA discusses the consequences of the Proposed Action related to socioeconomics and the action has the potential to provide beneficial impacts (with regards to the Proposed Action of real property transfer, the worst-case scenario with regards to socioeconomics would be "no impact"). Potential positive impacts would depend on a number of factors, among them the success of the chosen recruiting strategy and the types of commercial businesses and industrial recruiting, the willingness of commercial companies to locate at the site is not assured, although it was assumed for the analysis in the EA. The purpose here is not to forecast economic activity, but to make sure reasonably foreseeable indirect impacts are appropriately identified and considered. Additionally, 10 <i>CFR</i> 770 was implemented specifically to address the negative impacts on communities caused by unemployment from related DOE downsizing, facility closeouts and workforce restructuring at defense nuclear facilities such as PORTS.
		Socio-Economic Impacts Analysis	
		NEPA requires Federal agencies to consider actions that impact environmental, social, cultural, economic resources, and natural resources. NEPA does not require agencies to select the environmentally preferable alternative or prohibit adverse environmental effects. Federal agencies can incorporate other concerns and policy considerations to take into account in the decision-making process, such as social, economic, technical or national security interests.	

Comment			
No.	Commenter	Comment	Response
Comment Document No.	Commenter	Comment         An EA is prepared to determine the significance of the environmental effects and to look at alternative means to achieve the agency's objectives. It is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS or support an agency's determination to issue a FONSI.         NEPA section 1508.8 identifies two possible effects from proposed actions:         (a) Direct effects - which are actions that occur at the same time and place.         (b) Indirect effects - which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.         [14-06] The Village of Piketon is located approximately 2.5 miles to the PORTS facility. We are the closest community to PORTS. We contend that the Village and its residents have been adversely impacted in both a direct and indirect effects to the Village of Piketon from the PORTS facility.         DOE's primary purpose for issuing the PORTS EA is to convey property to SODI and other parties for economic	[14-06] The EA evaluates the impacts of the Proposed Action (conveyance of real property) to the socioeconomic resource area for the four-county region of influence. As described in Section 3.7.1.1 of the EA, the region of influence reflects where current PORTS workers live and includes the area in which these workers spend much of their wages.
		Village of Piketon from the PORTS facility. DOE's primary purpose for issuing the PORTS EA is to convey property to SODI and other parties for economic development. DOE's expectation is that property would become available incrementally over time in coordination with the cleanup program. Property outside the centrally developed area would be unneeded and eligible for transfer sooner.	these workers spend much of their wages.

Comment			
Document			
No.	Commenter	Comment	Response
No.	Commenter	CommentAs described on Page 4 of the EA report, DOE has employeda Bounding Analysis in recognition of there being insufficientinformation on future land uses for property transfer anddevelopment purposes. The Bounding Analysis is based onthe assumption of there being insufficientinformation on future land uses for property transfer anddevelopment purposes. The Bounding Analysis is based onthe assumption that various types of industrial, commercial,mixed-use, and business park uses would occur at PORTS,and that "some future uses anticipatedcould have greaterpotential than others for creating adverse environmental impactsto some environmental resource areasDOE's guidanceforimplementing the CEQ regulations (40 CFR 1502.1 and 1502.2)recommends a sliding-scale approach so that actions with greaterpotential effect can be discussed in more detail than those thathave less potential for impact. Because the actual future useof the facilities and land is not known, a bounding analysis isused to estimate potential impactsespecially in the case ofreal property transfer for development purposesthe boundinganalysis typically uses assumptions regarding land uses andanticipated operations and employs analytical methods to estimatepotential environmental impact." In addition, DOE has indicatedthat some land m	[14-07] See General Response 2a. In accordance with the Waste Disposition ROD, 100 acres is the approximate size of the area dedicated to the on-site waste disposal facility after closure that must remain under DOE ownership. This area includes the capped area and a small area between the cap and the final fence.
		and that some future uses anticipatedcould nave greater potential than others for creating adverse environmental impacts to some environmental resource areasDOE's guidancefor implementing the CEQ regulations (40 CFR 1502.1 and 1502.2) recommends a sliding-scale approach so that actions with greater potential effect can be discussed in more detail than those that have less potential for impact. Because the actual future use of the facilities and land is not known, a bounding analysis is used to estimate potential impactsespecially in the case of real property transfer for development purposesthe bounding analysis typically uses assumptions regarding land uses and anticipated operations and employs analytical methods to estimate potential environmental impact." In addition, DOE has indicated that some land may be designated forest/wildlife. [14-07] DOE has indicated in the EA that the total land area that would be transferred is unknown at this time. However, the DOE analysis assumes 3,677 acres of the 3,777-acre site would be eligible for eventual real property transfer. This acreage must then include large portions of the proposed On Site Waste Disposal Facility since according to the EA - Page 4, "More than 300 acres of land are dedicated to the on-site waste disposal facility (OSWDF) and its support facilities, which will be used to manage waste from the PORTS D&D project (100 acres will be permanently committed as a waste disposal location with no alternate use in the future [DOE 2015b])."	[14-07] See General Response 2a. In accordance with th Waste Disposition ROD, 100 acres is the approximate siz of the area dedicated to the on-site waste disposal facility closure that must remain under DOE ownership. This are includes the capped area and a small area between the cap and the final fence.

Comment			
No.	Commenter	Comment	Response
110.	Commenter	Existing facilities at PORTS are generally located within the 1,200-acre centrally developed area. As such, approximately 2,577 acres are considered undeveloped (though they are not undisturbed). Of the 2,577 acres, approximately 1,550 acres (about 60 percent) are assumed to be readily developable. The analysis also assumes the remaining acreage could be transferred but would not be developed due to various constraints (e.g., wetlands, land with slopes greater than 15 percent, utilities, etc.) that would make developable property on the site. [14-08] Based on the foregoing analysis of land subject to this EA property conveyance, the Village of Piketon believes irrespective of our position that an EIS needs to be conducted for the facility, DOE should limit the scope of this EA to 2,277 acres. This acreage is derived from 3,777 acres of total land less 300 acres OSWDF land, less 1,200-acre centrally developed area.	[14-08] The consideration of transfer of up to 3,677 acres was a bounding assumption for this EA, representing the maximum amount of real property that could be transferred. The last paragraph of Section 1.2 of the EA states that only 100 acres of the on-site waste disposal facility will be permanently committed as a waste disposal location, which is stated in the Waste Disposition ROD. The centrally developed area will be available for transfer following any required D&D and remediation (See General Response 2b).
		[14-09] DOE has acknowledged in the Record of Decision for the FOR THE PROCESS BUILDINGS AND COMPLEX FACILITIES DECONTAMINATION AND DECOMMISSIONING EVALUATION PROJECT AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT PIKETON, OHIO, July 2015 (D&D), Page 2-39, that "a 12-year schedule is assumed for demolition of the process buildings and complex facilities." Based upon this estimated and lengthy time period, it makes little sense to the Village of Piketon to support an EA that could result in a FONSI for the 1,200-acre centrally disturbed area.	[14-09] See General Response 2a.

Comment			
Document	Commontor	Commont	Dosponso
110.	Commenter	[14-10] In essence, DOE should not be given the option of rendering a final decision on the centrally disturbed area when there is much uncertainty with respect to the timing and funding of remediation, and the ability of DOE to complete a remedial action that achieves CERCLA Section 120(h)2 requirements.	[14-10] See General Response 2b.
		( <i>footnote 1</i> : CERCLA Section 120(h)2 applies to all transfers of real property "owned by the United States" to nonfederal entities. To comply with these requirements, DOE would prepare a report that documents the baseline environmental condition of the real property proposed for transfer and identifies hazardous materials that are present, stored, or have been released within the proposed transfer footprint. The report, called an environmental baseline survey, would also include information on prior property ownership, past and present property use, and past and present activities on adjacent properties. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process.)	
		The Village of Piketon is in agreement with DOE that the PORTS facility has had an adverse impact on the socio-economic condition in the near vicinity. On page 1 of the NEPA EA, DOE states that the "Transfer of real property for local development purposes could also reduce negative economic impacts caused by changes in the DOE mission at PORTS." The Village of Piketon concurs that the significant reduction in operations from the cessation of the gaseous diffusion operations in 2001 and the more recent planned closure of the American Centrifuge Plant in 2016 has had an incredibly detrimental effect to the local community. According to the February 19, 2016 Chillicothe Gazette, "Efforts to find another use for the American Centrifuge plant have been unsuccessful and work will begin to shut down the facility with the first round of layoffs coming the week of Feb. 29. Centrus Energy announced late Friday afternoon that it will be demobilizing the American Centrifuge in Piketon, but plans to preserve options for the future by maintaining its construction and operating license from the U.S. Nuclear Regulatory Commission for a commercial plant	

Comment			
Document	C	Comment	Davas
<u>No.</u>	Commenter	The company will continue working on the centrifuge technology at what it called its state-of-the-art research and testing facilities in Oak Ridge, Tennessee, after the U.S. Department of Energy decided at the end of September to de-fund the Piketon operation."	Kesponse
		<ul> <li>[14-11] In its heyday the PORTS facility had a workforce of over 22,000. Today the workforce is estimated to be approximately 2,650 including DOE and site tenants. The socio-economic impact to the Village of Piketon on these massive job losses from DOE's disinvestment at the PORTS facility cannot be understated but has been significantly understated in the socio-economic impact section of the EA. To correct this deficiency in the socio-economic section of the EA, the Village of Piketon contracted with The Ferguson Group (TFG) to undertake an economic analysis of the effect PORTS D&amp;D has had on the community and Pike County. TFG prepared an Industry Cluster Analysis for Pike County which includes information on the concentration of industry clusters in Pike County as compared to the State of Ohio and these other data:</li> <li>Employment changes in Industry Clusters from 2001-2015; and</li> <li>Percent poverty in the Village of Piketon in comparison to the State of Ohio and Pike County</li> </ul>	[14-11] See response to comment 14-05 above. The workforce of approximately 22,000 itinerant workers was during construction of PORTS (1952 to 1956). From fiscal year 2002 to fiscal year 2017, the total site workforce has increased from 1,710 to 2,603. The site workforce has remained relatively stable since fiscal year 2010 averaging more than 2,600 workers.
		<ul> <li>by TFG are that:</li> <li>1) The manufacturing industry cluster in Pike County has essentially collapsed as a consequence of the shutdown of the PORTS facility;</li> <li>2) The Village of Piketon has consistently had a much higher rate of persons living in "Poverty" as defined by the US Department of Housing and Urban Development. 37.5% of the Village population was defined as persisting at poverty levels in 2015;</li> <li>3) Average wages for manufacturing jobs in Pike County have reduced by 35.02% when adjusted for inflation for the time period of 2001-2015; and</li> </ul>	

Comment Document			
No.	Commenter	Comment	Response
110.	Commenter	<ul> <li>4) The combination of various contamination factors (described in other sections of this report) limit PORTS reuses: <ul> <li>pervasive contamination of buildings,</li> <li>high level contamination of soil and groundwater media at the PORTS, uncertainty with respect to the timing and funding of cleanup,</li> <li>degree to which industrial use cleanup standards can be achieved to permit property reuse, and</li> <li>uncertainty of offering liability protection to future tenants of the PORTS facility.</li> </ul> </li> <li>[14-12] These factors suggest to the Village of Piketon that not only will redevelopment and reuse of the PORTS be difficult to accomplish, but these significant hurdles will continue to have a negative impact on the socio-economic viability of the Village of Piketon. These factors also cause the Village of Piketon to be highly skeptical of DOE's contention that the PORTS facility can be transformed into "various types of industrial, commercial, mixed-use, and business park" - Page 5 of the NEPA EA. This assumption was based on the types of industries and businesses currently operating in industrial parks in the region around PORTS, the types of industrial parks in the region around PORTS, the types of industrial parks in the region around PORTS, so industries most likely to locate to or expand in southern Ohio, and businesses that transferees would likely recruit.</li> </ul>	[14-12] Ohio University conducted a public outreach project designed to engage community members in developing possible future reuse scenarios for the PORTS site (the outreach report is available at the PORTS <i>future</i> website at http://www.portsfuture.com/). The Proposed Action evaluated in this EA is to make land available for future reuse and reindustrialization. This EA does not preclude other uses beyond those considered in Section 2.1.1 of the EA. Proposals will be screened to determine if the proposed use is within the bounds of the document and to determine if further NEPA review (by DOE or receiving entity) is warranted. Uses outside of the range of those considered in the EA would obtain additional NEPA review, potentially through another EA, or an EIS.

Comment			
Document	<b>C</b>		D.
N0.	Commenter	Comment	Response
		PORTS facility will likely occur over an extended time period	
		The implication to the public is that DOE PORTS land that	
		would be offered for reuse would likely not be redeveloped in	
		the near term and, consequently, will not have a significant near	
		term beneficial economic impact to the community. As described	
		on pages 72 and 73 of the NEPA EA, "Several industrial parks	
		and sites are under development throughout the PORTS ROI	
		(Table 15). Many of these industrial developments are relatively	
		new and are considered together as parts of a single project for the	
		purposes of cumulative impacts assessment. Because moust fail parks tend to fill up slowly over time rather than all at once	
		these collective developments outside of PORTS can be viewed	
		primarily as current and reasonably foreseeable future projects.	
		Potential reindustrialization of the PORTS site is another	
		reasonably foreseeable future industrial development that is	
		considered in the cumulative impacts assessment along with	
		this group of off-site industrial developmentsthe full and specific	
		potential for new job and income creation among all of the	
		depend on the total number of jobs eventually created by these	
		industries throughout the ROI and the wages paid by the industries	
		that decide to locate in these developments."	
		*	
		Pike County Industry Cluster Analysis	
		Background	
		The Ferguson Group completed an Industry Cluster	
		Analysis for Pike County, OH to evaluate the economic	
		Impact to the County and the Village of Piketon from the closure of the PORTS facility which essentially began in	
		2001 with the cessation of the gaseous diffusion operations	
		An industry cluster is a geographic concentration of interrelated	
		competitive businesses with sufficient size to generate external	
		economies. Industries that are part of clusters have developed	
		buyer-supplier relationships, share labor pools, draw qualified	
		workers from area institutions of higher education, and are	
		located near each other. Industry clusters make regions	
		uniquely competitive for jobs and private investment.	

Comment			
Document No.	Commenter	Comment	Response
	Commenter	The identification of industry clusters is an important element in successfully recruiting businesses and facilitating development efforts focused on companies that complement existing businesses. An Industry Cluster Analysis can also identify gaps in value chains, and it can inform local decision- makers of industries that are either growing or declining so that programs and policies can be developed to address these challenges.	Response
		<b>Bubble Chart Information</b> An Industry Cluster Analysis can be depicted by use of a "Bubble Chart." A Bubble Chart is a method economists use to display three dimensions of data. The bubbles displayed on a graph represent the relative size of each industry's employment in the focus area - in this analysis it represents the size of employment in a particular industry in Pike County to other industries in the State of Ohio. The horizontal axis measures the percent change in the Location Quotient (LQ) over a designated period of time - in this case from 2001-2015. A LQ represents a methodology to quantify the concentration of a local industry to a larger geographic area - in this case TFG compared Pike County industry clusters to the same clusters in Ohio. Bubbles positioned to the right side of the vertical axis measures the concentration of an industry relative to the nation. A LQ concentration of 1.0 or higher indicates that the cluster is more heavily concentrated in Pike County than the state average. Economists also consider these industry clusters to be net exporter of goods and/or services to areas outside of the region. An LQ less than 1.0 for an industry suggests that the area is below the state average in concentration in a given industry.	
		<b>Data Sources</b> TFG used data collected and analyzed by the Bureau of Labor Statistics (BLS) location quotient calculator. The tool creates on demand tables of private sector employment data, by industry, as measured by the Quarterly Census of Employment and Wages (QCEW) program. The calculator allows the ready comparison of relative employment levels in the United States, states, counties, and Metropolitan Statistical Areas (MSAs).	

Comment			
Document	<b>a</b>	<b>a</b>	
N0.	Commenter	Comment	Kesponse
		industry groups that can be used to study the entire spectrum of	
		industries as classified by North American Industry Classification	
		System (NAICS) - the standard used by Federal statistical	
		agencies in classifying business establishments for the purpose	
		of collecting, analyzing, and publishing statistical data related to	
		the U.S. business economy. As the location quotient calculator	
		is currently limited to presenting private sector data, the industry	
		bighest level (most aggregated) group is the SuperSector group	
		The second highest is the Sector group, and the most detailed is	
		the Sub-Sector group. After reviewing the data available at each	
		group, TFG selected to analyze the SuperSector group as there	
		was more data available to examine. BLS has defined a total	
		of twelve SuperSectors, one of which is Public Administration.	
		The eleven SuperSectors used for classifying private-sector	
		activity are.	
		Natural Resources and Mining	
		Construction	
		• Manufacturing	
		Irade, Transportation, and Utilities	
		Financial Activities	
		Professional and Business Services	
		Education and Health Services	
		Leisure and Hospitality	
		Other Services	
		• Unclassified	
		Industry Cluster Analysis for Pike County	
		The Industry Cluster Analysis completed by TFG for Pike County	
		examines the period from 2001 to 2015. Typically, if a cluster is	
		weak in the County but strong in the State, that cluster would be	
		an effective investment for the County because the State has the	
		support growth	
		Support Browm.	
		The analysis includes industry cluster bubble charts, several	
		charts on industry cluster employment, wages and LQ changes,	
		a time series comparison of industry cluster employment LQ from	
		2001-2015, and an analysis of industry clusters in Pike County.	

Comment			
Document No.	Commenter	Comment	Response
Document No.	Commenter	CommentResults of Pike County vs. Ohio Industry Cluster Analysis General OverviewThe upper right-hand quadrant contains Pike County's strongest, most dynamic clusters, where the County has both a larger than proportional share of state cluster employment and the cluster is advancing. They are identified as strengths of the economy. Pike County has competitive advantage in the Construction and Professional and Business Services clusters.The lower right-hand quadrant contains clusters where 	Response
		http://www.incom/projections/20030110/50411643(.pti)	

Comment			
Document	<b>C</b>		D. C.
N0.	Commenter	Comment	Kesponse
		and Business Services. This cluster includes professional and	
		technical services (accounting and book keeping, architectural.	
		engineering, and relates services, etc), management of companies	
		and enterprises and administrative waste services. This industry	
		has the highest LQ $(1.77)$ and is the largest employer accounting	
		for 2,175 jobs. An LQ of 1.77 means that the Professional and	
		in Pike County as compared to the state of Obio Between 2001	
		and 2015. Pike County added 1.899 jobs to the Professional	
		and Business Services workforce, representing a 688.04%	
		employment growth. According to the Ohio Department	
		of Job and Family Services' Bureau of Labor Market, the	
		Professional and Business Services cluster in the Southeast	
		and 2022 adding 2 500 jobs to the workforce	
		and 2022, adding 2,500 jobs to the workforce.	
		The Construction Cluster accounts for 576 jobs in Pike County	
		and is the sixth largest employer. Between 2001 and 2015	
		the cluster added 164 jobs. This cluster has the second highest	
		LQ at 1.08. Accoluting to the U.S. Census, the average annual wage for the construction industry in Pike County in 2015	
		was approximately \$67,163 annually, and has an employment	
		multiplier of 1.90. This cluster is expected to grow 23.1%	
		between 2012 and 2022, adding 3,000 jobs to the Southeast	
		Ohio Region.	
		( <u>footnote 3</u> : Ibid.)	
		Weak Industry Clusters	
		The lower right-hand quadrant contains clusters where	
		Pike County is gaining employment but which do not yet	
		have a strong concentration compared to the state. These	
		clusters typically present strong growth opportunities. Clusters	
		Transportation and Utilities: Financial Activities: Education and	
		Health Services; Leisure and Hospitality; and Other Services.	

Comment			
Document	Commenter	Comment	Demense
INO.	Commenter	<b>Comment</b> The Trade Transportation and Utilities cluster is the second	Kesponse
		largest employment sector in Pike County and has the fourth	
		highest LQ at 0.91. The LQ for this cluster increased from 0.59	
		in 2001 to .091 in 2015. This means that this cluster has been	
		gaining employment and strength, however, is not concentrated	
		compared to the State. With a modest wage of \$29,315 annually,	
		this cluster is expected to grow 3.1% between 2012 and 2022, adding 1 000 jobs to the Southeast Ohio Pagion	
		adding 1,900 jobs to the Southeast Onio Region.	
		The Financial Activities, which includes services such as finance	
		and insurance and real estate services, has remained relatively	
		stable over the period of analysis, only losing 2 jobs between	
		2001 and 2015. The cluster is important to the regional economy	
		indirect jobs are a created as a result of the cluster. This cluster	
		has a modest wage of \$34,003 and is expected to grow 5%	
		between 2012 and 2022, adding 500 jobs to the Southeast	
		Ohio Region.	
		Education and Health Services is the third largest employment	
		cluster in Pike County, accounting for 1,445 jobs. This cluster	
		saw an increase in employment of 485 jobs over the period	
		of analysis. In 2015, the cluster's LQ was 0.97 having grown	
		from an LQ of 0.68 in 2001. This cluster has a modest wage of $$24,002$ and is expected to grow 129% between 2012 and 2022$	
		adding 11 500 jobs to the Southeast Ohio Region	
		······································	
		The Leisure and Hospitality cluster and Other Services cluster are	
		generally characterized by low pay and have lower employment	
		mumphers.	
		The Manufacturing and Information Sector clusters are	
		considered weak locally and shrinking and are considered	
		to be on the decline. The Information cluster, which includes	
		publishing, telecommunications, and data processing services,	
		an annual wage of \$38,564.	
		•	·

Comment			
Document			
No.	Commenter	Comment	Response
140.	Commenter	In 2001, the Manufacturing cluster had the strongest LQ (2.8) in Pike County and was the largest employer, providing jobs for 5,544 people. At that time, the United States Enrichment Corporation (USEC) -now Centrus Energy Corporation - ceased gaseous diffusion Plant (GDP), which was a major employer. The GDP was placed in interim Cold Standby for potential restart. At the end of 2010, facilities were placed in Cold Shutdown to prepare for Decontamination and Decommissioning (D&D), which commenced in 2011. [14-13] The decommissioning of the plant and the impact it has on the region can be seen by the significant drop in LQ and employment numbers by 2015. In 2015, this cluster had an LQ of 0.8 and had lost 4,607 jobs, only employing 576 people. Of equal concern to the loss of manufacturing jobs in Pike County is the loss in real wages from manufacturing jobs in the County from 2001 to 2015. Data collected from the US Bureau of Labor Statistics for Pike County reveal that not only did the County experience a massive loss of manufacturing jobs during this time interval, but real wages in the manufacturing sector were depressed by -35.02%. In 2001, the average annual wage for a manufacturing position was \$36,469. This figure translates to \$48,807.30 in 2015 when inflation is included. In 2015, a person employed in manufacturing not only did not keep up with inflation in terms of real wages, but actually lost ground by having an average annual salary of just \$31,713! Based on this data, it is apparent that the type of manufacturing jobs in Pike County in 2015 are much lower paying than in other parts of the country.	[14-13] The PORTS site workforce, which includes USEC and Centrus employment figures, increased from 1,710 in fiscal year 2002 to 2,603 in fiscal year 2017. The site workforce has remained relatively stable since fiscal year 2010 averaging over 2,600 workers. The Proposed Action is consistent with the purpose of 10 <i>CFR</i> 770 which was implemented specifically to address the negative impacts on communities caused by unemployment from related DOE downsizing, facility closeouts, and workforce restructuring.

Comment			
Document No.	Commenter	Comment	Response
N0.	Commenter	[14-14] Moreover, the notion that new manufacturing jobs at the PORTS facility will support the creation of other indirect and induced jobs with an employment multiplier of 2.9 is not realistic. As a consequence, even a successful implementation of an industrial redevelopment and reuse of the PORTS facility will not have the economic impact envisioned by DOE on the surrounding community. In addition, the job sectors that are growing in Pike County are not suitable for locating on the PORTS facility by virtue of DOE's decision to remediate site environmental media and building contamination to an industrial use standard of protectiveness. The Industry Clusters of Professional and Business Services identified as strong locally and growing in Pike County would not be permitted to operate on the PORTS facility but growing would also not be permitted to operate on the PORTS facility because of the industrial use standard of protectiveness. These industries include: Natural Resources and Mining; Trade, Transportation, and Utilities; Financial Services; Education and Health Services; Leisure and Hospitality; and Other Services. These findings from the Industry Cluster analysis suggest to the Village of Piketon that DOE has presented an unrealistic view of the likelihood of reindustrialization of our local economy from the D&D of the PORTS facility. The decision to construct a low-level nuclear waste and hazardous waste landfill will only further exacerbate the degradation of our economy. Rather, than suggest that the transfer of land for reindustrialization will mitigate the damage already done to our Village economy, we believe the DOE should be offering recommendations on how it can directly mitigate the damages already inflicted on our socio-economic condition.	[14-14] See response to comment 14-05 above. DOE agrees that an employment multiplier of 2.9 is not realistic. As noted on page 62 of the EA, Ohio University conducted an economic impact analysis for various possible future use scenarios at PORTS. Their modeling indicated an employment multiplier of 1.1 to 1.6 depending on the scenario.         From 2002 to 2010, DOE increased the number of workers at PORTS by more than 1,000 workers. The workforce has remained relatively stable from 2010 to 2017, averaging over 2,600 workers.

Comment			
No	Commenter	Comment	Response
No.	Commenter	<b>Comment</b> <b>Location Quotient Time Series Comparison</b> The Location Quotient Time Series Comparison chart provided below illustrates the change in industry cluster LQ concentrations on a yearly basis over the period of 2001 to 2015. The benefit of this time series graph allows for easy identification of industry concentration growth or decline. When examining the graph, it is important to note, that some industrise experienced a drop in LQ between 2009 and 2011. The drop in LQ is reflective of the economic recession which began in 2008 resulting in job loss across the nation. Despite the recession, many industries have begun to slowly recover, reflected by their growth in LQ. Unfortunately, the manufacturing industry has not seen a recovery and until 2013, continued to see a steady decline in LQ. A large contributing factor to the decline can be attributed to the closure of the Portsmouth Plant, with over 19,000 jobs lost since closure. <b>Poverty</b> The shutdown of the PORTS facility has had a much larger negative effect on the Village of Piketon than surrounding communities. As seen of Figure 3, the Village of Piketon has consistently experienced an elevated percentage of persons living at or below the rate of poverty as defined by the US Department of Housing and Urban Development. Data taken from the American Fact Finder of the US Census Bureau from 2000 to 2015 reveals that the Village of Piketon has been experiencing much higher rates of persons living in poverty as compared to Pike County, the State of Ohio and the United States. Data from the Census for poverty in Piketon is only available for the years highlighted with a blue star. In all of the blue starred years the Village of Piketon is shown to have a higher rate of persons living in poverty than the other geographic areas. In 2015, the percentage of persons living in poverty in the Village of Piketon was 37.5%!	Response

Comment			
Document			
No.	Commenter	Comment	Response
		[14-15] DOE's socio-economic analysis in the NEPA EA	[14-15] See response to comment 14-05 above.
		has focused on the impact PORTS operations have had on	The socioeconomic evaluation in the EA is appropriate
		the four-county region which includes Pike, Scioto, Jackson	for the Proposed Action (conveyance of real property)
		and Ross. When such an analysis is undertaken it reflects a	and discusses changes in employment and workforce;
		generally uniform socio-economic condition for the mainly	and construction sectors to service and government sectors:
		agricultural based economies of these counties and will by its	the unemployment rate and decrease in the labor force in
		operations and now closure activities have had on the nearest	the four county region of influence: and noverty levels
		community to the facility - the Village of Piketon. Even a review	and minority populations on a "census tract" basis.
		of data collected by the DOE by Census Tract does not reveal the	
		impact to the Village of Piketon as the Village represents a very	The types of businesses and industries in the assumption,
		small fraction of the land area that constitutes Census Tract 9523.	and the consideration of a four-county region of influence,
			are consistent with those in Ohio University's "PORTSfuture"
		In real terms, however, the Village of Piketon has borne the	studies.
		greatest burden from both the operation and now the shutdown	
		of the PORTS facility. During times when the PORTS was fully	
		operational, the Village of Piketon provided sewer and water	
		supply facilities from the expected increased population as a result of <b>DOPTS</b> . These facilities were sized for a nonulation	
		much larger than currently exists at PORTS. The impact of	
		iob losses and PORTS shutdown is that these facilities are now	
		both old and in need of repair as they have infiltration and infill	
		problems, and they are also more costly to maintain because the	
		system is now oversized for the current needs of a much smaller	
		population.	
		Environmental Impacts	
		The Village of Piketon's comments on environmental impacts	
		associated with the conveyance of real property at the PORTS	
		actility are based on information included in the EA report,	
		the DOF Guidance entitled "Recommendations for the Preparation	
		of Environmental Assessments and Environmental Impact	
		Statements Second Edition December 2004 U.S. Department	
		of Energy Environment, Safety and Health Office of NEPA	
		Policy and Compliance." The Village has copied relevant	
		excerpts from the DOE Guidance in bold and italics print	
		which is then followed with a comment and/or a comment	
		and an excerpt from a DOE environmental document.	
Comment			
----------	-----------	---	---
Document	~	~	_
No.	Commenter	Comment	Response
		Page 2 of the DOE Guidance states that "Proposals with clearly small environmental impacts usually will require less depth and breadth of analysis either in identifying alternatives or analyzing their impacts (though the analysis still must satisfy all NEPA requirements). Application of the sliding-scale approach is not, however, a rationale for preparing an EA (even a complex EA) rather than an EIS for a proposal with potentially significant environmental impacts."	
		[14-16] The Village of Piketon's contends that DOE is incorrectly applying the sliding-scale approach with respect to the PORTS facility. We believe that the PORTS site has known significant environmental impacts to the soil and groundwater media, and numerous buildings are also contaminated with various metals, nuclear waste, PCBs, organic solvents, and other documented contaminants.	[14-16] As noted in the comment, this EA uses a "sliding-scale" approach to analysis. The CEQ regulations require agencies to "focus on significant environmental issues and alternatives" (40 CFR 1502.1) and discuss impacts "in proportion to their significance" (40 CFR 1502.2(b)). CEQ and DOE refer to this as the "sliding scale" approach so that actions with greater potential effect can be discussed in more detail than those that have less potential for impact. Because the actual future use of the facilities and land is not known, a bounding analysis is used to estimate potential impacts. A bounding analysis is prepared when no specific activity has been identified for analysis. Because of the lack of detail on a future use, especially in the case of real property transfer for development purposes, the bounding analysis typically uses assumptions regarding land uses and anticipated operations and employs analytical methods to estimate potential environmental impact. The sliding-scale approach was not a rationale for preparing an EA rather than an EIS, but in determining which impacts are discussed in more detail.

Comment			
Document	<b>C</b>		D
N0.	Commenter	<b>Comment</b>	<b>Response</b>
		on-site has reached the Berea sandstone, the regional	response, soil and groundwater remediation are being evaluated
		aquifer. Groundwater testing data from the report entitled	in a separate regulatory process. The public will get a chance
		"U.S. Department of Energy Portsmouth Gaseous Diffusion	to comment on the preferred plan for remediation of soil
		Plant Annual Site Environmental Report - 2014 Piketon, Ohio	and groundwater, selected by the Ohio EPA, in the future.
		reveals that elevated concentrations of Inchloroethene (ICE) in the Borea conditions as high as $2,000 \text{ ug/}1$ . The Safe Drinking	Onio EPA's final decision on soil and groundwater will be made after coraful evaluation of public input on the preferred
		Water Act (SDWA) Maximum Contaminant Level (MCL) for	nade after careful evaluation of public input on the preferred
		TCE is 5 $\mu$ g/I.	piui.
		Numerous environmental studies have documented the	
		difficulty in remediating TCE and like Dense Non-Aqueous	
		Phase Liquids (DNAPL) in groundwater. According the	
		US Environmental Protection Agency (EPA), the difficulty in	
		remediating DNAPLs in groundwater is due to the chemicals	
		humans at very low concentrations. According to EPA	
		"These two physical characteristics mean that when released	
		into the environment in sufficient quantity, they can move	
		through soils and groundwater until they encounter a sufficiently	
		resistant layer that will impede further mass vertical movement	
		and allow the liquid to pool. Depending upon the nature of	
		quite complex as the liquid follows the path of least resistance	
		For example, soils considered homogenous often have subtle	
		differences in layering that can cause a DNAPL to run and drop	
		many times, creating a complex of thin horizontal and vertical	
		ganglia. Both DNAPL soil residuals, which are the most	
		common form of contamination/spill encountered, and pools	
		become slowly dissolving sources of groundwater and soil vapor contamination. In addition, low conductivity areas into which the	
		DNAPL mass/or and the dissolved-phase plume have diffused or	
		migrated can in turn become sources of low-level contamination	
		after the DNAPL mass has disappeared While the solubilities	
		of these chemicals are very low (often hundreds to low thousands	
		of parts per million), the level at which they can present a human	
		health or ecological risk is considerably lower (few to hundreds	
		or parts per ormon).	

Comment			
Document	<b>a</b>	<b>~</b>	
N0.	Commenter	Comment	Response
		The fact that the TCE DNAPL has migrated into the Berea	
		sandstone regional aquifer - a term used by DOE - suggests	
		to the Village of Piketon that it will be extremely difficult for	
		DOE to remediate the groundwater in this aquifer to the EPA	
		Supertund standard of care in section 300.430 (a)III (F) of	
		the National Contingency Plan (NCP) which is "EPA expects	
		to return usable ground waters to their beneficial uses wherever	
		practicable, within a timetrame that is reasonable given the	
		particular circumstances of the site. When restoration of ground	
		water to beneficial uses is not practicable, EPA expects to	
		prevent further migration of the plume, prevent exposure to the	
		contaminated ground water, and evaluate further fisk reduction."	
		Under either standard of care ched in the NCP for the protection	
		or restoration of the groundwater media, the village of Piketon	
		that it will be extremely difficult for DOE to meet this	
		standard in the Derec formation to make it impossible for DOE	
		to dia out the source meterial as it has indicated will ecour with	
		to dig out the source material as it has indicated will occur with the TCE contamination in the shellower and everlying Callie	
		and stone against the standower and overlying Gaina	
		satisficities adulter. As a consequence, DOE will have to use less	
		autrently in place and injection of evidents and microbes to reduce	
		TCE contaminant levels. These measures have a limited benefit	
		here the very difficult problem of dispersing chemical	
		treatments to remediate an equifer through the annulus of one or	
		more treatment wells. The prestical experience of groundwater	
		remediation practitioners is that the inability to control or direct	
		the chemical treatment dispersents limits the chility of the	
		treatment to remedy the DNAPL contamination in the aguifer	
		system	
		system.	
		DOF has also documented the existence of 13 legacy landfills	
		that account for at least 101 acres of land area DOF concedes	
		that these landfills were closed under regulatory standards that	
		are not deemed protective in 2017 and that they are uncertain	
		of the waste types that were buried in them	
		of the maste types that were buried in them.	

Comment Document			
No.	Commenter	Comment	Response
		[14-18] In addition, DOE has plans to construct a 300-acre OSWDF on PORTS land for the disposal of low-level nuclear waste and hazardous waste from facility operations which in of itself satisfies the standard of potentially significant environmental impacts.	[14-18] See General Response 2a.
		Page 3 of the DOE Guidance states that DOE should "Provide information that a concerned citizen might want, keeping in mind that concerned citizens may need evidence for conclusions that seem obvious to the preparers." As stated further below, DOE has not provided in either of the two RODS relevant information on soil contamination or the quality of on-site groundwater at PORTS.	
		[14-19] Soil and groundwater data is included in the RI/FS report; however, the complete assessment of risk to receptors from these environmental media is not included in the RI/FS and must be found in the RCRA Corrective Action documents. DOE understands that an enormous number of environmental studies and remedial actions have been undertaken at the PORTS site. Yet, in order to develop a complete understanding of the scope of work completed and work still to be completed relative to this EA report, the concerned citizen would literally have to read through at least 5,000 pages of technical reports. The Village believes DOE should prepare a more comprehensive EIS report of land transfer that the concerned citizen can readily access and understand the breadth of issues.	[14-19] See General Response 2b. As noted in the general response, soil and groundwater remediation are being evaluated in a separate regulatory process. The public will get a chance to comment on the preferred plan for remediation of soil and groundwater, selected by the Ohio EPA, in the future. Ohio EPA's final decision on soil and groundwater will be made after careful evaluation of public input on the preferred plan.

Comment			
Document			
No.	Commenter	Comment	Response
		[14-20] On page 3-20 of the SITE-WIDE WASTE DISPOSITION	[14-20] See General Response 2a.
		EVALUATION PROJECT, DOE states that it "understands the	
		public's desire for improvements to the existing infrastructure	In addition, the DOE Environmental Management mission
		to help reindustrialization. The scope of the selected remedy	at PORTS is to accomplish the environmental remediation,
		includes the potential removal of essentially all man-made	waste management, depleted uranium hexafluoride (DUF <sub>6</sub> )
		improvements supporting the gaseous diffusion plant (GDP),	conversion, and D&D at PORTS. The goal is to accelerate
		including site rail, roads, power, and water treatment systems.	cleanup, eliminate potential environmental threats, reduce
		However, DOE is committed to work with the community,	the DOE footprint, and reduce the life-cycle cost. DOE
		including the Southern Ohio Diversity Initiative, to identify	will complete this mission with potential redevelopment
		those opportunities where infrastructure can cost effectively	of the site in mind and facilitate transfer of real property
		remain behind after cleanup is complete. It is important to	for reuse, but reindustrialization of the site is not part of
		note that DOE has not currently been appropriated, or expects to	DOE Environmental Management's mission. DOE cannot
		be appropriated, any funds that would allow DOE to spend those	upgrade existing infrastructure solely for the purpose of
		funds on maintaining or upgrading existing infrastructure solely	reindustrialization by future users of the facility after transfer.
		for the purpose of reindustrialization by future users of the facility	
		after transfer. DOE's appropriations are for the purpose of	
		cleaning up the GDP. With that said, the reasonably anticipated	
		future land use, i.e., reindustrialization after transfer, is a vital	
		component of the overall cleanup approach." This information is	
		not included in the EA report and is relevant to understanding the	
		likelihood of the GDP ultimately being transferred to a third party	
		for reindustrialization. Essentially, the communities surrounding	
		the PORTS facility have no guarantee that DOE will receive	
		runging to maintain infrastructure that is a critical component	
		to supporting reindustrialization of the facility.	

Comment			
Document			
No.	Commenter	Comment	Response
		[14-21] Page 8 of the DOE Guidance states that "Cumulative	[14-21] Section 4 of the EA discusses cumulative impacts of
		actions" are those that when viewed with other actions proposed	the Proposed Action and current actions as well as reasonably
		by the agency have cumulatively significant impacts and therefore	foreseeable future actions. With regards to the Proposed
		should be discussed in the same EIS. "Similar actions" are those	Action (conveyance of real property), the incremental
		that when viewed with other reasonably foreseeable or proposed	impact to the socioeconomic area ranges from "no impact"
		agency actions have similarities that provide a basis for evaluating	to "positive (or beneficial) impact." Potential positive impacts
		their environmental impacts together, such as common timing or	would depend on a number of factors, among them the success
		geography. Also, Page 8 of the DOE guidance provides clarity on	of the chosen recruiting strategy and the types of commercial
		the interrelationships of these actions, "Cumulative, connected, or	businesses and industries recruited. Given the competitive
		similar actions should not be confused with cumulative impacts,	nature of business and industrial recruiting, the willingness
		which result from the past, present, or reasonably foreseeable	of commercial companies to locate at the site is not assured,
		actions of any Federal or non-Federal agency."	although it was assumed for the analysis in the EA. The
			purpose here is not to forecast economic activity, but to
		The Village of Piketon believes that DOE seeks to undertake	make sure reasonably foreseeable indirect impacts are
		"similar actions" at the PORTS facility that has experienced	appropriately identified and considered. The incremental
		cumulatively significant impacts. DOE has done an outstanding	impact from property transfer would not result in a negative
		job of documenting the environmental degradation of the	or adverse cumulative impact to the socioeconomic conditions
		environmental media and buildings since the 1990s. These	of the four-county region of influence when added to the
		actions taken as a collective of actions constitute significant	past, present, and reasonably foreseeable future actions.
		environmental impacts and, therefore, warrant completion of	In addition, the evaluation of the environmental resources
		an EIS.	areas in Section 3 of the EA did not identify any adverse
			impacts from the Proposed Action.
		Page 16 of the DOE Guidance indicates that an EIS should	
		discuss:	See General Response 2c.
		direct and indirect effects	The Proposed Action is consistent with the purpose
		• possible conflicts between the proposed action and the	of 10 CFR 770 which was implemented specifically
		objectives of Federal, regional, state, local, and tribal land	to address the negative impacts on communities caused
		use plans, policies, and controls	by unemployment from related DOE downsizing, facility
			closeouts and workforce restructuring at defense nuclear
		Direct effects are caused by an action and occur at the same time	facilities such as PORTS. Transfer for economic
		and place as the action. Indirect effects are reasonably foreseeable	development is the established means to address the
		effects caused by the action that occur later in time or farther in	adverse effects of these decisions and circumstances.
		distance (40 CFR 1508.8).	
			Specific transfer proposals will be evaluated prior to real
			property transfer. Once specific land use proposals are
			received, the Department would screen the proposals against
			this EA to determine if the proposed use is within the bounds
			of the document and to determine if further NEPA review
			(by DOE or receiving entity) is warranted. Uses outside of the
			range of those considered in the EA would obtain additional
			NEPA review, potentially through another EA, or an EIS.

Comment		
Document No. Commontor	Commont	Despense
Document No.       Commenter         [14-22] The Village not provide sufficient effects from the close care of the OSWDF WASTE DISPOSIT that "Postclosure can least 30 years after the postclosure period of being responsible we believe DOE is be trust fund for just th NRC, and RCRA C not been established be documented in th completed.         [14-23] The Village thoroughly evaluate investigations and re buildings as well as on our local land uss period of time to con PORTS site - estima the demolition of pr expected to occur ov Village of Piketon th in this EA the indire We have documente response document facility operations h and quality of life. T more robust evaluat operations as well at operations as well at	<b>Comment</b> of Piketon position is that the EA report does it information to quantify direct and indirect ure of the PORTS facility and the post closure According to Page A-33 of the SITE-WIDE ION EVALUATION PROJECT, DOE states <i>re must begin after closure and continue for at</i> <i>that date. The Director may shorten or extend</i> od." The Village is aware of DOE's position for post closure care in perpetuity; however, etter served by establishing post closure care e OSWDF. This is a common practice at & D landfills. The fact that a trust fund has for the OSWDF is a direct impact that should is EA and in the EIS that we support being of Piketon also believes that DOE has not the cumulative impacts of the environmental medial actions of environmental media and the impact of construction of the OSWDF plans, policies and controls. The extended mplete remediation of contamination at the tod by DOE to be in excess of 12-years since ocess buildings and complex facilities is for a 12-year period alone - suggests to the at the DOE has adequately accounted for ct effects to our socio-economic condition. d in the socio-economic section of our he significant adverse impact the PORTS as already had on our economic standing We believe DOE needs to undertake a much on of the impact of current and future PORTS is the protracted schedule for site remediation or the or the impact of current and future PORTS	[14-22] See General Response 2a. [14-23] See response to comment 14-21 above. Specific transfer proposals will be evaluated prior to real property transfer. Once specific land use proposals are received, the Department would screen the proposals against this EA to determine if the proposed use is within the bounds of the document and to determine if further NEPA review (by DOE or receiving entity) is warranted. Uses outside of the range of those considered in the EA would obtain additional NEPA review, potentially through another EA, or an EIS.
on the vintage of the	eton:	

Comment			
Document No	Commenter	Comment	Response
110.	Commenter	[14-24] Page 20 of the DOE Guidance states that "In general, use available data for an EA. If data needed to quantify impacts are not available, qualitatively describe the most relevant impacts. Be aware that inability to satisfactorily characterize an important impact in an EA likely will render it inadequate to support a finding of no significant impact."	[14-24] See General Response 2a. NEPA values, including impacts to socioeconomic resources, were included in the evaluation of the two remedial decisions for process building D&D and waste disposition. The EA considered these evaluations in the cumulative impacts (Section 4).
		In reviewing the two PORTS RODS we note several instances where data is needed to quantify impacts. The lack of data reinforces our position that DOE should not issue a FONSI and instead should complete an EIS for the PORTS facility. The following are relevant excerpts from the two RODS that support the Village's position.	
		[14-25] Page 1-3 of the D&D ROD indicates that additional characterization is needed to support the remedial design and other criteria, "The selected remedy includes the following key elements:Requires additional building characterization to be performed, as needed, to support remedial design, develop worker safety protocols, and facilitate segregation of waste streams and waste disposition planning. The amount of characterization will depend on the historical use, available process knowledge, and the anticipated disposal facility. An appropriate amount of characterization will be specified during the remedial design phase and such remedial design plans will be submitted for Ohio EPA concurrence and/or approval, as applicable."	[14-25] See General Response 2a.
		[14-26] On Page 1-6 of the D&D ROD, DOE asserts that "Support of characterization activities in the process buildings that began during the Waste Disposition Project RI/FS will continue under the Phase 1 Sampling and Analysis Plan for the Process Equipment Characterization in Support of the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio (DOE 2014) until such time as Ohio EPA concurs with the associated post-ROD RD/RA work plans or other documents, as appropriate."	[14-26] See General Response 2a.

Document			
No Com	montor	Commont	Dosponso
<u>No.</u> Comi	menter	<b>Comment</b> [14-27] On Page 2-40 of the D&D ROD, DOE states that "Chemical-specific ARARs provide health- or risk-based concentration limits or discharge limitations in various environmental media for specific hazardous substances, pollutants, or contaminants. The scope of this action is D&D of buildings/structures and infrastructure and does not include remediation of environmental media. Therefore, no chemical-specific ARARs ore triggered." Neither the D&D ROD, nor the Site-Wide Disposition Evaluation ROD clearly addresses contamination to environmental media such as the soil and groundwater. The public must review the RCRA Corrective Action files in order to develop an understanding of the scope of investigation and remediation undertaken to date. The complexity and breadth of the PORTS facility environmental investigations suggests to the Village of Piketon that DOE should have at a minimum included in the EA a more comprehensive reporting on environmental media sampling, and also suggests that DOE EA report does not fulfill the criteria for issuance of a FONSI.	[14-27] See General Response 2a.
		<ul> <li>[14-28] On Page 1-4 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that the On-Site Disposal remedy "Requires a final WAC that meets oil ARARs and is in compliance with the DFF&amp;O for any constructed OSDC. The Ohio EPA-approved WAC consists of seven components Several of the components (3 through 7) of the final WAC will require refinements after the final design is completed. Such refinements for these WAC components will be reviewed and approved by Ohio EPA in future OSDC-related regulatory documents as required by the DFF&amp;O." The inability of DOE to provide final WAC does not satisfactorily characterize an important impact in an EA per the Guidance.</li> <li>[14-29] On Page 2-8 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that it is in the "process of completing RFIs for various solid waste management units that were deferred." This statement reflects that DOE cannot quantify the impacts of these sites in the EA and therefore. cannot quant impact in the standard in the equidance of</li> </ul>	[14-28] See General Response 2a. [14-29] See General Response 2a.

Comment			
No.	Commenter	Comment	Response
		[14-30] On Page 2-9 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "Whenever excavation and/or disposal of non-DFF&O waste (Categories RC-2, RC-3, RC-4) is discussed in this document, whether in terms of additional waste or fill, it is to be understood that additional authorization/approval, as applicable, would be required to undertake this activity." This statement also reflects that DOE cannot quantify the impacts of these sites in the EA.	[14-30] See General Response 2a.
		[14-31] On Page 2-30 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "Because the waste disposition decision made in this ROD is not determining a need to remediate mobile source material, liquid or drummed buried waste, or highly toxic soils, the concept of principal threat wastes does not apply to this decision." This statement again reflects that DOE cannot quantify the impacts on environmental media in the EA.	[14-31] See General Response 2a.
		[14-32] On Page 2-38 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "The existing landfills inside Perimeter Road are one of the key potential sources of contaminated fill (RC- 3). Additional characterization specified in future plans will be conducted to support the excavation of the landfills and to determine WAC compliance of the material excavated. The new data and other information collected will be evaluated to determine CAMU eligibility as well as if there are additional PHCs in the landfill waste." The disposal of land (i.e., existing landfills) to a third party cannot occur until additional characterization and remediation is completed.	[14-32] See General Responses 2a and 2b.

Comment Document			
No.	Commenter	Comment	Response
		<b>Conclusions</b> [14-33] Based on the foregoing statements conveyed in DOE RODS for the PORTS site, The Village of Piketon cannot support a FONSI. It is clear to us that there is much uncertainty with respect to the scope, timing and funding of required remediations. As a consequence, DOE has failed to make the case for issuing a FONSI for the conveyance of property in this EA report. We respectfully request that DOE prepare an EIS for the PORTS site that addresses all the concerns raised in this response document.	[14-33] As noted in Section 1.3 (page 5) of the EA, a bounding analysis is used to estimate potential impacts to the resource areas, as discussed in the response to comment 14-03 above. Also, as noted on page 5 of the EA, prior to future real property transfers, DOE would obtain information from interested parties who are requesting real property. That information would enable DOE to screen a potential transferee's proposed future uses against the uses evaluated in the EA, enabling DOE to ascertain whether future uses are within the bounds and assumptions used in the EA analysis. Based on the analysis in the EA, an EIS is not needed to evaluate the impacts of the Proposed Action (conveyance of real property).
15	Michael Rubadue, Ohio Department of Health	<ul> <li>February 17, 2017</li> <li>Environmental Assessment Comments U.S. Department of Energy</li> <li>RE: Draft Environmental Assessment: Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio (DOE/EA-1856)</li> <li>To Whom It May Concern,</li> <li>The mission of the Ohio Department of Health is to protect and improve the health of all Ohioans. This mission is fulfilled, in part, by ensuring the requirements of the Ohio Revised Code, and the rules promulgated by the Ohio Administrative Code, are met.</li> </ul>	

Comment			
Document			
No.	Commenter	Comment	Response
		ODH has completed its review of the Draft Environmental	This is an EA where the Proposed Action is the
		Assessment, and has found the industrial use risk assessment	conveyance of real property for economic development
		criteria used by DOE does not meet the standards of protection	and reindustrialization. DOE has prepared this EA to
		required by the Ohio Revised Code.	assess the consequences of the potential transfer of PORTS
			real property. The CEQ regulations (40 Code of Federal
		Placing restrictions on the use of a property, such as industrial	Regulations [CFR] §1508.9[b]) state an EA must include brief
		use, is not consistent with the unrestricted use criteria promulgated	discussions of $(1)$ the need for the Proposed Action, $(2)$ of the
		in Ohio Administrative Code (OAC) 3701:1-38-22. Ohio's	alternatives, (3) of the environmental impacts of the proposed
		release criteria have been established to ensure the public does	action and alternatives, and (4) a listing of agencies and persons
		not receive greater than 25 millirem per year of dose from	consulted. Site-wide EAs typically use a bounding analysis
		all exposure pathways including groundwater. Included	rather than a quantitative risk assessment to identify the
		in the unrestricted use criteria in OAC 3701:1-38-22(B) is	range of potential impacts where there is uncertainty or
		the requirement to use the groundwater exposure pathway	where expected values are unknown (i.e., the range of land
		for dose risk evaluation. DOE specifically excluded the	uses and assumptions provided in Section 2.1.1 of the EA).
		groundwater pathway in the Draft Environmental Assessment.	
			PORTS property transfers will be evaluated on a
		A line by line evaluation is not being provided, however examples	parcel-by-parcel basis and each parcel transfer would
		of inconsistencies with Onio's regulations are given below:	have to be found to be protective of human health and the
			environment for its intended use to be suitable for transfer
		1) In Section 2.1.1, page 9, DOE provides a list of anticipated	and will include risk/dose evaluations consistent with the
		future uses for the site. For fisk modeling, the uses listed	requirements in CERCLA 120(n) and DOE Orders.
		would be included under the industrial use modeling	
		scenario. Onio Administrative Code (OAC) 5/01.1-58-22(B)	
		use is in effect placing restrictions on the site. For properties	
		released with restrictions OAC 3701:1-38-22(E) requires	
		a radioactive materials license to ensure that any residual	
		radioactivity will not nose a significant threat to the	
		nublic's health and safety	
		public 5 licului and survey.	
		OAC 3701:1-38-22(E) States:	
		(E) When a decommissioning with restrictions is	
		proposed by a licensee, a decommissioning possession	
		only license is required to assure that the provisions of	
		the decommissioning plan as approved by the director	
		remain effective. The license will contain a condition	
		that the director will not require further cleanup unless	
		he or she determines that the criteria of this rule or	
		terms of the license were not met or that residual	
		radioactivity at the site could result in a significant	
		threat to public health and safety.	

Comment			
Document			
No.	Commenter	Comment	Response
		In order for a license to be issued, the requirements of $OAC 2701(1.28, 22)(D)$	
		OAC 5/01.1-38-22(D) must be met. $OAC 5/01.1-38-22(D)$	
		states.	
		(D) A licensee may decommission a facility and maintain	
		a decommissioning possession only license using	
		alternate criteria greater than the dose criterion specified	
		in paragraph (B) of this rule, provided that the licensee:	
		(1) Provides assurance that public health and safety	
		would continue to be protected, and that it is unlikely	
		that the dose from all man-made sources combined,	
		other than medical, would be more than the one	
		millisievert (one hundred millirem) per year limit set	
		nossible sources of exposure.	
		(2) Has employed, to the extent practicable,	
		restrictions on site use in minimizing exposures at	
		the site;	
		(3) Reduces doses to ALARA levels, taking	
		into consideration any detriments, such as traffic	
		accidents expected to potentially result from	
		decontamination and waste disposal; and	
		(4) Has submitted a decommissioning plan or license	
		termination plan (LTP) to the director indicating the	
		licensee's intent to decommission in accordance with	
		rule 3/01:1-40-18 of the Administrative Code, and	
		decommission by restricting use of the site. The	
		licensee shall document in the decommissioning plan	
		or LTP how the advice of individuals and institutions	
		in the community who may be affected by the	
		decommissioning has been sought and incorporated,	
		as appropriate, following analysis of that advice.	

Comment			
Document	<b>C</b>		P
N0.	Commenter	Longeving such advice, the licensee shall provide	Kesponse
		for:	
		(a) Participation by representatives of a broad	
		cross section of community interests who may be affected by the decommissioning;	
		(b) An opportunity for a comprehensive, collective discussion on the issues by the participants represented; and	
		(c) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and	
		disagreement among the participants on the issues.	
		(5) Has provided sufficient financial assurance in the form of a trust fund to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site.	
		2) Section 2.1.1, page 10, DOE states "For any uses outside the bounds evaluated in this EA, DOE may transfer the property and place conditions in the deed that require the transferee to obtain all necessary approvals for the use of the real property."	
		Placing restrictions on property use does not meet the unrestricted use criteria in OAC 3701:1-38-22(B). As explained in the first comment, OAC 3701:1-38-22(E) requires a radioactive materials license, not deed restrictions, to ensure that any residual radioactivity at a site will not pose a significant threat to the public's health and safety.	

Comment			
No.	Commenter	Comment	Response
		3) In Section 3.4.2.1, discussion of groundwater impacts from the proposed action, DOE states "Use of groundwater directly beneath DOE property would be prohibited as a condition of the deed for title transfer. The deed restriction would ensure the protection of human health by preventing exposure to contaminants that could potentially be present in groundwater."	
		OAC 3701:1-38-22(B) specifically requires drinking water from ground water sources be used in the total effective dose equivalent evaluation. As such, DOE's risk assessment does not adequately demonstrate the property will not cause harm from radiological exposure to future owners in accordance with Ohio's regulations.	
		If you have any questions or comments, please contact Stephen Helmer, Program Administrator or Michael Rubadue, Senior Health Physicist at (614) 644-2727.	
16	Craig Galloway	HelloI am a resident of Piketon. I grew up here, my family is from hereand my children will grow up here. [16-01] I have many concerns regarding the burial of nuclear waste in this areanot only for me and my family but the local wildlife. Has the ODNR been made aware of this potential project? Should they be made aware? What is at risk for the hunters that harvest game from the surrounding area?	[16-01] See General Response 2a.
		[16-02] This project will most certainly degrade the value of this area to anyone potentially wanting to locate here. The area is already in dire shape. Has any thought been given about investing in other projects to help the area if this goes through? Possibly the DOE investing in a solar farm for the area. Putting the Village of Piketon on a Smart Grid? This surely would be a positive thing for this area if something so negative as burying nuclear waste in our backyard. Present us with options of help and a positive future for this area instead of burying waste and leaving us to deal with the aftermath that is possible if this site is a go. This will impact us and the area 100%.	[16-02] Comment noted.
		Craig Galloway	

Comment Document			
No.	Commenter	Comment	Response
17	Stephen Sparks	The Piketon uranium enrichment plant has contaminated nearly everyone I know in this area. Most people have either enlarged thyroids or tumors growing on them. It is shocking that there seems to be an effort in place to silence this information. The government should be quantifying the number of people contaminated and gauging the extent of their damage. Another point is that the present cleanup is allowing breeding age females to come into contact with toxic substances. This cannot be good and is creating an extensive liability in the future. A cleanup in Piketon will never produce a safe and viable commercial district. It is just a government make work project and an expensive one at that. There is quite a bit of local property that could be developed around Piketon and is not, because there is no demand for it. It would be better to just quarantine the area.	Comment noted.
		Stephen C Sparks	
18	Diana Cahall	U.S. Department of Energy	
		February 16, 2017 Re: DRAFT ENVIRONMENTAL ASSESSEMENT: CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO (DOE/EA-1856) Public Comment The Environmental Assessment (EA) divides the total DOE reservation minus 100 acres set aside for a long term waste disposal facility into two large areas, one area outside the Perimeter Road consisting of about 2,500 acres and the other area of 1,200 acres inside the Perimeter Road. The 1,200 acres inside the Perimeter Road is presumably to be devoted to reuse and industrial development. The process of industrial development supposedly begins with an 80 acre tract DOE is in process of transferring to Southern Ohio Diversification Initiative (SODI). The 2,500 acre area outside Perimeter Road has the on-site, waste disposal facility (OSWDF) closed landfills, and burial grounds. [18-01] What does DOE envision for future use of this portion of the former federal reservation?	[18-01] As discussed in Section 2.1.1 of the EA, the transferred real property is assumed to be developed for a range of uses, including various types of industrial, commercial, mixed-use, and business park uses. In addition, some areas may be designated as open space for forest/wildlife management or conservation purposes.

Comment			
Document	<b>a</b>	<b>a</b>	
No.	Commenter	Comment	Response
		[18-02] How many acres of the 2,500 total are now in closed landfills, burial grounds, and other disposal areas?	[18-02] Landfills, burial grounds, and other disposal areas (excluding the On-Site Waste Disposal Facility) comprise less than 35 acres of the 2,500 acre area outside of Perimeter Road.
		[18-03] Will DOE use a categorical exclusion to transfer land adjoining disposal areas?	[18-03] Although certain transfers may be able to be categorically excluded under the DOE NEPA regulations, DOE has chosen to prepare this site-wide EA for their proposed transfer activities rather than a CX. As stated in Section 1.3 of the EA, DOE would obtain information from interested parties who are requesting real property and DOE would screen a potential transferee's proposed future uses against the uses evaluated in the EA. That screening would enable DOE to ascertain whether future uses are within the bounds and assumptions used in the EA analysis or if further NEPA review is necessary.
		[18-04] Has DOE developed a 10 Year Plan for the Ports Site?	[18-04] This comment is beyond the scope of the Federal action being evaluated in this EA.
		[18-05] What process is used by DOE for transfer of land that SODI doesn't want?	[18-05] As stated in Section 1.3, DOE will accept viable proposals from other interested parties (in addition to SODI).
		[18-06] The 80 acre land transfer is supposedly the beginning of reuse and industrialization on the Portsmouth Site, yet EA doesn't mention the 80 acre parcel in process of being transferred in any of its 81 pages. EA is obviously a site wide decision-making document based upon Portsmouth being designated a Closure Site.	[18-06] As stated in Section 1.3 of the EA, DOE would obtain information from SODI or other interested parties who are requesting real property and DOE would screen a potential transferee's proposed future uses against the uses evaluated in the EA. As noted on page 5 of the EA, the EA was not intended to identify and address specific future uses for individual parcels of real property.

Comment			
Document No.	Commenter	Comment	Response
110.	Commenter	[18-07] Why are these basic facts not made clear to members of the public who wish to offer comment? National Environmental Policy Act (NEPA) mandates opportunity for participation in agency decision-making process by a fully informed public. This EA was so confusing to me that I pursued answers on my own and actually found some explanation in PROTOCOL FOR THE ENVIRONMENTAL REGULATORY PROCESSESS FOR THE TRANSFER OF REAL PROPERTY AT THE U.S. DEPARTMENT OF ENERGY PORTSMOUTH AND PADUCAH SITES, VOLUME 1: UNCONTAMINATED PROPERTY (March 2016). One of the many interesting items of information that this document provided was its date of issue, March 2016. The Site Specific Advisory Board (SSAB) voted upon a request to DOE to designate Portsmouth a Closure Site, 7 months or more after DOE had already declared it a Closure Site.	[18-07] Comment noted.
		[18-08] On page 73 of EA under "CUMULATIVE IMPACTS BY RESOURCE AREA" the other regional industrial developments are in the process of being developed. Cumulative impacts from all actions on land use would be minimal." What are the regional industrial developments? If unknown to DOE how can DOE know the impacts would be minimal?!	[18-08] The other "regional industrial developments" mentioned on page 73 are the industrial parks included in Table 15 of the EA. The EA assumes these industrial parks will continue to be developed concurrently with the Proposed Action and industries will obtain required permits and comply with all applicable local, state, and federal regulations. While the full range of potential cumulative impacts that could occur as a result of these regional industrial developments is not known, as stated in the EA, collectively, they represent the most significant economic activity that is occurring now and would be occurring during the foreseeable future.
		<b>[18-09]</b> On page 76, paragraph one, please explain what are the "five other actions" claimed to have no adverse cumulative impacts of minority or low-income populations?	<ul> <li>[18-09] The "five other actions" mentioned on page 76 of the EA include the:</li> <li>1. PORTS D&amp;D Project</li> <li>2. PORTS Remediation Project</li> <li>3. On-site Waste Disposal Facility</li> <li>4. DUF<sub>6</sub> Conversion Project</li> <li>5. Regional Industrial Developments (Industrial Parks).</li> <li>In addition, see General Response 2c.</li> </ul>

Comment			
Document			
No.	Commenter	Comment	Response
		[18-10] From paragraph heading "Waste Management" what are the projects that could occur in the same timeframe in the region thereby creating "potential adverse cumulative impact on other municipal and/or commercial landfills in the region?" All public agencies are directed to avoid actions that could foreseeably result in loss of public trust and confidence. DOE needs to reveal the total plan for the PORTS Site. At minimum DOE needs to reveal the plan for the 80 acres being considered for transfer at this time. It is not credible for DOE to claim not to know what type of facility or facilities are to be constructed on the 80 acres since Protocol Document under "Phase 2-Proposal Review Phase" states "The proposal is reviewed to see if it offers a 'good fit' for the site. At this time PPPO determines if the proposal is in the best interest of the Government". The next paragraph concludes with "Transfer processes would not proceed for proposals found not to be in the best interest of the Government." (PROTOCOL FOR THE ENVIRONMENTAL REGULATORY PROCESSES FOR THE TRANSFER OF REAL PROPERTY AT THE U.S. DEPARTMENT OF ENERGY PORTSMOUTH AND PADUCAH SITES, VOLUME 1: Uncontaminated Property, page 6.)	[18-10] The statement in the Waste Management discussion refers primarily to the Proposed Action and the regional industrial parks undergoing development within the same timeframe. If the development was relatively rapid, there could be a potential cumulative impact on municipal and/or commercial landfills in the region. However, it is anticipated that these developments would occur over a longer time period, and landfill capacity would be adequate to handle the amounts of solid waste requiring disposal.
		[18-11] What types of facility or facilities are planned for the 80 acre land transfer to SODI? It appears me that a facility which involves 1,100 degree heat is likely some kind of Smelter, but I shouldn't need to offer a best guess. I should be informed.	[18-11] This EA was not intended to identify and address specific future uses for individual parcels of real property (as noted in Section 1.3 on page 5 of the EA).

Comment			
No.	Commenter	Comment	Response
		<ul> <li>[18-12] I am especially concerned that use of categorical exclusion (CX) for property transfers will result in environmental contaminants and health risks being ignored or overlooked.</li> <li>"Some real property may be transferred for the same or similar uses (e.g., office space or industrial development or previously developed land), it is possible in those cases to use a categorical exclusion (CX) to meet the requirements of NEPA found in respective appendix to 10 CFR 1021." (IBID.) What would be considered a similar use for a conversion facility, a uranium centrifuge enrichment facility, or the site where the former uranium processing buildings once stood after D&amp;D is completed? The use of categorical exclusion could result in one polluting industry replacing another and clean up an exercise in making conditions better just to make them worse again.</li> <li>I have had difficulty understanding the implications of DOE/PPPO actions in these impending property transfers and particularly, in this EA. I would appreciate DOE providing answers to my questions. Thank you for opportunity to comment.</li> </ul>	[18-12] See response to comment 18-03 above.
19	Elizabeth Lamerson	<ul> <li>February 15, 2017</li> <li>Environmental Assessment Comment</li> <li>U.S. Department of Energy</li> <li>To whom it may concern:</li> <li>As concerned citizens and fence line neighbors, we have reviewed the Draft Environmental Assessment document dated January 4, 2017. We attended the January 24, 2017 public meeting and expressed our disappointment that DOE did not have a public meeting since November 2014. During this greater than two year period when comments were due for the Record of Decision (ROD), why was there not a public meeting to present the ROD and a responsiveness summary? We again appreciate the opportunity to comment on the Draft Environmental Assessment. Our comments are as follows:</li> </ul>	

Comment			
Document	<b>C</b> 1		P
N0.	Commenter	Comment	Response
		<ul> <li>1.2 Background</li> <li>[19-01]</li> <li>The document states "Most of the facilities are planned to be removed under DOE's D&amp;D program" What is planned with the remaining facilities?</li> <li>o Will some of the structures remain standing?</li> </ul>	[19-01] In this case, a "facility" can mean a building, utility system, or infrastructure unit. As part of the decision in the Process Building Record of Decision (ROD), infrastructure may be left in a state that protects future users of PORTS or it may be removed. Text in Section 1.2 of the EA has been revised to clarify that infrastructure may be left in place.
		<ul> <li>[19-02]</li> <li>This section also discusses the waste material will be packaged for disposition. What packaging requirements will need to be met?         <ul> <li>Also, if this material is slated for final disposition in the onsite disposal facility, what are the waste acceptance criteria (WAC) that will have to be met?                 <ul> <li>How will the onsite WAC requirements compare to offsite disposal facilities? We would assume the standard would be similar</li> <li>Similar</li> <li>Output</li> <li>Output</li></ul></li></ul></li></ul>	[19-02] See General Response 2a.
		<ul> <li>[19-03]</li> <li>Why would the DOE want to create an additional 300+ acres of unusable land, which has been dedicated to the on-site waste disposal facility, which cannot be reused and could inhibit the reuse of the surrounding land?</li> </ul>	[19-03] See General Response 2a.

Comment			
Document No	Commenter	Comment	Response
<u>No.</u>	Commenter	<ul> <li>Comment</li> <li>[19-04]</li> <li>The on-site disposal facility reduces the long term value of residential property in the area. In all of the documents that we have read we have never seen this issue addressed. The original agreement of this property was that the land would be left as it were found, not with large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill in its wake. Although this document seems to discount that there are real people living in this area, what document will address the long term effects of the residents, such as health effects and property value loss in the area, the negative impacts to the tax base that affect school funding, health department funding, etc.?</li> </ul>	[19-04] See General Response 2a.
		<ul> <li>1.3 Scope of This Environmental Assessment</li> <li>[19-05]</li> <li>Has the study taken into account the potential interest in the area if there is a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill verses removing the waste from the reservation?</li> </ul>	[19-05] See General Response 2a.
		<ul> <li>[19-06]</li> <li>When will the impacts to the residential property be assessed?         <ul> <li>What document can be expected to address the concerns along with long term health impacts to this community?</li> </ul> </li> </ul>	[19-06] See General Response 2a. In addition, transferees will need to obtain required permits and comply with all applicable local, state, and federal regulations.
		<ul> <li>2.1 Proposed Action</li> <li>[19-07]</li> <li>In the event of property transfer, would SODI receive first preference to selling of leasing the property? <ul> <li>Would other potential interested parties be offered the same pricing as SODI?</li> <li>What does SODI do in the community and where does the money go that is not spent within the community?</li> </ul> </li> </ul>	[19-07] As stated in Section 1.1, this EA evaluates the transfer of real property to the Southern Ohio Diversification Initiative (SODI) and/or other parties so that they may sell, lease, or license the transferred real property to further economic development in the area. This is consistent with the purpose of 10 <i>CFR</i> 770 which was implemented specifically to address the negative impacts on communities caused by unemployment from related DOE downsizing, facility closeouts and workforce restructuring at defense nuclear facilities such as PORTS.

Comment			
Document	<b>G</b> (1)		D
N0.	Commenter	<ul> <li>[19-08]</li> <li>Will the 2 acres located in Piketon be considered for sale? Or will the land be given to the Village of Piketon?</li> </ul>	Response         [19-08] DOE only holds an easement for the approximately         2 acres in Piketon where the X-608 Raw Water Pump House         is located. The text in Section 2.1 regarding the 2 acres being         noncontiguous real property has been deleted.
		<ul> <li>The document refers to "Real property outside of the centrally developed areaeligible for transfer sooner." Please provide examples of this type of property.</li> </ul>	[19-09] The "real property outside the centrally developed area" refers to DOE property in Figure 3 of the EA that is not shaded light green.
		<ul> <li>Our comments that were submitted on March 10, 2015 on the Record of Decision document referenced in this document were never addressed. To date, we have not received any correspondence or answers to our questions. Please provide me with this information as originally requested or let me know when I can expect this information.</li> </ul>	<ul> <li>[19-10] See General Response 2a.</li> <li>In addition, responses to comments on the Waste Disposition Proposed Plan are included in a responsiveness summary in the Waste Disposition ROD. This document can be accessed online at the following address: <u>https://energy.gov/pppo/downloads/portsmouth-waste- disposition-record-decision</u>.</li> <li>Comment responses on this Draft EA will be provided in Appendix A of the Final EA.</li> </ul>
		<ul> <li>[19-11]</li> <li>What levels of soil contamination are anticipated? As a fence line neighbor, we would assume DOE would expect a clean closure with soil samples to reflect clean closure prior to transfer of any property. <ul> <li>If this is the case, please provide the clean closure levels that DOE would be expecting to achieve.</li> <li>If this is not the case, please provide the level acceptable to transfer property.</li> </ul> </li> </ul>	[19-11] See General Response 2b.
		<ul> <li>[19-12]</li> <li>When an environmental due diligence review is completed; will this be available for review by the public prior to each transfer?</li> </ul>	[19-12] Any deliverable related to the CERCLA 120(h) process will be available in the Information Repository.

Comment Document			
No.	Commenter	Comment	Response
		<ul> <li>[19-13]</li> <li>Seeing the DOE will evaluate each transfer request on a case by case basis, what stipulations or requirements will be used?</li> </ul>	[19-13] As noted in Section 2.1.2 of the EA, to transfer real property, DOE must comply with the requirements of CERCLA 120(h). In addition, DOE would screen the proposals against this EA to determine if the proposed use is within the bounds of the document and to determine if further NEPA review (by DOE or receiving entity) is warranted.
		<ul> <li>[19-14]</li> <li>After a 30 year period, what will happen to any un-transferred property?         <ul> <li>Will DOE retain the property ownership?</li> <li>Will DOE continue to do any needed maintenance or security on an ongoing basis?</li> </ul> </li> </ul>	[19-14] Any real property not transferred would remain under federal ownership and management.
		<ul> <li>[19-15]</li> <li>If new soil is added to the property to be used as fill, would this take place after clean closure values are obtained? If needed, where will the fill material come fromonsite or offsite?</li> </ul>	[19-15] Details regarding soil fill needed for future development is beyond the scope of this EA.
		<ul> <li>2.1.1 Land Use Scenarios and Assumptions <ol> <li>Was the information obtained by Ohio University assuming the site would obtain clean closure prior to any future development? <ol> <li>Does the information take into consideration there would be a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill on the property?</li> <li>Does it assess any health impacts to potential future employees on the site?</li> <li>Has there been any real potential interest or this all speculation?</li> </ol> </li> </ol></li></ul>	[19-16] The EA utilized the Ohio University studies to provide input for community reuse priorities. The PORTS <i>future</i> Outreach Report is available on the internet at <u>http://www.portsfuture.com/</u> .
		<ul><li>[19-17]</li><li>Will the property be clean but still have the contaminated ground water plumes at the time of transfer?</li></ul>	[19-17] There are provisions of CERCLA 120(h) that allow for the transfer of property prior to cleanup, but that is not DOE's plan for PORTS. Information on groundwater is addressed in Section 3.4.1.2 of the EA.

Comment			
No.	Commenter	Comment	Response
		<ul> <li>[19-18]</li> <li>The document discusses deed restrictions. What type of deed restrictions may be required?         <ul> <li>What are the impacts of any deed restrictions on potential future occupants?</li> </ul> </li> </ul>	[19-18] Deed restrictions may be employed to support real property transfer. There is currently a deed notification at the Pike County Auditor's Office restricting the use of groundwater beneath DOE property.
		<ul><li>[19-19]</li><li>What are the site-wide environmental restoration cleanup goals?</li></ul>	[19-19] See General Response 2b.
		<ul> <li>2.2 No Action Alternative</li> <li>[19-20]</li> <li>• Who decides whether this property can be transferred or no action and retained by DOE? <ul> <li>o Is this a decision of the Ohio EPA?</li> </ul> </li> </ul>	[19-20] See Section 2.1 of the EA. DOE will evaluate PORTS property transfers on a parcel-by-parcel basis and each transfer would have to be found to be protective of human health and the environment for its intended future use in order to be determined to be suitable for transfer. Ohio EPA and U.S. EPA are involved in the CERCLA 120(h) process that determines whether property is suitable for transfer and protective of human health and the environment for its intended future use prior to transfer.
		<ul> <li>2.3.2 Use of Property in a Manner Not Consistent with Expected Future Use</li> <li>[19-21]</li> <li>Please define the differences between residential use and industrial use cleanup standards. Health impacts for extended use of the site must be considered.</li> </ul>	[19-21] DOE will conduct remediation activities under legal agreements with regulators and cleanup levels will be included in those agreements.
		<ul> <li>3. Affected Environment and Environmental Consequences</li> <li>[19-22]</li> <li>The document references the 2014 Annual Site Environmental Report and the 2015 Annual Groundwater Report. I would like to request a copy of both of these reports. Please provide.</li> </ul>	[19-22] Annual Site Environmental Reports for PORTS may be accessed online at the following address: <u>https://energy.gov/pppo/downloads/portsmouth-annual-site- environmental-reports</u> . In addition, the Annual Groundwater Reports may be requested from the U.S. DOE Environmental Information Center located at the Ohio State Endeavor Center (Room 207) at 1862 Shyville Road.

Comment			
Document	<b>C</b>		D
N0.	Commenter	Comment	Kesponse
		<ul> <li>In reference to the ROD, many comments were made on this document. Please provide a copy of the questions and answers from this document. Also please provide a copy of the WAC.</li> </ul>	[19-23] See General Response 2a. In addition, responses to comments on the Waste Disposition Proposed Plan are included in a responsiveness summary in the Waste Disposition ROD. This document can be accessed online at the following address: <u>https://energy.gov/pppo/downloads/portsmouth-waste- disposition-record-decision.</u>
		<ul> <li>[19-24]</li> <li>With the decision to move forward with the onsite waste landfill, who was responsible for making this decision?</li> </ul>	[19-24] See General Response 2a.
		<ul> <li>[19-25]</li> <li>Who will regulate a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill? As you know there are many regulatory agencies with substantially different regulations in which regulates each type of waste.</li> </ul>	[19-25] See General Response 2a.
		<ul><li>[19-26]</li><li>Who will provide the oversight to all of the extremely different wastes going into the same landfill?</li></ul>	[19-26] See General Response 2a.
		<ul><li>[19-27]</li><li>How will the public be protected?</li></ul>	[19-27] See General Response 2a.
		<ul><li>[19-28]</li><li>Why does SODI have rail access to the DOE reservation?</li></ul>	[19-28] Details regarding SODI's rail access are beyond the scope of this EA.

Comment			
No.	Commenter	Comment	Response
		<ul> <li>3.2.1.2 Air Quality</li> <li>[19-29]</li> <li>What work practices are used to control asbestos emission to the surrounding community?</li> </ul>	[19-29] Asbestos emissions are controlled by a system of work practices in accordance with Ohio EPA regulations. Standard practices, specified in site-specific procedures, are used to minimize and/or contain asbestos fibers when there is the potential to disturb asbestos-containing materials. These practices may include:
			<ul> <li>Use of isolation barriers and mini-enclosures (i.e., glove bags) to ensure fibers are not released to the environment; and</li> <li>Using wet methods (such as applying water) to ensure fibers are not released to the environment.</li> </ul>
		<ul><li>[19-30]</li><li>Was there any asbestos waste shipped offsite in 2015 or 2016?</li></ul>	[19-30] The environmental data used for the EA comes from publicly available reports and uses the most recent version of the Annual Site Environmental Report (2014 report issued in March 2016) for information. Based on the 2015 Annual Site Environmental Report, 8.8 tons of asbestos-containing materials were shipped from PORTS in 2015.
		<ul> <li>Please provide Greenhouse Gas Emissions information for 2015.</li> </ul>	[19-31] The environmental data used for the EA comes from publicly available reports and uses the most recent version of the Annual Site Environmental Report (2014 report issued in March 2016) for information. Based on the 2015 Annual Site Environmental Report, emissions of 13,703 metric tons of carbon dioxide, 0.26 metric ton of methane, and 0.026 metric ton of nitrous oxide were reported. As in 2014, these emissions result from combustion of natural gas used at the X-690 Boilers.
		<ul> <li>[19-32]</li> <li>The document references air quality samples collected form 15 ambient air monitoring stations. Are these sample results available to the public?</li> </ul>	[19-32] Yes, the ambient air monitoring results are available in the Annual Site Environmental Reports. These are available online at the following address: https://energy.gov/pppo/downloads/portsmouth-annual-site- environmental-reports.

Comment			
Document No	Commenter	Comment	Response
110.	Commenter	<ul> <li>[19-33]</li> <li>Please provide a list of radionuclides that are evaluated or tested for in the air monitoring.</li> </ul>	[19-33] Details on the ambient air monitoring program are available in the Annual Site Environmental Reports. Radionuclides evaluated with the ambient air monitoring program include isotopic uranium (uranium-233/234, uranium-235/236, and uranium-238), technetium-99, and selected transuranic radionuclides (e.g., americium-241, neptunium-237, plutonium-238, and plutonium-239/240).
		<ul> <li>[19-34]</li> <li>With the detection of a number of radionuclides offsite, has there been any studies of potential cases of rare cancers in the community, especially in the area of Shyville Road or Shuster Road that could be tracked back to the site?</li> <li>o How will the large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill being in close proximity to that area affect the community?</li> </ul>	[19-34] See General Responses 2a and 2b.
		<ul> <li>3.2.2.1 Proposed Action <ul> <li>[19-35]</li> <li>There is a reference that commercial businesses and industries are anticipated to be recruited. Who would be doing the recruiting for these businesses?</li> </ul> </li> </ul>	[19-35] SODI and/or other parties may recruit commercial business or industry to further economic development in the area.
		<ul> <li>3.3.1.1 Geology <ul> <li>[19-36]</li> <li>The bedrock is discussed in this section. The question was posed in our comments on the ROD asking if the bedrock was cracked. We have never received the answer to this question. Is the bedrock cracked? Please provide information on the determination whether the bedrock is or is not cracked.</li> </ul></li></ul>	[19-36] See General Response 2a.
		<ul> <li>[19-37]</li> <li>How would an earthquake affect the site? If the bedrock were cracked would there be further damage? <ul> <li>How did the recent nearby earthquakes in December 2014 and February 2015 affect the bedrock?</li> </ul> </li> </ul>	[19-37] Effects related to earthquakes would be speculative and background information about geology and earthquakes may be found in Section 3.3.1.1 of the EA. Please visit the Ohio Department of Natural Resources website ( <u>http://geosurvey.ohiodnr.gov/earthquakes-ohioseis/ohioseis- home</u> ) for additional information on seismic events in Ohio.

Comment			
Document			
No.	Commenter	Comment	Response
		<ul> <li>3.3.1.2 Soils</li> <li>[19-38]</li> <li>With the soil samples being collected annually, was the soil tested for TCE? If so, what were the results?</li> </ul>	[19-38] As noted on page 30 of the EA, soil samples are collected annually from ambient air monitoring locations and analyzed for transuranic radionuclides; technetium-99; total uranium; and uranium isotopes. These samples are not evaluated for trichloroethene.
		<ul> <li>3.4.1.1 Surface Water</li> <li>[19-39]</li> <li>What remediation efforts will be taken with the stream that leaves plant site that is contaminated and posted with radioactive signs as the water leaves plant site?</li> </ul>	[19-39] See General Response 2b.
		<ul> <li>[19-40]</li> <li>Is the storm water going off site tested? If so, are the results available to the public?</li> </ul>	[19-40] Storm water and other effluents from the site are subject to National Pollutant Discharge Elimination System (NPDES) permits and monitoring. The monitoring results are summarized on pages 34 to 36 of the EA and additional information can be found in the Annual Site Environmental Reports.
		<ul> <li>[19-41]</li> <li>Where is LBC-SW03 located?</li> <li>Have there been any additional detection of radionuclides including transuranics since 2014? If so, what are the results?</li> <li>What will be done about the detection of Pu239/240 offsite?</li> </ul>	[19-41] LBC-SW03 is located on Little Beaver Creek just to the west of Shyville Road. The location can be found on Figure 6.13 of the 2014 Annual Site Environmental Report and the EA has been revised to include this figure. Based on the 2015 Annual Site Environmental Report, no transuranics were detected in the surface water samples collected during 2015. Regarding the detection of Pu-239/240, monitoring will continue.
		<ul> <li>[19-42]</li> <li>Where are LBC-SW0l, LBC-SW02, LBC-SW03, LBC-SW04, WDDSW0l and WDD-SW03 located? <ul> <li>What is being done to mitigate the Tc-99 from going offsite in the surface water?</li> <li>When were these samples collected?</li> <li>Have the results been trending upward? Please provide the results.</li> </ul> </li> </ul>	[19-42] The locations of these monitoring locations can be found on Figure 6.13 of the 2014 Annual Site Environmental Report and the EA has been revised to include this figure. Details of the monitoring program and results at these locations can be found in the Annual Site Environmental Reports. As noted in the EA, the detections of technetium-99 are at levels up to 18.3 pCi/L which is far less than the DOE derived concentration level for technetium-99 in water of 44,000 pCi/L.

Comment Document			
No.	Commenter	Comment	Response
		<ul> <li>[19-43]</li> <li>What do the results show of the breakdown of Uranium (U-233, U-234, U-235, U-238, and naturally occurring) detected?</li> </ul>	[19-43] While all results of individual isotopes for surface water were not reported in the Annual Site Environmental Report, it did state (as noted in Section 3.4.1.1 of the EA) that individual isotopes in surface water were 1 percent or less of the DOE derived concentration levels for the isotopes.
		<ul> <li>[19-44]</li> <li>With the offsite contamination that is mentioned in this document, how can we or other concerned citizens in the area be included in the environmental monitoring program?</li> </ul>	[19-44] PORTS has an "Envoy Program" that matches employee volunteers with community stakeholders such as families living next to DOE property, community groups, and local government organizations. The envoys communicate information about PORTS to the stakeholders and are available to answer questions about PORTS. Please contact your FBP Envoy for further information on the environmental monitoring program.
		<ul> <li>3.4.1.2 Groundwater</li> <li>[19-45]</li> <li>Will all five contaminated groundwater plumes be cleaned up prior to any land transfer?</li> <li>O What clean numbers will be used?</li> </ul>	[19-45] See General Response 2b.
		<ul> <li>[19-46]</li> <li>With the TCE contamination plumes going offsite, what steps are being taken to prevent the levels from going above the drinking water standards?         <ul> <li>What are the chances that this contamination will continue to increase offsite?</li> </ul> </li> </ul>	[19-46] See General Response 2b.
		<ul><li>[19-47]</li><li>What remediation steps are being taken other than pump and treat to control the groundwater contamination?</li></ul>	[19-47] See General Response 2b.
		<ul><li>Have all water wells in the two mile radius been tested?</li></ul>	[19-48] Information and details regarding the PORTS groundwater monitoring program can be in the Annual Site Environmental Reports.
		<ul><li>[19-49]</li><li>What constituents were tested on the drinking water?</li></ul>	[19-49] The Annual Site Environmental Report provides the analytical results for the residential drinking water wells.

Comment Document			
No.	Commenter	Comment	Response
		<ul> <li>[19-50]</li> <li>The document states that DOE has filed a deed notification to restrict the use of groundwater. Will this restriction ever be removed?</li> </ul>	[19-50] Currently, DOE has no plans to remove the deed notation restricting the use of groundwater.
		<ul><li>[19-51]</li><li>Has it been considered that the drinking water from the offsite wells are used to water livestock?</li></ul>	[19-51] See General Response 2b.
		<ul> <li>[19-52]</li> <li>With such a small amount of TCE removed from the groundwater per year, what is the estimated timeframe for cleaning the groundwater?</li> </ul>	[19-52] See General Response 2b.
		3.4.2.1 Proposed Action [19-53]	[19-53] See response to comment 19-17 above and General
		• Is there an assumption that the groundwater will not be cleaned up prior to land transfer? If this is the case, what future actions will be taken to ensure offsite groundwater is not affected long term?	Kesponse 20.
		<ul> <li>3.5.1.1 Terrestrial resources</li> <li>[19-54]</li> <li>What steps will be taken to protect the Indiana bat and the northern long-eared bat?</li> <li>o Is there a population of either species on the reservation now?</li> </ul>	[19-54] The Indiana bat has not been documented on the PORTS site but the northern long-eared bat is a federally-listed threatened species that has been documented on the PORTS site. U.S. Fish and Wildlife Service (USFWS) has issued a Biological Opinion with appropriate mitigation measures for the northern long-eared bat.
		<ul> <li>3.5.1.3 Rare, threatened, and endangered species</li> <li>[19-55]</li> <li>How did the removal of the 200+ acres of potential habitat affect the endangered bat population?</li> </ul>	[19-55] Regarding the removal of habitat related to construction of the OSWDF, see General Response 2a.
		<ul> <li>[19-56]</li> <li>Has there been a study conducted to see the effects of the runoff from the site and how it effects the threatened or protected fish population?</li> </ul>	[19-56] Runoff from the site is monitored according to the site's NPDES permits. PORTS has a biological monitoring program, which includes the monitoring of fish, that is described in the Annual Site Environmental Reports.

Comment			
No.	Commenter	Comment	Response
		<ul> <li>3.5.1.5 Environmentally sensitive areas</li> <li>[19-57]</li> <li>Will the environmentally sensitive areas be transferred or will DOE retain possession of these areas?</li> </ul>	[19-57] Sensitive resources may be transferred and they would be protected or mitigated as necessary. The transferee would comply with all applicable local, state, and federal regulations.
		<ul> <li>3.5.2.1 Proposed Action <ul> <li>[19-58]</li> <li>Was the recommendation of the USFWS taken into consideration when 200+ acres of trees were removed for the large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill?</li> </ul> </li> </ul>	[19-58] See General Response 2a.
		<ul> <li>3.6.1 Affected Environment <ul> <li>[19-59]</li> <li>The document states there were four prehistorical archaeological sites found; now there are three. It also states DOE developed mitigation measures to one of these areas. What mitigation measures have been taken or will be taken?</li> <li>Why could the destroyed prehistoric archaeological site not be avoided?</li> </ul> </li> </ul>	[19-59] See General Response 2a. As stated in Section 3.6.2.1 of the EA, DOE would include restrictions in the deed to avoid adverse impacts to cultural resources and indicate that, should a transferee propose adverse impacts, the process in Section 106 of National Historic Preservation Act of 1966 would be followed.
		<ul> <li>3.7.2.1 Proposed Action</li> <li>This information is nothing but made up numbers used to make the document more positive, when in fact there is no basis for the information. What is the analysis from other closed DOE facilities? How much of those properties have been re-industrialized?</li> </ul>	[19-60] The number of jobs created by the Proposed Action discussed in Section 3.7.2.1 is an assumption used for analysis in the EA. This is similar to assumptions used at other DOE facilities that have evaluated property transfer. As an example of reindustrialization at other DOE facilities, a recent news article (dated December 2016) in Oak Ridge, Tennessee, stated that reindustrialization of the former K-25 gaseous diffusion plant has led to 20 companies moving to the site, accounting for more than 200 private-sector jobs. Another company has licensed carbon-fiber technology and is expected to create more than 240 new jobs over the next 5 years on property transferred from DOE.
		<ul> <li>3.9.1 Affected Environment</li> <li>[19-61]</li> <li>As mentioned above, please provide a copy of the WAC for the OSWDF.</li> </ul>	[19-61] See General Response 2a. The WAC for the waste disposal facility is provided in Table 5 of the Waste Disposition ROD.

Comment Document			
No.	Commenter	Comment	Response
		<ul> <li>3.10.1 Affected Environment</li> <li>[19-62]</li> <li>The 2014 annual site environmental report states the current levels of certain radioisotopes are "low." What standard is "low" compared?</li> </ul>	[19-62] As stated in Section 3.10.1 of the EA (last full paragraph on page 68), the maximum dose a member of the public could have received from radiation released by PORTS in 2014 or detected by environmental monitoring programs is 0.91 mrem/year, which is much less than the 100-mrem/year limit set by DOE for the dose to a member of the public from radionuclides from all potential pathways.
		<ul> <li>[19-63]</li> <li>This report also states the data collected is consistent with the data collected in previous years. Please supply the data in order to define consistent.</li> <li>Although the effect is stated to be minimal, what are the effects or potential effects?</li> </ul>	[19-63] Previous Annual Site Environmental Reports (years 2010 through 2014) are available at the following address: <u>https://energy.gov/pppo/downloads/portsmouth- annual-site-environmental-reports</u> .
		<ul> <li>[19-64]</li> <li>What are the potential health effects of Trihalomethanes and VOCs?</li> <li>At what levels are these detected?</li> </ul>	[19-64] As noted in the Annual Site Environmental Report (March 2016), trihalomethanes in surface water and groundwater were well below Ohio EPA standards.
		<ul> <li>[19-65]</li> <li>What actions are being taken to reduce the levels of PCBs?</li> <li>• What are the health effects to the public?</li> </ul>	[19-65] As stated in Section 1.3 of the EA, remedial actions (e.g., actions taken to reduce levels of PCBs) and corrective actions activities are independent of the analysis performed in this EA. DOE will continue to conduct remediation activities under legal agreements with regulators regardless of any proposed future property transfers.
		<ul> <li>4.3 Cumulative Impacts by Resource Area</li> <li>[19-66]</li> <li>What are the chances that the disposal cell leachate will go to the groundwater? <ul> <li>What is expected to be in the leachate?</li> <li>How often will the leachate be tested?</li> <li>How will it be known if the leachate enters the groundwater?</li> </ul> </li> </ul>	[19-66] See General Response 2a.

Comment			
Document No.	Commenter	Comment	Response
110.	Commenter	We are still extremely concerned at the potential of a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill will be in our neighborhood. We have young children and are concerned for their health and future. We appreciate the opportunity to comment on the future of our community. Please respond with the answers to our questions to the following email address: liz_bee5@yahoo.com. Sincerely, Elizabeth and Josh Lamerson Concerned Citizens and Fence line Neighbors	
20	Daniel Minter	Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio I am in support of the Proposed Action as outlined in section 1.1, and the defined proposed action within EA-1856: Draft Environmental Assessment (Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio). I further recommend that Southern Ohio Diversification Initiative (SODI) who is the Federally Designated Community Reuse Organization (CRO) be the utilized for all such pending and future conveyances of property assets associated with the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio. SODI has been the central agent within the region of influence and the surrounding 4 county area for the past 20 years, regarding numerous economic development programs and projects. SODI is engaged in existing discussions and has partnering arrangements as well as current grant funding to help facilitate existing end use objectives, as developed by the region of influence interests. SODI's board of directors is comprised of elected officials and community leaders within the region of influence and has ongoing working relationships with Ohio University who conducted the Future End Use survey and associated end use recommendations.	Comment noted.

Comment			
No.	Commenter	Comment	Response
No.	Commenter	CommentSimply stated SODI is the only organization positioned to assure the transferring of property back to the region of influence is executed fulfilling said interests, and postured to assure such interests are represented, while balancing the future land use objectives regarding the Portsmouth Gaseous Diffusion Plant and associated end use objectives. SODI was developed for this exact purpose, noting this EA-1856: Draft Environmental Assessment is largely based on current and past land transfer requests and the reason that this proposed action was developed.In closing I support the proposed action to proceed with land transfer(s) at the Portsmouth site, as this will provide the opportunity to return assets back to the local community, fostering future economic development opportunities, while reducing the federal governments footprint and continuing long-term surveillance and maintenance mortgage costs.Submitted 2/10/2017Daniel J. Minter Lifetime resident of Pike County and former fence line resident, located at the current site of the (OSU Endeavor Center) SODI Vice Chairman Board of Directors (20 years)	Response
		Local Union Workforce Representative (15 years)	
21	Rick Warner	To Whom It May Concern: I support the transfer of property to the SODI for their use in creating economic development opportunities centered on the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century. The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation.	Comment noted.

Comment			
Document	C (		D. D
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an	
		avenue for the taxpayers to realize a return on their investment in	
		to re-industrialize the site addresses many of the issues important	
		to re-industrialize the site addresses many of the issues important	
		to our region.	
		- Wealth creation through job creation	
		- Growth in economic development opportunities within	
		the region	
		- Support to Educational attainment	
		- Opportunities for small businesses	
		- Development of leaders to serve within our local communities	
		The transfer of land to the SODI aligns with their goals of	
		attracting private industry and developing Private-Public	
		Partnerships to create industrial opportunities on the reservation.	
		These opportunities can align with the interests of the regional	
		community as identified in the Public Outreach work performed	
		by the OU voinovich School.	
		The safe and environmentally sound transfer of property back	
		to the communities that supported the Cold War efforts provides	
		the opportunities for the Community Reuse Organization to	
		re-industrialize the site and avoid the negative impacts resulting	
		from the completed DOE missions.	
		Respectfully,	
		Rick Warner	
		Rick Warner   Manager, Planning & Integration	
		Innovative Solutions Unlimited, LLC	
Comment			
----------------------------------	---	--	----------------
Document	6		
No.	Commenter	Comment	Response
Comment Document No. 22	Commenter Portsmouth Area Chamber of Commerce	Comment         February 15, 2017         Environmental Assessment Comments         U.S. Department of Energy         Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"         The Portsmouth Area Chamber of Commerce supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.         The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	Comment noted.
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	

Comment			
Document	Commenter	Comment	Response
110.	Commenter	The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio Sincerely, Lisa Carver Executive Director	
23	Pike County Commis- sioners	Members of the Board of Commissioners Fred Foster, Chairman Blaine Beekman, Member Tony Montgomery, Member April Elliott, Clerk Angela Burggraf, Secretary Susan Cange Acting Assistant Secretary Office of Environmental Management Dear Madam Secretary, The Pike County Commissioners are pleased to comment on our evaluation of the DRAFT ENVIRONMENTAL ASSESSMENT CONVEYANCE OF REAL PROPERTY OF THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. The transfer of land from the Department of Energy to the Southern Ohio Diversification represents much more to the people of Pike County than the number of acres involved.	Comment noted.

Comment			
Document No	Commenter	Comment	Response
No.	Commenter	CommentThe 2001 shutdown of the Gaseous Diffusion Plant createdeconomic turmoil in Pike County. Jobs left, but the results of ahalf century of nuclear enrichment remained. The County bandedtogether to make the best of the situation. A serious dialogueopened with the Department of Energy.From those initial dialogues a series of critical facts evolved.First, we visited a number of other DOE sites and observedtheir cleanup issues. By comparison, we learned that thecontamination at the Portsmouth site was not so severe thatit could not be corrected. Second, there would probably bea number of industries that would be interested in the site onceD and D was completed. That would obviously take time. Inthe meantime, a third factor would hopefully come into play.As certain areas are declared contamination-free, they can beturned over to the Southern Ohio Diversification Initiative formarketing as industrial sites.Reindustrialization has become the key word in our negotiationswith DOE. Pike County officials worked with a number ofeconomic development funds has provided moneyfor projects in the four-county area. As a result of the extensivecommunity participation in the PORTS FUTURE VISION,plana declared contamination of the JointEconomic development funds has provided money	Response

Comment			
No.	Commenter	Comment	Response
<u>24</u>	Commenter Scioto County Health Coalition	CommentEnvironmental Assessment CommentsU.S. Department of EnergySubject: Public Comment on DOE/EA-1856, "Conveyance ofReal Property at the Portsmouth Gaseous Diffusion Plant inPike County, Ohio"The Scioto County Health Coalition supports the transfer ofproperty to the Southern Ohio Diversification Initiative (SODI)for their use in creating economic development opportunities inalignment with their strategic plans for the re-industrializationof the site. The operations at the DOE reservation have been akey contributor to the economic and socio-economic stabilityof the region for well over half a century, and the regulatedmethodology utilized to provide for the transfer of the land fromthe DOE to the SODI provides an opportunity for continued safeand environmentally responsible use of the assets that exist onthe DOE Reservation. We are supportive of activities that ensurethe safety and health of the plant employees and neighbors areprotected.The transfer of the land from the DOE to the SODI provides anavenue for the taxpayers to realize a return on their investment inthe development of this asset. Providing the SODI the opportunityto our region:• Wealth creation through job creation• Growth in economic development opportunities withinthe region• Driving force for pursuit of advanced educational andtechnical skills• Opportunities for small businesses• Development of leaders to serve within our local communities	Comment noted.

Comment			
No.	Commenter	Comment	Response
		The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
		Sincerely, Regina Tipton, MS Executive Director	
25	Robert E. Cole, Jr. Business Manager, Local 577	The Plumber and Pipefitters Local #577, Portsmouth, Ohio, support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected. The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	Comment noted.

Comment			
No.	Commenter	Comment	Response
N0.	Commenter	<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public</li> <li>Partnerships to create industrial opportunities on the reservation.</li> <li>These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> <li>Sincerely, Robert E. Cole, Jr.</li> <li>Business Manager, Local 577</li> </ul>	Kesponse
26	Bryan Davis Mike Crabtree Cathy Coleman (Scioto County Commis- sioners)	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" We, the Board of Commissioners of Scioto County, Ohio, support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the aconomy of</li> </ul>	
		southern Ohio.	
27	Jerry Hall (Jackson County Commissione rs Office)	Subject: Public Comment on DOE/EA- 1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" As President of the Jackson County Board of Commissioners I wish to express my support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for there-industrialization of the site.	Comment noted.

Comment			
Document No	Commenter	Comment	Response
N0.	Commenter	<ul> <li>Comment</li> <li>The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.</li> <li>The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to rein-dustrialize the site addresses many of the issues important to our region:</li> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation.</li> <li>These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.</li> </ul>	

Comment			
Document	C.	Comment.	D
NO. 28	Randy R	Comment Subject: Public Comment on DOE/EA_ 1856. "Conveyance of	Kesponse Comment noted
20	Heath	Real Property at the Portsmouth Gaseous Diffusion Plant in	Comment noted.
	mouth	Pike County. Ohio"	
	(Mayor, City	57	
	of Jackson)	As Mayor of the City of Jackson, I wish to express my support	
		the transfer of property to the Southern Ohio Diversification	
		Initiative (SODI) for their use in creating economic development	
		opportunities in alignment with their strategic plans for the	
		reservation have been a key contributor to the economic and	
		socioeconomic stability of the region for well over half a century,	
		and the regulated methodology utilized to provide for the transfer	
		of the land from the DOE to the SODI provides an opportunity	
		for continued safe and environmentally responsible use of the	
		assets that exist on the DOE Reservation. We are supportive of	
		activities that ensure the safety and health of the plant employees and neighbors are protected	
		and heighbors are protected.	
		The transfer of the land from the DOE to the SODI provides an	
		avenue for the taxpayers to realize a return on their investment in	
		the development of this asset. Providing the SODI the opportunity	
		to rein-dustrialize the site addresses many of the issues important	
		to our region.	
		- Wealth creation through job creation	
		- Growth in economic development opportunities within	
		the region	
		- Driving force for pursuit of advanced educational and	
		technical skills	
		- Opportunities for small businesses	
		- Development of readers to serve within our local communities	
		The transfer of land to the SODI aligns with their goals of	
		attracting private industry and developing Private Public	
		Partnerships to create industrial opportunities on the reservation.	

Comment			
No.	Commenter	Comment	Response
		These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.	
29	Jennifer Jacobs (Jackson County Economic Development Partnership)	<ul> <li>Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"</li> <li>As Executive Director of the Jackson County Economic Development Partnership I wish to express my support for the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.</li> <li>The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:</li> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	Comment noted.

Comment			
Document	Commenter	Comment	Response
N0.	Commenter	The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio	Kesponse
30	Randy Heath (Executive Director – Jackson Area Chamber of Commerce)	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" As Executive Director of the Jackson Area Chamber of Commerce I wish to express my support for the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected. The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	Comment noted.

Comment			
No.	Commenter	Comment	Response
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio	
31	Matthew Settas Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Matthew H. Settas (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> </ul>	
32	William Kelley Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>William Kelley (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> </ul>	
33	Kara Arms Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Kara Arms (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
34	Tim Glockner Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Tim Glockner (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
35	Andy Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Rea Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Andy Glockner (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> </ul>	
36	Neal Ferrell Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Neal Ferrell (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected	Comment noted.

Comment			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public</li> <li>Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> </ul>	
37	Brenda Thompson Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Brenda Thompson (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
38	Gregory Gulker Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Gregory Gulker (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employage and neighborg are prototed.	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skill</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
39	Todd Ramey Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Todd Ramey (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.</li> <li>We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.</li> </ul>	
40	Tony Krick Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Tony Krick (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employaes and neighbors are protected	Comment noted.

Comment Document			
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul> The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
41	Ralph Cartee Glockner Superstore, Portsmouth	Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio" I, <u>Ralph Cartee (signature)</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health	Comment noted.

Comment			
Document	~	~	_
No.	Commenter	Comment	Response
		The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:	
		<ul> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within the region</li> <li>Driving force for pursuit of advanced educational and technical skills</li> </ul>	
		<ul><li> Opportunities for small businesses</li><li> Development of leaders to serve within our local communities</li></ul>	
		The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.	
42	Franklin J.C. Wallbrown	Has there been an independent geological and/or environmental assessment of the Portsmouth Gaseous Diffusion plant for these purposes or the on-site waste disposal cell?	See General Response 2a.

Comment Document			
No.	Commenter	Comment	Response
<u>No.</u> 43	Commenter Kerry Tague, Kings Daughters Medical Center	Comment           King's Daughters Medical Center Ohio supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.           The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:           • Wealth creation through job creation           • Growth in economic development opportunities within the region           • Driving force for pursuit of advanced educational and technical skills           • Opportunities for small businesses           • Development of leaders to serve within our local communities           The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.	Comment noted.
		KDMC Ohio Business Development & Physician Relations	

Comment			
Document	Commontor	Commont	Desponso
<u> </u>	Iosh	Comment The Scioto County Career Technical Center supports the transfer	Comment noted
	Shoemaker	of property to the Southern Ohio Diversification Initiative (SODI)	Comment noted.
	Central Office	for their use in creating economic development opportunities in	
	Administrator	alignment with their strategic plans for the re-industrialization of	
	- Scioto	the site. The operations at the DOE reservation have been a key	
	County CTC	contributor to the economic and socioeconomic stability of the	
		region for well over half a century, and the regulated methodology	
		utilized to provide for the transfer of the land from the DOE	
		to the SODI provides an opportunity for continued safe and	
		environmentally responsible use of the assets that exist on the	
		the safety and health of the plant employees and neighbors are	
		protected	
		L	
		The transfer of the land from the DOE to the SODI provides an	
		avenue for the taxpayers to realize a return on their investment in	
		the development of this asset. Providing the SODI the opportunity	
		to reindustrialize the site addresses many of the issues important	
		to our region:	
		- Wealth creation through job creation	
		- Growth in economic development opportunities within	
		the region	
		- Driving force for pursuit of advanced educational and	
		technical skills	
		<ul> <li>Opportunities for small businesses</li> </ul>	
		- Development of leaders to serve within our local communities	
		The transfer of land to the SODI aligns with their goals of	
		attracting private industry and developing Private Public	
		Partnerships to create industrial opportunities on the reservation	
		These opportunities can align with the interests of the regional	
		community as identified in the Public Outreach work performed	
		by the OU Voinovich School.	
		We strongly urge you to approve this transfer of property as you	
		consider the positive impacts this will have on the economy of southern Objo	
		Soutient Olio.	

Document         Commenter         Comment         Response           45         Susan Shultz, Executive         Subject: Public Comment on DOE/EA-1856, "Conveyance of Executive         Comment noted.           45         Director, ADAMHS         Pike County, Ohio"         Comment on DOE/EA-1856, "Conveyance of Pike County, Ohio"         Comment noted.           45         Board         The Adams, Lawrence and Scioto Counties Alcohol, Drug Addiction and Mantel Haelth Somison Board automat the transfer         Comment noted.	Comment
45       Susan Shultz, Executive       Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Director, ADAMHS Board       Comment noted.         45       The Adams, Lawrence and Scioto Counties Alcohol, Drug Addiction and Martel Hack's Survives Board support the transfer       Comment noted.	No. (
<ul> <li>Adduction and wethin retain services board support the transfer</li> <li>of property to the Southern Ohio Diversification initiative (SOBI)</li> <li>for their use in creating economic development opportunities in</li> <li>alignment with their strategic plans for the re-industrialization of</li> <li>the site. The operations at the DOE reservation have been a key</li> <li>contributor to the economic and socioeconomic stability of the</li> <li>region for well over half a century, and the regulated methodology</li> <li>utilized to provide for the transfer of the land from the DOE</li> <li>to the SODI provides an opportunity for continued safe and</li> <li>environmentally responsible use of the assets that exist on the</li> <li>DOE Reservation. We are supportive of activities that ensure</li> <li>the safety and health of the plant employees and neighbors are</li> <li>protected.</li> <li>The transfer of the land from the DOE to the SODI provides an</li> <li>avenue for the taxpayers to realize a return on their investment in</li> <li>the development of this asset. Providing the SODI the opportunity</li> <li>to reindustrialize the site addresses many of the issues important</li> <li>to our region:</li> <li>Wealth creation through job creation</li> <li>Growth in economic development opportunities within</li> <li>the creation through job creation</li> <li>Driving force for pursuit of advanced educational and</li> <li>technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> <li>The transfer of land to the SODI aligns with their goals of</li> <li>attracting private industry and developing Private Public</li> <li>Partnerships to create industrial opportunities on the reservation.</li> <li>These opportunities can align with the interests of the regional</li> <li>community as identified in the Public Outreach work perform</li></ul>	No. ( 45 S

Comment			
Document	Commontor	Commont	Dosponso
110.	Commenter	We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio Sincerely, Susan Shultz, Executive Director	Kesponse
46	Aaron Adams, Medical Director, Kings Daughter's Medical Center	<ul> <li>The Scioto County Health Coalition supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.</li> <li>The transfer of the land from the DOE to SODI provides an avenue for the taxpayers to realize a return on their investment in the development of the asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region.</li> <li>Wealth creation through job creation</li> <li>Driving force for the pursuit of advanced educational and technical skills</li> <li>Opportunities for small businesses</li> <li>Development of leaders to serve within our local communities</li> </ul>	Comment noted.

Comment			
Document	Commontor	Commont	Demonso
<u>No.</u>	Commenter	CommentThe transfer of land to the SODI aligns with their goals ofattracting private industry and developing Private PublicPartnerships to create industrial opportunities on the reservation.These opportunities can align with the interests of the regionalcommunity as identified in the Public Outreach work performedby the OU Voinovich School.We strongly urge you to approve this transfer of property as youconsider the positive impacts this will have on the economy ofsouthern Ohio.Aaron Adams, D.O., F.A.A.F.P.Kings Daughter's Medical Center-OhioMedical DirectorScioto County Health Coalition, Chairman	Kesponse
47	Diana Cahall	Re: Draft Environmental Assessment: Conveyance of Real Property At The Portsmouth Gaseous Diffusion Plant in Pike County, Ohio (DOE/EA-1856) Public Comment I have spent most of the last five weeks attempting to determine DOE intentions for the Portsmouth Site. It seems that the best explanation is the most obvious one. Beginning with this 80 acre transfer DOE plans to reindustrialize the 1,200 acre portion inside the Perimeter Road. The 80 acres most probably is destined for reuse/recycling of the 20,000 cylinders of depleted uranium currently in some stage of conversion to uranium oxide. DOE has explored the use of uranium for canisters and/or casks for high level radioactive waste storage and disposal since the mid 1990's. [47-01] Do the plans for the 80 acres contain a research laboratory and/or visitor center?	[47-01] As stated in Section 1.3 of the EA, DOE would obtain information from SODI or other interested parties who are requesting real property and DOE would screen a potential transferee's proposed future uses against the uses evaluated in the EA. As noted on page 5 of the EA, the EA was not intended to identify and address specific future uses for individual parcels of real property.

Comment			
Document			
No.	Commenter	Comment	Response
		[47-02] Has DOE addressed the health impacts to workers and the	[47-02] As stated in Section 1.3 of the EA, DOE has prepared
		public from use of depleted uranium which is contaminated with	this EA to assess the consequences of the potential transfer of
		transuranics?	PORTS real property. The use of depleted uranium and any
			health impacts to workers are beyond the scope of this EA.
		What happens to the "heels" at the bottom of the cylinders when	The DUF6 conversion was evaluated in an environmental
		the DUF6 is converted to uranium oxide? The conversion process	impact statement (EIS-0360) which is available at the
		leaves the "heels" in the bottom to the cylinders which contain a	following website:
		higher concentration of transuranics.	http://web.evs.anl.gov/uranium/documents/portdeis/index.cfm
		[47-03] What properties are currently proposed for future	[47-03] The EA evaluates the transfer of up to 3,677 acres
		transfer to SODI which DOE PPPO has designated as	which was a bounding assumption, representing the
		Parcels 2, 3, and 4 and what use(s) does DOE intend for	maximum amount of DOE real property that could be
		each of them? (PROTOCOL FOR THE ENVIRONMENTAL	transferred. Regarding types of uses DOE envisions for
		REGULATORY PROCESSES FOR THE TRANSFER OF	the transferred property, the EA (page 5) uses the bounding
		REAL PROPERTY AT THE U.S. DEPARTMENT OF	assumption that various types of industrial, commercial,
		ENERGY PORTSMOUTH AND PADUCAH SITES,	mixed-use, and business park uses would occur on the
		Volume 1: Uncontaminated Property, March 2016.)	transferred real property.
		[47.04] Deep DOE second transfer to a submet of the	[47.04] This summer is the second state second state of the Performance
		[4/-04] Does DOE or another party have plans to recycle	[4/-04] This comment is beyond the scope of the Federal
		contaminated steel at the Portsmouth Site for use in the	action being evaluated in this EA.
		disposed conjutors?	
		disposar canisters?	
			1

Comment Document			
No.	Commenter	Comment	Response
		<ul> <li>[47-05] Are canisters or casks using DUCRETE, DUAGG, and/or Cermet presently approved as transport containers?</li> <li>DOE intends to approve this 80 acre transfer based upon "the best interest of the government." (IBID) It seems rather obvious that reuse of DOE's considerable supply of depleted uranium at Portsmouth and Paducah, 800,000 metric tons, which DOE has been paying to convert, transport, and dispose as waste at Nevada National Security Site would save the government (DOE) considerable expense. Twenty thousand cylinders are currently on site at Portsmouth in process of being converted to uranium oxide. DU used as DUCRETE and DUAGG casks for shielding of spent nuclear fuel and high level radioactive waste storage has the potential to use DOE's entire inventory. Cost savings in production makes these casks economically attractive as an alternative to steel casks. "Preliminary design cost estimates indicate that DUCRETE and steel transportation and storage cask(s) could be sold for about \$500,000 compared to steel casks selling for over \$1 Million" (NUCLEAR NEWS, December 2000.) DUCRETE casks require steel components to perform adequately during transport, but significant transport problems could be solved by limiting transport from inside Perimeter Road to the 2,500 acres outside Perimeter Road.</li> <li>In January 2013 Idaho National Laboratory hosted a conference on Spent Nuclear Fuel Management that concluded with a draft report which recommended a used fuel demonstration project be conducted and that a U.S. Regional Interim Storage Facility Pilot be established. Shortly after the President's Blue Ribbon Commission recommended that DOE give "consideration of transport and storage of government owned used nuclear fuel and high level waste at a proposed interim storage facility."</li> </ul>	[47-05] As stated in Section 1.3 of the EA, DOE has prepared this EA to assess the consequences of the potential transfer of PORTS real property. Shipping canisters or casks are beyond the scope of this EA.

Comment			
Document			
No.	Commenter	Comment	Response
		<ul> <li>[47-06] Is some sort of pilot and/or interim storage facility for DOE high level waste and spent nuclear fuel envisioned for Portsmouth 2,500 acres outside the Perimeter Road? As of April 10, 2017 DOE "Acquisition and Forecast Opportunities" website listed 42 separate sites and offices that expect to solicit and/or award contracts in the current fiscal year and beyond. This list did not include the Hanford and West Valley Sites which both have high level waste requiring management, as does Idaho National Laboratory Site.</li> <li>Atomic Energy Act of 1954 and 10 CFR Part 770 provide DOE authority to transfer property at less than full market value to help local communities recover from the economic effects of government downsizing. The creation of a high level radioactive waste "solution" hardly seems consistent with "recovering" from the effects of economic downsizing. DOE needs to implement the mandates of National Environmental Policy Act (NEPA) in its treatment of the local Piketon Community and the surrounding region of influence which actually includes most of Southwest Ohio. DOE's environmental assessment is not only vague and uninformative, it is deceptive about the future that awaits a community that has served the national interest for over sixty years. As DOE's consent based siting criteria in 2016 and in 2017 indicate a community cannot consent to what it does not know. Transparency is essential to community based consent, but apparently not in DOE's treatment of Piketon. I have spent much of the last weeks trying to determine the overall plan behind this environmental assessment. Participation by an informed public is crucial to informed consent and to democratic process.</li> </ul>	[47-06] As stated in Section 1.1 of the EA, DOE is proposing the transfer of real property at PORTS to shrink the federal site footprint to provide for economic redevelopment and to reduce the costs of maintaining the site.

Comment			
Document			
No.	Commenter	Comment	Response
		DOE needs to develop a plan for Portsmouth future that the community has likelihood of supporting, rather than visiting the "gaps" in the nuclear fuel cycle upon one region. The front end gap in the nuclear fuel cycle is created by the uranium enrichment process which produces a ratio of 8,000 metric tons of depleted uranium for every 1,000 metric tons of enriched uranium. The back end of the gap in the nuclear fuel cycle is created by no viable solution for safely isolated highly radioactive waste for the thousands and hundreds of thousands of years it poses a threat to human health and the natural environment. DOE is attempting to close both the front end gap inside the Perimeter Road and the back end gap outside the Perimeter Road by creating a sacrifice zone at the Portsmouth Site. I would like to thank the Village Council and Mayor of the Village of Piketon for requesting an extension of the comment period and to DOE for granting this extension. Respectfully submitted, Diana Cahall	

APPENDIX B: CONSULTATION AND CORRESPONDENCE

This page is intentionally left blank.

The U.S. Department of Energy (DOE) has recently worked closely with Native American Tribes, the Ohio Historic Preservation Office, and the Advisory Council on Historic Preservation with an interest in historic preservation to identify appropriate measures to comprehensively address the decontamination and decommissioning and waste disposition activities at the Portsmouth Gaseous Diffusion Plant (PORTS). Much of the coordination and information obtained from those two projects was used to support this Environmental Assessment (EA). DOE has also had recent and on-going consultation with the U.S. Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources to identify the potential existence of federal and state endangered, threatened, and rare species, as well as candidate species, in the vicinity of PORTS. Agency websites were used in the development of this EA to update information related to federal and state listed endangered, threatened, and rare species. As part of the ongoing consultation, DOE received an email (attached to this appendix) from USFWS alerting DOE about the running buffalo clover (*Trifolium stoloniferum*) being listed as an endangered floral species in Pike County.

In addition, DOE provided notification and/or a copy of the draft EA to the agencies and groups listed in Table B.1.

Agency or Group
Shawnee Tribe of Oklahoma
Eastern Shawnee Tribe of Oklahoma
Seneca-Cayuga Tribe of Oklahoma
Shawnee Nation, United Remnant Band
Shawnee Tribe
City of Chillicothe
City of Jackson
City of Portsmouth
Village of Beaver
Village of Piketon
Village of Waverly
Jackson County Commissioner
Pike County Commissioner
Ross County Commissioner
Scioto County Commissioner
Advisory Council on Historic Preservation
Ohio Historic Preservation Office
Ohio Department of Health
Ohio Development Services Agency
Ohio Division of Forestry
Ohio Environmental Protection Agency
Chillicothe/Ross Chamber of Commerce
Jackson Area Chamber of Commerce
Pike County Chamber of Commerce
Portsmouth Area Chamber of Commerce
Ross County Chamber of Commerce

# Table B.1. Partial Listing of Agencies or Groups Receiving Notification of the Draft EA

This appendix contains copies of:

- An email from the USFWS regarding potential existence of endangered floral species in Pike County (page B-3)
- The comment submittals DOE received during the public comment period (pages B-3 through B-99, in the order of presentation provided in Table A-1).
From: Boyer, Angela [mailto:angela\_boyer@fws.gov] Sent: Friday, June 03, 2016 12:17 PM

Subject: Updates to Ohio USFWS Species Lists

Dear Interested Parties,

Attached you will find the June 2016 versions of the Ohio Species Lists for federally listed species and select species of concern. These lists replace the April 2016 versions. The following update was made to the lists:

- Running buffalo clover was added to Athens and Pike Counties due to the recent discovery of a new population in each county.

Sincerely, Angela Boyer Endangered Species Biologist USFWS, Ohio Field Office From: Sent: To: Subject: Lee Blackburn <leeblackburn@live.com> Monday, January 09, 2017 12:33 PM EAComments RE: EA-1856: CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO

Sirs:

This is a comment on the above referenced environmental assessment.

On page 9, the following statement appears:

Under the Proposed Action, DOE could transfer up to 3,677 acres of real property located within the EA study area (designated by the DOE site boundary on Figure 3).1 Footnoted as follows:

1 DOE acknowledges that significant portions of land within the 1,200-acre centrally developed area would not be transferred until after certain D&D and remedial actions are completed. Also, some property used for waste disposal locations will not be transferred. However, for the purposes of this analysis, the scope of this EA addresses the potential transfer of up to 3,677 acres of DOE-owned property.

This is an extremely egregious statement to make as this would indicate the potential eventual transfer of property used for waste disposal without specifically identifying the property identified or its highly volatile and carcinogenic contents as well as the eventual transfer of property contaminated with trichloroethene (TCE), which the US EPA classifies as "carcinogenic to humans by all routes of exposure."

Indeed, the OSWDF alone will cover some 300 acres, so making such a cavalier and broad-stroke statement clearly indicates the need for an EIS.

Lee Blackburn

Pataskala, OH 43062

Sent from Mail for Windows 10

B-4

Comment Document #2	2
---------------------	---

From:	Wagner, Jeff
Subject:	Land Transfer Question from Seal Township
Date:	Tuesday, January 10, 2017 7:28:00 AM

Gents,

I dropped copies of the EA off with the Seal Township Trustees last evening. In addition to dropping off extra copies they'd also received a copy in the mail, along with a postcard for the upcoming Project Update on Jan. 24. I encouraged them to weigh in during the public comment process. Jason Foster had a couple of questions including one that I hadn't heard before. Once the transferred land is occupied how will emergency response be handled? Will neighboring townships be first responders or the site?

Jeff

**Jeff Wagner** Public Affairs | Senior Manager

Fluor-BWXT Portsmouth LLC Contractor to the U. S. DOE under Contract No. DE-AC30-10CC40017



Comment Document #3

## Henneberger, Amanda

From:
Sent:
To:
Subject:

EAComments	
Tuesday, January 17	7, 2017 10:14 AM

FW: EA-1856: CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO

From: Lee Blackburn [mailto:leeblackburn@live.com] Sent: Saturday, January 14, 2017 1:09 PM To: EAComments Subject: EA-1856: CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO

Sirs:

After final review of the above referenced EA, I am at a loss as to how such a document could in any way be considered sufficient for the potential transfer of all but 100 acres of the identified property. Nor can I determine why an EA with such a broad scope would even be done.

Under section 1.3 SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, it states: "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document..." but it is impossible to separate the two. The land that is being proposed for transfer IS contaminated and not suitable for transfer until cleaned up. While the INTENT may be to EVENTUALLY transfer all but 100 acres of the site, IT MUST FIRST BE CLEANED UP.

In determining whether an EA or an EIS should be performed, DOE says an EIS is required for federal actions significantly affecting the quality of the human environment. DOE goes on to say: "In reaching a decision on the need for an EIS DOE first determines if the project is a type that is included in DOE's classes of actions that normally requires EISs as set out at Appendix D to Subpart D of 10 CFR Part 1021"

Appendix D to Subpart D of 10 CFR Part 1021 is classes of actions that DOE says normally require EISs and D3 is uranium enrichment facilities.

If the intent is to transfer land to SODI, then the scope of the EA should be restricted to encompass that land only and only to the extent it can be demonstrated the land if free of any environmental contaminants.

Lee Blackburn Former member SSAB,

Pataskala, OH 43062

B-6



EAComments

Subject: Date:

From:

FW: Comment on Draft Environmental Assessment on Conveyance of Real Property Friday, January 27, 2017 12:25:30 PM

From: jwagner7087@fuse.net [mailto:jwagner7087@fuse.net]
Sent: Friday, January 27, 2017 10:50 AM
To: EAComments
Subject: Comment on Draft Environmental Assessment on Conveyance of Real Property

I fully support draft environmental assessment and encourage the Department of Energy to take the steps necessary to release this and future property to the Southern Ohio Diversification Initiative (SODI) for reuse.

Jeff Wagner

Comment Document #5

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

EAComments

Subject: Date:

From:

FW: Support for Land Transfer Tuesday, January 31, 2017 2:39:03 PM

From: Jim Morgan [mailto:jimmorgan@insolves.com] Sent: Monday, January 30, 2017 2:12 PM To: EAComments Subject: Support for Land Transfer

To Whom It May Concern;

I support the transfer of property described in the Environmental Assessment to the SODI for their use in creating economic development opportunities through the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century. The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Support to Educational attainment
- Opportunities for small businesses
- Development of leaders to serve within our local communities

Thank you for the opportunity to provide my input,

Jim Morgan

Jim Morgan | Senior Associate

inSolves Associates

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

740.981.2141 (cell)

740.289.3015 (Fax) www.inSolves.com Comment Document #6





-----Original Message-----From: Vina Colley [mailto:vcolley@earthlink.net] Sent: Tuesday, January 31, 2017 5:27 PM To: Lovins, Jason Subject: Land transfer please send to the right person. Thank you

Jan 31, 2017

To whom it may concern: Assessment-EA PPPO-03-3910704-17

(PRESS) Portsmouth/Piketon Resident For Environmental Safety and Security and (NNWJ) National Nuclear Workers for Justice oppose the transfer of land located on and off site of USEC Aplant located in Piketon, Ohio.

We were not permitted to ask questions at the public meeting about the transfer of land from the public to the community. Also, we haven't been informed as to who property is going to be transferred to or who will be responsible for cleanup. Many of the hazards that have been released at the site were not mentioned at the public meeting. Whoever takes the land becomes responsible for the contaminants. We need more information to give informed opinions and input.

This was a weapons grade facility that was making Highly Enrichment Uranium Hex Fluorides with Plutonium mixed since 1953 which has a half life of over 24 thousand years or more.

We ask that there be NO transfer at this time without real community input.

Thanks,

Sincerely,

Vina K Colley (PRESS) (NNWJ)

Sent from my iPhone

Sent from my iPhone

Comment Document #7

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017



Ohio Sierra Club 131 North High Street, Suite 605 Columbus, OH 43215



Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, OH 45661 eacomments@fbports.com

February 4, 2017

Comments regarding the January 2017 **DOE/EA-1856 Draft Environmental Assessment** for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO.

The title of the Environmental Assessment document DOE/EA-1856 refers to the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (GDP). This title is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site and is not limited to the GDP.

The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. That is all but 100 of 3,777 acres at the site. These 100 acres would be the final footprint of the onsite disposal cell, whose activities currently encompasses 300 or more acres.

DOE/EA-1856 is extraordinarily broad, insufficient and premature. The EA also violates the Department's own requirements for an Environmental Impact Statement.

The property at PORTS is characterized by a wide variety of buildings, hazardous and radioactive landfill dump sites, uncharacterized landfill sites and other areas of unknown and uncharacterized radioactive contamination, including landfills which are not included in the current Environmental Cleanup Program. The Portsmouth Waste Disposition Record of Decision of June 2015 covers only those landfills within Perimeter Road, which add up to only 45% of total landfill areas. We have a concern with the landfills outside Perimeter Road, specifically, X-734, X-734A and X-734B, which contain known carcinogens, heavy metals and radioactively contaminated soils.

**The DUF6 Conversion Plant is** operated by a private entity. It has been estimated that it will take 20 years, if this facility works round the clock, to remove all the fluorine from the DUF6 on the site. This process has been complicated and stalled for 2 years by accidents and safety violations as well as by the Department's desire to "sell" the DUF6 waste to a private entity at Paducah. It would be many years before this facility could be decommissioned and demolished.

**The American Centrifuge Plant** is under a lease agreement. The ultimate disposition of this facility and the Department's legal ability to dismantle it will also be far in the future.

**The Gaseous Diffusion Plant** (GDP) is to be dismantled, a process which has uncertain funding and is currently estimated to take 40 years to complete.

High-Level Radioactive Waste Contamination. While uranium is radioactive and dangerous much more serious contamination of the site occurred as the Department of Energy, in an astonishingly imprudent move, brought in what they termed "recycled uranium" and ran it through the gaseous diffusion uranium enrichment facility for many years. The Department also used the terms "processed recycled uranium", "processed recycled feed materials", "special nuclear material" and "reactor returns" to describe this material which is officially termed *reprocessed high-level radioactive waste.* This waste is the irradiated (used) fuel rods of nuclear reactors. Reprocessed high-level radioactive waste from various sources came into Portsmouth and two other gaseous diffusion facilities at Oak Ridge, TN and Paducah, KY from as early as 1953 to as late as 1976, contaminating the entirety of the gaseous diffusion process buildings at these sites with technetium as well as transuranics and their decay elements. In turn, high-level radioactive waste contamination would have been transferred along with the DUF6 into cylinders that have been run through the conversion process, as well as cylinders that are currently stored on the site. That means that the DUF6 conversion plant and likely much of the site are also contaminated with these more highly radioactive elements. The Department has indicated that much of this higherradioactivity contamination is contained in the "heels" - heels being what remains in a cylinder after its DUF6 has been converted. At this time, we are unsure of the composition or the disposition of these heels. Transuranics are some of the deadliest entities on earth and even a tiny particle has the ability to cause illness and death. Testing of all parts of the site for these elements is critical, but has not been proposed by the Department. We consider this to be a serious public health issue.

Waste was incinerated at PORTS up until the 1970s. This would have spread radioactive contamination as well, reinforcing the need for testing of all areas at the site.

We would like to ask why the Department would consider an EA of such a broad scope. Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document...". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.

Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.

While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight.

At this time the Southern Ohio Diversity Initiative is interested in obtaining 90 acres in a particular area at PORTS. Doing an EA for this particular delineated area would be appropriate at this time – but of course only to the extent it can be demonstrated that the land is free of chemical and radioactive contaminants.

As the case with the above transfer, all transfers of any amount of land must require a separate EA or EIS as the particular case demands.

An important reality that the Department seems to have overlooked is the value of uncontaminated land in Pike County and in the area surrounding PORTS. Unless people were unaware of the dangerous nature of the contamination at PORTS, they would likely prefer to purchase uncontaminated land – even if the PORTS land were to be given away. Facilities at PORTS are old and outdated and are unlikely to have much attraction to a potential buyer. If the cost of remediation is large, then that bespeaks that the property is too contaminated to either legally or morally be taken out of government ownership and oversight.

The only special value of land at PORTS would be the value added if the Department were to engage in research and development of renewable and sustainable energy sources and supporting technologies. We strongly recommend that the Department begin such a program as soon as possible. There are many new innovations in this burgeoning field. And the Department owes this to the people of Pike County.

Sincerely.

/s/ Guy Marentette, chair Ohio Sierra Club

/s/ Patricia A. Marida, chair Ohio Sierra Club Nuclear Free Committee Comment Document #8



From: Candace Head-Dylla [mailto:cheaddylla@gmail.com] Sent: Saturday, February 04, 2017 10:58 AM To: EAComments Subject: DOE/EA-1856 Draft Environmental Assessmen

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, OH 45661 <u>eacomments@fbports.com</u>

February 4, 2017

Comments regarding the January 2017 **DOE/EA-1856 Draft Environmental Assessment** for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO.

As people whose families have suffered the health effects of living next to a uranium contamination site and whose community has been sacrificed to the lack of real cleanup efforts, the Bluewater Valley Downstream Alliance joins with other affected communities in Ohio in asking the DOE to reconsider its current proposal, which is flawed in a number of ways.

As others have pointed out, the title of the Environmental Assessment document DOE/EA-1856 is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site.

The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. This is not a real solution. It is acting for the sake of convenience without serious concern for long-term effects.

DOE/EA-1856 is extraordinarily broad, insufficient and premature. The EA also violates the Department's own requirements for an Environmental Impact Statement.

Not enough work has been done at PORTS to really understand what is on the site and how best to handle this legacy waste. The Portsmouth Waste Disposition Record of Decision of June 2015 covers only those landfills within Perimeter Road, which add up to only 45% of total landfill areas. What about other areas with known carcinogens, heavy metals and radioactively contaminated soils?

**The DUF6 Conversion Plant is** operated by a private entity. It has been estimated that it will take 20 years, if this facility works round the clock, to remove all the fluorine from the DUF6 on the site. This process has been complicated and stalled for 2 years by accidents and safety violations as well as by the Department's desire to "sell" the DUF6 waste to a private entity at Paducah. It would be many years before this facility could be decommissioned and demolished.

**The American Centrifuge Plant** is under a lease agreement. The ultimate disposition of this facility and the Department's legal ability to dismantle it will also be far in the future.

**The Gaseous Diffusion Plant** (GDP) is to be dismantled, a process which has uncertain funding and is currently estimated to take 40 years to complete.

**High-Level Radioactive Waste Contamination.** Not only Uranium but also recycled radioactive waste was handled at PORTS. Reprocessed high-level radioactive waste from various sources was also handled at this site. Basically, it is a toxic stew. Transuranics are some of the deadliest entities on earth and even a tiny particle has the ability to cause illness and death. Testing of all parts of the site for these elements is critical, but has not been proposed by the Department. Does the DOE care so little about the health and environment of Ohio?

Waste was incinerated at PORTS up until the 1970s. This would have spread radioactive contamination as well, reinforcing the need for testing of all areas at the site.

Why consider such a broad EA?Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document...". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.

Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.

While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight.

Please reconsider your proposed actions at this site. Our nation is watching.

Sincerely Candace Head-Dylla Bluewater Valley Downstream Alliance Grants NM

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

Sent from my iPhone

B-17





Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, OH 45661 <u>eacomments@fbports.com</u>

February 1, 2017

Comments regarding the January 2017 **DOE/EA-1856 Draft Environmental Assessment** for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO.

Comment Document #9

town, Ohio 44505-

The title of the Environmental Assessment document DOE/EA-1856 refers to the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (GDP). This title is in conflict with the document itself, since the EA is for all but 100 acres of the entire Portsmouth Nuclear Site and is not limited to the GDP.

The Department of Energy has released this Environmental Assessment as an attempt to clear the way for the transfer up to 3,677 acres of land at the Portsmouth Nuclear Site (PORTS) to private or other entities. That is all but 100 of 3,777 acres at the site. These 100 acres would be the final footprint of the onsite disposal cell, whose activities currently encompasses 300 or more acres.

DOE/EA-1856 is extraordinarily broad, insufficient and premature. The EA also violates the Department's own requirements for an Environmental Impact Statement.

The property at PORTS is characterized by a wide variety of buildings, hazardous and radioactive landfill dump sites, uncharacterized landfill sites and other areas of unknown and uncharacterized radioactive contamination, including landfills which are not included in the current Environmental Cleanup Program. The Portsmouth Waste Disposition Record of Decision of June 2015 covers only those landfills within Perimeter Road, which add up to only 45% of total landfill areas. We have a concern with the landfills outside Perimeter Road, specifically, X-734, X-734A and X-734B, which contain known carcinogens, heavy metals and radioactively contaminated soils.

**The DUF6 Conversion Plant is** operated by a private entity. It has been estimated that it will take 20 years, if this facility works round the clock, to remove all the fluorine from the DUF6 on the site. This process has been complicated and stalled for 2 years by accidents and safety violations as well as by the Department's desire to "sell" the DUF6 waste to a private entity at Paducah. It would be many years before this facility could be decommissioned and demolished.

**The American Centrifuge Plant** is under a lease agreement. The ultimate disposition of this facility and the Department's legal ability to dismantle it will also be far in the future.

**The Gaseous Diffusion Plant** (GDP) is to be dismantled, a process which has uncertain funding and is currently estimated to take 40 years to complete.

High-Level Radioactive Waste Contamination. While uranium is radioactive and dangero PRE/EA-1856 FBP-ER-GEN-WD-RPT-0076 much more serious contamination of the site occurred as the Department of Energy, in an Revision 6 astonishingly imprudent move, brought in what they termed "recycled uranium" and ran it through 2017 the gaseous diffusion uranium enrichment facility for many years. The Department also used the terms "processed recycled uranium", "processed recycled feed materials", "special nuclear material" and "reactor returns" to describe this material which is officially termed *reprocessed* high-level radioactive waste. This waste is the irradiated (used) fuel rods of nuclear reactors. Reprocessed high-level radioactive waste from various sources came into Portsmouth and two other gaseous diffusion facilities at Oak Ridge, TN and Paducah, KY from as early as 1953 to as late as 1976, contaminating the entirety of the gaseous diffusion process buildings at these sites with technetium as well as transuranics and their decay elements. In turn, high-level radioactive waste contamination would have been transferred along with the DUF6 into cylinders that have been run through the conversion process, as well as cylinders that are currently stored on the site. That means that the DUF6 conversion plant and likely much of the site are also contaminated with these more highly radioactive elements. The Department has indicated that much of this higherradioactivity contamination is contained in the "heels" - heels being what remains in a cylinder after its DUF6 has been converted. At this time, we are unsure of the composition or the disposition of these heels. Transuranics are some of the deadliest entities on earth and even a tiny particle has the ability to cause illness and death. Testing of all parts of the site for these elements is critical, but has not been proposed by the Department. We consider this to be a serious public health issue.

Waste was incinerated at PORTS up until the 1970s. This would have spread radioactive contamination as well, reinforcing the need for testing of all areas at the site.

We would like to ask why the Department would consider an EA of such a broad scope. Section 1.3, SCOPE OF THIS ENVIRONMENTAL ASSESSMENT, states that "D&D and remediation of the PORTS site is independent of the Proposed Actions described in this document...". This statement contradicts the on-the-ground reality that the property cannot legally or morally be transferred without sufficient cleanup and remediation.

Before any land is transferred, it first must be cleaned up. A full Environmental Impact Statement (EIS) is required for federal actions significantly affecting the quality of the human environment. Appendix D to Subpart D of 10 CFR Part 1021 names classes of actions that the Department says normally require an EIS. Paragraph D3 names siting, construction, operation, and decommissioning of uranium enrichment facilities as operations needing an EIS.

While it is possible that land at PORTS that is free of radioactivity and other contamination could be transferred, parts of the property are too hazardous to be taken out of government oversight.

At this time the Southern Ohio Diversity Initiative is interested in obtaining 90 acres in a particular area at PORTS. Doing an EA for this particular delineated area would be appropriate at this time – but of course only to the extent it can be demonstrated that the land is free of chemical and radioactive contaminants.

As the case with the above transfer, all transfers of any amount of land must require a separate EA or EIS as the particular case demands.

An important reality that the Department seems to have overlooked is the value of uncontaminated land in Pike County and in the area surrounding PORTS. Unless people were unaware of the dangerous nature of the contamination at PORTS, they would likely prefer to purchase uncontaminated land – even if the PORTS land were to be given away. Facilities at PORTS are old and outdated and are unlikely to have much attraction to a potential buyer. If the cost of remediation is large, then that bespeaks that the property is too contaminated to either legally or morally be taken out of government ownership and oversight.

The only special value of land at PORTS would be the value added if the Department were tooE/EA-1856 engage in research and development of renewable and sustainable energy sources and Supporting vision 6 technologies. We strongly recommend that the Department begin such a program as soon as June 2017 possible. There are many new innovations in this burgeoning field. And the Department owes this to the people of Pike County.

Sincerely.

George Peya Chair

Revision 6 June 2017



The Joint Economic Development Initiative of Southern Ohio (JEDISO) fully supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. JEDISO is a joint initiative of Jackson, Pike, Ross, & Scioto Counties to jointly market and promote economic development in the 4-county region. We believe the reindustrialization of this site is key to economic survival of the region.

The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.

Very Respectfully,

Jaron D VErter

Jason D. Kester Secretary Joint Economic Development Initiative of So. Ohio jkester@jediso.com

#### DOE/EA-1856

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, OH 45661



RE: Public Comment on DOE/EA-1856 Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio

## To Whom It May Concern:

The Southern Ohio Port Authority (SOPA) fully supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the reindustrialization of the site. The port authority is the economic development office for the Scioto County. In our opinion, it is vital that the site be returned to the local community as quickly as feasible in order to properly market and reindustrialize this vital asset. This is the first of what we hope will be many transfers.

The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of Southern Ohio.

Very Respectfully,

ISI Harold R. Sayre

Harold R. Sayre Chairman Southern Ohio Port Authority (SOPA) Comment Document #12

City of



Office of the City Manager 728 Second Street Portsmouth, Ohio 45662

Portsmouth



February 15, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

We, The City of Portsmouth, Ohio support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

Page 1 of 2

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

Duch K. aller

Derek K. Allen, ICMA-CM Portsmouth City Manager

# Below is the information regarding submittal of comments:

# SUMMARY

DOE is preparing an EA that evaluates the potential environmental consequences associated with the proposed conveyance of land at the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio, for economic development purposes.

# PUBLIC COMMENT OPPORTUNITIES

Comments on the Draft EA should be submitted no later than February 18, 2017, by one of the following methods.

- By email: <u>eacomments@fbports.com</u>
- By mail: Environmental Assessment Comments, U.S. Department of Energy, P.O. Box 700, Piketon, Ohio 45661
- By phone: 1-888-603-7722

# DOCUMENTS AVAILABLE FOR DOWNLOAD

JANUARY 3, 2017

EA-1856: Draft Environmental Assessment

Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio

Page 2 of 2



From: Davis, Paul Sent: Thursday, February 16, 2017 10:36 AM To: EAComments Subject: Support for land transfer at Ports

# Security \* Police \* Fire Professionals of America

# Local #66

P. O. Box 264 Piketon, Ohio 45661

We the SPFPA Local #66, support the transfer of property to the SODI for their use in creating economic development opportunities centered on the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomics stability of the region for well over half a century.

The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Support to Educational attainment
- Opportunities for small business
- Development of leaders to serve within our local communities

The safe and environmentally sound transfer of property back to the communities that supported the Cold War efforts provides the opportunities for the Community Reuse Organization to re-industrialize the site and avoid the negative impacts resulting from the completed DOE missions.

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

Respectfully,



Paul Davis, President SPFPA Local #66

Piketon, OH 45661

Village of Piketon Office of the Mayor 411 West Street Piketon, Ohio 45661 (740) 289-8154

E-mail-piketonmayor@yahoo.com Fax-(740) 289-3565 Billy R. Spencer Mayor

February 15, 2017

Joel Bradburne DOE Site Director Piketon Plant

Dear Joel;

The Village of Piketon, OH offers comments and recommendations concerning the U.S. Department of Energy (DOE) Environmental Assessment (EA) for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY. OHIO in the enclosed document.

The Village of Piketon's position following review of the EA and supporting documents associated with the environmental investigations and remediations at PORTS as well as the socio-economic studies for the four-county area, is that DOE has not provided sufficient information in support of the proposed actions. Therefore, the Village of Piketon cannot support a Finding of No Significant Impact (FONSI), nor can it support a mitigated FONSI for this project. Instead, The Village of Piketon recommends DOE comply with Title 10 – Energy, Part 1021 – National Environmental Policy Act Implementing Procedures Subpart D – Typical Classes of Actions, and complete an Environmental Impact Statement (EIS) for the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (PORTS) facility.

Under the current plan, the community will have no redevelopment opportunities for decades. DOE is using the land best suited for immediate redevelopment opportunities as a nuclear waste dump and the current timeline and sequencing for cleanup and groundwater remediation does not make land available for gainful private reuse in this generation. Without a firm commitment from DOE to excavate the landfills and plumes, successful private redevelopment inside Perimeter Road is highly unlikely. Private redevelopment success is inversely proportional to distance from active D&D activities and nuclear waste. Redevelopment next to nuclear waste is limited to a small subset of nuclear-related industries.

The onsite disposal cell location brings nuclear waste as close to the community as you can possibly bring it, and it will negatively impact development in and around the Village of Piketon.

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

Please call me with any questions.

Sincerely

Ralph Y. Douthitt Council President, Village of Piketon

cc Village Administrator Village Solicitor Village Council Members

### Village of Piketon Position on U.S. Department of Energy (DOE) Environmental Assessment (EA) for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO.

The Village of Piketon, OH offers the following comments and recommendations concerning the U.S. Department of Energy (DOE) Environmental Assessment (EA) for the CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. The EA was publically released by DOE on January 4, 2017 for public comment. DOE provided a 45 day public comment period that expires on February 18, 2017.

The primary purpose for the EA as described on Page 1 is the conveyance of real property for economic development. DOE has indicated that the conveyance of property may also result in other outcomes such as public benefit, conservation, or mitigation. DOE envisions that the transfer of real property will occur to "the Southern Ohio Diversification Initiative (SODI) and/or other parties so that they may sell, lease, or license the transferred real property to further economic development in the area." DOE states that "transferring excess, unutilized and underutilized real property for local economic development purposes would have a positive impact on the economy in Piketon, Ohio and surrounding communities. Such transfer of real property for local development purposes could also reduce negative economic impacts caused by changes in the DOE mission at PORTS."

The Village of Piketon's position following review of the EA and supporting documents associated with the environmental investigations and remediations at PORTS as well as the socio-economic studies for the four-county area, is that DOE has not provided sufficient information in support of the proposed actions. Therefore, the Village of Piketon cannot support a Finding of No Significant Impact (FONSI), nor can it support a mitigated FONSI for this project. Instead, the Village of Piketon recommends DOE comply with Title 10 - Energy, Part 1021 - National Environmental Policy Act Implementing Procedures Subpart D - Typical Classes of Actions, and complete an Environmental Impact Statement (EIS) for the conveyance of real property at the Portsmouth Gaseous Diffusion Plant (PORTS) facility. Appendix D to Subpart D of Part 1021 - Classes of Actions That Normally Require ElSs, item D2 identifies "Siting/construction/operation/decommissioning of nuclear fuel reprocessing facilities" as a basis for requiring the completion of an EIS. Similarly, Subheading D3 identifies "Siting/construction/operation/decommissioning of uranium enrichment facilities" as requiring the conduct of an EIS and, Subheading D10 also identifies "Siting/construction/operation/decommissioning of major treatment, storage, and disposal facilities for high-level waste and spent nuclear fuel" for completing an EIS. We note that high level waste is not defined in the regulation; however, the Village of Piketon considers low-level nuclear waste and hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) to be high level waste. Similarly, the Village considers the proposal to construct the On Site Waste Disposal Facility on PORTS land to be a major treatment, storage, and disposal facility.

The Village of Piketon also contends that the activities at the PORTS facility have had both a direct and indirect detrimental effect on the socio-economic condition of our residents. The Decontamination & Decommissioning (D&D) activities, the uncertainty with respect to achieving cleanup of the PORTS site to permit industrial redevelopment of land as well as DOE's plan to construct an approximately 100-acre

low-level nuclear waste and hazardous waste landfill on PORTS land have had a detrimental effect on our Village's ability to attract business investment and new residents. Accordingly, we believe DOE must at a minimum reassess the socio-economic section of the EA report to document this adverse effect to the Village of Piketon and recommend measures to mitigate the damages caused.

The Village of Piketon does recognize that pursuant to the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR parts 1501.3 (b), DOE may prepare an EA at any time in order to assist agency planning and decisionmaking. However, the approach taken by DOE for the PORTS site should not be a basis for issuing a FONSI. Rather, the EA should support the completion of an EIS in compliance with DOE NEPA regulation cited above and in compliance with NEPA (40 CFR parts 1501.4 (a) (1) "Determine under its procedures supplementing these regulations (described in §1507.3) whether the proposal is one which: (1) Normally requires an environmental impact statement."

#### Socio-Economic Impacts Analysis

NEPA requires Federal agencies to consider actions that impact environmental, social, cultural, economic resources, and natural resources. NEPA does not require agencies to select the environmentally preferable alternative or prohibit adverse environmental effects. Federal agencies can incorporate other concerns and policy considerations to take into account in the decision-making process, such as social, economic, technical or national security interests.

An EA is prepared to determine the significance of the environmental effects and to look at alternative means to achieve the agency's objectives. It is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS or support an agency's determination to issue a FONSI.

NEPA section 1508.8 identifies two possible effects from proposed actions:

(a) Direct effects - which are actions that occur at the same time and place.

(b) Indirect effects - which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

The Village of Piketon is located approximately 2.5 miles to the PORTS facility. We are the closest community to PORTS. We contend that the Village and its residents have been adversely impacted in both a direct and indirect effect from the operations of the facility. The following describes the effects to the Village of Piketon from the PORTS facility.

DOE's primary purpose for issuing the PORTS EA is to convey property to SODI and other parties for economic development. DOE's expectation is that property would become available incrementally over time in coordination with the cleanup program. Property outside the centrally developed area would be unneeded and eligible for transfer sooner.

Z

As described on Page 4 of the EA report, DOE has employed a Bounding Analysis in recognition of there being insufficient information on future land uses for property transfer and development purposes. The Bounding Analysis is based on the assumption that various types of industrial, commercial, mixed-use, and business park uses would occur at PORTS, and that "some future uses anticipated...could have greater potential than others for creating adverse environmental impacts to some environmental resource areas...DOE's guidance...for implementing the CEQ regulations (40 CFR 1502.1 and 1502.2) recommends a sliding-scale approach so that actions with greater potential effect can be discussed in more detail than those that have less potential for impact. Because the actual future use of the facilities and land is not known, a bounding analysis is used to estimate potential impacts...especially in the case of real property transfer for development purposes...the bounding analysis typically uses assumptions regarding land uses and anticipated operations and employs analytical methods to estimate potential environmental impact." In addition, DOE has indicated that some land may be designated forest/wildlife.

DOE has indicated in the EA that the total land area that would be transferred is unknown at this time. However, the DOE analysis assumes 3,677 acres of the 3,777-acre site would be eligible for eventual real property transfer. This acreage must then include large portions of the proposed On Site Waste Disposal Facility since according to the EA - Page 4, "More than 300 acres of land are dedicated to the on-site waste disposal facility (OSWDF) and its support facilities, which will be used to manage waste from the PORTS D&D project (100 acres will be permanently committed as a waste disposal location with no alternate use in the future [DOE 2015b])."

Existing facilities at PORTS are generally located within the 1,200-acre centrally developed area. As such, approximately 2,577 acres are considered undeveloped (though they are not undisturbed). Of the 2,577 acres, approximately 1,550 acres (about 60 percent) are assumed to be readily developable. The analysis also assumes the remaining acreage could be transferred but would not be developed due to various constraints (e.g., wetlands, land with slopes greater than 15 percent, utilities, etc.) that would make development more costly compared to the balance of the readily developable property on the site.

Based on the foregoing analysis of land subject to this EA property conveyance, the Village of Piketon believes irrespective of our position that an EIS needs to be conducted for the facility, DOE should limit the scope of this EA to 2,277 acres. This acreage is derived from 3,777 acres of total land less 300 acres OSWDF land, less 1,200-acre centrally developed area.

DOE has acknowledged in the Record of Decision for the FOR THE PROCESS BUILDINGS AND COMPLEX FACILITIES DECONTAMINATION AND DECOMMISSIONING EVALUATION PROJECT AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT PIKETON, OHIO, July 2015 (D&D), Page 2-39, that "a 12-year schedule is assumed for demolition of the process buildings and complex facilities." Based upon this estimated and lengthy time period, it makes little sense to the Village of Piketon to support an EA that could result in a FONSI for the 1,200-acre centrally disturbed area. In essence, DOE should not be given the option of



rendering a final decision on the centrally disturbed area when there is much uncertainty with respect to the timing and funding of remediation, and the ability of DOE to complete a remedial action that achieves CERCLA Section 120(h)2 requirements<sup>1</sup>.

The Village of Piketon is in agreement with DOE that the PORTS facility has had an adverse impact on the socio-economic condition in the near vicinity. On page 1 of the NEPA EA, DOE states that the "Transfer of real property for local development purposes could also reduce negative economic impacts caused by changes in the DOE mission at PORTS." The Village of Piketon concurs that the significant reduction in operations from the cessation of the gaseous diffusion operations in 2001 and the more recent planned closure of the American Centrifuge Plant in 2016 has had an incredibly detrimental effect to the local community. According to the February 19, 2016 Chillicothe Gazette, "Efforts to find another use for the American Centrifuge plant have been unsuccessful and work will begin to shut down the facility with the first round of layoffs coming the week of Feb. 29. Centrus Energy announced late Friday afternoon that it will be demobilizing the American Centrifuge in Piketon, but plans to preserve options for the future by maintaining its construction and operating license from the U.S. Nuclear Regulatory Commission for a commercial plant. The company will continue working on the centrifuge technology at what it called its state-of-the-art research and testing facilities in Oak Ridge, Tennessee, after the U.S. Department of Energy decided at the end of September to de-fund the Piketon operation."

In its heyday the PORTS facility had a workforce of over 22,000. Today the workforce is estimated to be approximately 2,650 including DOE and site tenants. The socio-economic impact to the Village of Piketon on these massive job losses from DOE's disinvestment at the PORTS facility cannot be understated but has been significantly understated in the socio-economic impact section of the EA. To correct this deficiency in the socio-economic section of the EA, the Village of Piketon contracted with The Ferguson Group (TFG) to undertake an economic analysis of the effect PORTS D&D has had on the community and Pike County. TFG prepared an Industry Cluster Analysis for Pike County which includes information on the concentration of industry clusters in Pike County as compared to the State of Ohio and these other data:

- Employment changes in Industry Clusters from 2001-2015;
- Average wage changes in in Industry Clusters from 2001-2015; and
- · Percent poverty in the Village of Piketon in comparison to the State of Ohio and Pike County

The high level results of the socio-economic analysis completed by TFG are that:

 The manufacturing industry cluster in Pike County has essentially collapsed as a consequence of the shutdown of the PORTS facility;

<sup>&</sup>lt;sup>1</sup> CERCLA Section 120(h)2 applies to all transfers of real property "owned by the United States" to nonfederal entities. To comply with these requirements, DOE would prepare a report that documents the baseline environmental condition of the real property proposed for transfer and identifies hazardous materials that are present, stored, or have been released within the proposed transfer footprint. The report, called an environmental baseline survey, would also include information on prior property ownership, past and present property use, and past and present activities on adjacent properties. Before a transfer could occur, DOE would have to make a determination that the condition of the property is protective of human health and the environment for its intended future use (e.g., industrial/commercial/business), and therefore the property is suitable for transfer, via a risk evaluation process.



- The Village of Piketon has consistently had a much higher rate of persons living in "Poverty" as defined by the US Department of Housing and Urban Development. 37.5% of the Village population was defined as persisting at poverty levels in 2015;
- Average wages for manufacturing jobs in Pike County have reduced by 35.02% when adjusted for inflation for the time period of 2001-2015; and
- The combination of various contamination factors (described in other sections of this report) limit PORTS reuses:
  - pervasive contamination of buildings,
  - high level contamination of soil and groundwater media at the PORTS,
  - uncertainty with respect to the timing and funding of cleanup,
  - degree to which industrial use cleanup standards can be achieved to permit property reuse, and
  - uncertainty of offering liability protection to future tenants of the PORTS facility.

These factors suggest to the Village of Piketon that not only will redevelopment and reuse of the PORTS be difficult to accomplish, but these significant hurdles will continue to have a negative impact on the socio-economic viability of the Village of Piketon. These factors also cause the Village of Piketon to be highly skeptical of DOE's contention that the PORTS facility can be transformed into "various types of industrial, commercial, mixed-use, and business park" – Page 5 of the NEPA EA. This assumption was based on the types of industries and businesses currently operating in industrial parks in the region around PORTS, the types of industries most likely to locate to or expand in southern Ohio, and businesses that transferees would likely recruit.

The current viability of industrialization in Pike and Scioto counties is very bleak. Industrial parks located closest to the PORTS facility are all experiencing significant vacancy. Zahn's Corner Industrial Park in Waverly, Pike County currently has 320 acres of 325 developable acres. Inside the Industrial Park the 1,021,400 square foot Jackson Building remains basically empty. Masco Corporation's 11-building, 2.5 million square-foot Mills Pride furniture maker facility in Waverly, OH closed in 2012. In Ray, DH (287 Elam Road) the 246,200 square foot industrial park is unoccupied.

DOE tacitly acknowledges that reindustrialization of the PORTS facility will likely occur over an extended time period. The implication to the public is that DOE PORTS land that would be offered for reuse would likely not be redeveloped in the near term and, consequently, will not have a significant near term beneficial economic impact to the community. As described on pages 72 and 73 of the NPEA EA, "Several industrial parks and sites are under development throughout the PORTS ROI (Table 15). Many of these industrial developments are relatively new and are considered together as parts of a single project for the purposes of cumulative impacts assessment. Because industrial parks tend to fill up slowly over time rather than all at once, these collective developments outside of PORTS can be viewed primarily as current and reasonably foreseeable future projects. Potential reindustrialization of the PORTS site is another reasonably foreseeable future industrial development that is considered in the cumulative impacts assessment along with this group of off-site industrial developments... the full and specific potential for new job and income creation among all of the industrial developments is unknown at this time. This would depend on the total number of jobs eventually created by these industries throughout the ROI and the wages paid by the industries that decide to locate in these developments."

## Pike County Industry Cluster Analysis Background

The Ferguson Group completed an Industry Cluster Analysis for Pike County, OH to evaluate the economic impact to the County and the Village of Piketon from the closure of the PORTS facility which essentially began in 2001 with the cessation of the gaseous diffusion operations. An industry cluster is a geographic concentration of interrelated competitive businesses with sufficient size to generate external economies. Industries that are part of clusters have developed buyer-supplier relationships, share labor pools, draw qualified workers from area institutions of higher education, and are located near each other. Industry clusters make regions uniquely competitive for jobs and private investment.

The identification of industry clusters is an important element in successfully recruiting businesses and facilitating development efforts focused on companies that complement existing businesses. An Industry Cluster Analysis can also identify gaps in value chains, and it can inform local decision-makers of industries that are either growing or declining so that programs and policies can be developed to address these challenges.

#### **Bubble Chart Information**

An Industry Cluster Analysis can be depicted by use of a "Bubble Chart." A Bubble Chart is a method economists use to display three dimensions of data. The bubbles displayed on a graph represent the relative size of each industry's employment in the focus area – in this analysis it represents the size of employment in a particular industry in Pike County to other industries in the State of Ohio. The horizontal axis measures the percent change in the Location Quotient (LQ) over a designated period of time - in this case from 2001-2015. A LQ represents a methodology to quantify the concentration of a local industry to a larger geographic area - in this case TFG compared Pike County industry clusters to the same clusters in Ohio. Bubbles positioned to the right side of the vertical axis on the graph are classified as growing. The vertical axis measures the concentration of an industry relative to the nation. A LQ concentration of 1.0 or higher indicates that the cluster is more heavily concentrated in Pike County than the state average. Economists also consider these industry clusters to be net exporter of goods and/or services to areas outside of the region. An LQ less than 1.0 for an industry suggests that the area is below the state average in concentration in a given industry.

#### **Data Sources**

TFG used data collected and analyzed by the Bureau of Labor Statistics (BLS) location quotient calculator. The tool creates on demand tables of private sector employment data, by industry, as measured by the Quarterly Census of Employment and Wages (QCEW) program. The calculator allows the ready comparison of relative employment levels in the United States, states, counties, and Metropolitan Statistical Areas (MSAs).

The location quotient calculator makes available three standard industry groups that can be used to study the entire spectrum of industries as classified by North American Industry Classification System (NAICS) - the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. As the location quotient calculator is currently limited to presenting private sector data, the industry groups

do not include the Public Administration sector. The highest level (most aggregated) group is the SuperSector group. The second highest is the Sector group, and the most detailed is the Sub-Sector group. After reviewing the data available at each group, TFG selected to analyze the SuperSector group as there was more data available to examine. BLS has defined a total of twelve SuperSectors, one of which is Public Administration. The eleven SuperSectors used for classifying private-sector activity are:

- Natural Resources and Mining
- Construction
- Manufacturing
- Trade, Transportation, and Utilities
- Information
- Financial Activities
- Professional and Business Services
- Education and Health Services
- Leisure and Hospitality
- Other Services
- Unclassified

#### Industry Cluster Analysis for Pike County

The Industry Cluster Analysis completed by TFG for Pike County examines the period from 2001 to 2015. Typically, if a cluster is weak in the County but strong in the State, that cluster would be an effective investment for the County because the State has the infrastructure, supply chains, labor pool and other resources to support growth.

The analysis includes industry cluster bubble charts, several charts on industry cluster employment, wages and LQ changes, a time series comparison of industry cluster employment LQ from 2001-2015, and an analysis of industry clusters in Pike County.

#### **Results of Pike County vs. Ohio Industry Cluster Analysis**

#### **General Overview**

The upper right-hand quadrant contains Pike County's strongest, most dynamic clusters, where the County has both a larger than proportional share of state cluster employment and the cluster is advancing. They are identified as strengths of the economy. Pike County has competitive advantage in the Construction and Professional and Business Services clusters.

The lower right-hand quadrant contains clusters where Pike County is generally gaining employment but which do not yet have a strong concentration compared to the state. These clusters typically present strong growth opportunities. Clusters in this quadrant include: Natural Resources and Mining; Trade, Transportation, and Utilities; Financial Services; Education and Health Services; Leisure and Hospitality; and Other Services.

The upper-left hand quadrant indicates clusters that are strong and concentrated in Pike County but are losing employment opportunity because the industry is shrinking. These clusters are important parts of the County's economy that now face the threat of general shrinking trends. At the time of the report, the County did not have any industries located in this quadrant.

Finally, the lower-left hand quadrant indicates clusters that have both a weak local presence and are shrinking. These clusters include: Manufacturing and Information.

#### Strong Industry Clusters

The Industry Clusters that are both strong locally and growing in Pike County, Ohio are: Construction and Professional and Business Services. Each of these industry clusters has an LQ greater than 1.00, which indicates the local presence is stronger when compared to the state.

The strongest industry cluster in Pike County is Professional and Business Services. This cluster includes professional and technical services (accounting and book keeping, architectural, engineering, and relates services, etc), management of companies and enterprises and administrative waste services. This industry has the highest LQ (1.77) and is the largest employer accounting for 2,175 jobs. An LQ of 1.77 means that the Professional and Business Services cluster is concentrated at a 77% greater rate in Pike County as compared to the state of Ohio. Between 2001 and 2015, Pike County added 1,899 jobs to the Professional and Business Services 'Bureau of Labor Market, the Professional and Business Services cluster in the Southeast Ohio Region is expected to grow 14.9% between 2012 and 2022, adding 2,500 jobs to the workforce.<sup>2</sup>

The Construction Cluster accounts for 576 jobs in Pike County and is the sixth largest employer. Between 2001 and 2015 the cluster added 164 jobs. This cluster has the second highest LQ at 1.68. According to the U.S. Census, the average annual wage for the construction industry in Pike County in 2015 was approximately \$67,163 annually, and has an employment multiplier of 1.90. This cluster is expected to grow 23.1% between 2012 and 2022, adding 3,000 jobs to the Southeast Ohio Region.<sup>3</sup>

#### Weak Industry Clusters

The lower right-hand quadrant contains clusters where Pike County is gaining employment but which do not yet have a strong concentration compared to the state. These clusters typically present strong growth opportunities. Clusters in this quadrant include: Natural Resources and Mining; Trade, Transportation, and Utilities; Financial Activities; Education and Health Services; Leisure and Hospitality; and Other Services.

The Trade, Transportation, and Utilities cluster is the second largest employment sector in Pike County and has the fourth highest LQ at 0.91. The LQ for this cluster increased from 0.59 in 2001 to .091 in 2015. This means that this cluster has been gaining employment and strength, however, is not concentrated

<sup>&</sup>lt;sup>2</sup> Ohio Department of Job and Family Services, 2022 Job Outlook: JobsOhio Network Southeast Ohio, August 2015. http://ohiolml.com/proj/projections/JobsOhio/Southeast.pdf
<sup>3</sup> Ibid.

compared to the State. With a modest wage of \$29,315 annually, this cluster is expected to grow 3.1% between 2012 and 2022, adding 1,900 jobs to the Southeast Ohio Region.

The Financial Activities, which includes services such as finance and insurance and real estate services, has remained relatively stable over the period of analysis, only losing 2 jobs between 2001 and 2015. The cluster is important to the regional economy because it has an employment multiplier of 2.40, indicating many indirect jobs are a created as a result of the cluster. This cluster has a modest wage of \$34,003 and is expected to grow 5% between 2012 and 2022, adding 500 jobs to the Southeast Ohio Region.

Education and Health Services is the third largest employment cluster in Pike County, accounting for 1,445 jobs. This cluster saw an increase in employment of 485 jobs over the period of analysis. In 2015, the cluster's LQ was 0.97 having grown from an LQ of 0.68 in 2001. This cluster has a modest wage of \$34,003 and is expected to grow 13% between 2012 and 2022, adding 11,500 jobs to the Southeast Ohio Region.

The Leisure and Hospitality cluster and Other Services cluster are generally characterized by low pay and have lower employment multipliers.

The Manufacturing and Information Sector clusters are considered weak locally and shrinking and are considered to be on the decline. The Information cluster, which includes publishing, telecommunications, and data processing services, is a relatively small cluster, providing jobs for 30 workers and an annual wage of \$38,564.

In 2001, the Manufacturing cluster had the strongest LQ (2.8) in Pike County and was the largest employer, providing jobs for 5,544 people. At that time, the United States Enrichment Corporation (USEC) —now Centrus Energy Corporation — ceased gaseous diffusion enrichment operations at the Portsmouth Gaseous Diffusion Plant (GDP), which was a major employer. The GDP was placed in interim Cold Standby for potential restart. At the end of 2010, facilities were placed in Cold Shutdown to prepare for Decontamination and Decommissioning (D&D), which commenced in 2011. The decommissioning of the plant and the impact it has on the region can be seen by the significant drop in LQ and employment numbers by 2015. In 2015, this cluster had an LQ of 0.8 and had lost 4,607 jobs, only employing 576 people.

Of equal concern to the loss of manufacturing jobs in Pike County is the loss in real wages from manufacturing jobs in the County from 2001 to 2015. Data collected from the US Bureau of Labor Statistics for Pike County reveal that not only did the County experience a massive loss of manufacturing jobs during this time interval, but real wages in the manufacturing sector were depressed by -35.02%. In 2001, the average annual wage for a manufacturing positon was \$36,469. This figure translates to \$48,807.30 in 2015 when inflation is included. In 2015, a person employed in manufacturing not only did not keep up with inflation in terms of real wages, but actually lost ground by having an average annual salary of just \$31,713! Based on this data, it is apparent that the type of manufacturing jobs in Pike County in 2015 are much lower paying than in other parts of the country. Moreover, the notion that new manufacturing jobs at the PORTS facility will support the creation of other indirect and induced jobs with an employment multiplier of 2.9 is not realistic. As a consequence, even a successful implementation of an industrial redevelopment and reuse of the PORTS facility will not have the economic impact

envisioned by DOE on the surrounding community. In addition, the job sectors that are growing in Pike County are not suitable for locating on the PORTS facility by virtue of DOE's decision to remediate site environmental media and building contamination to an industrial use standard of protectiveness. The Industry Clusters of Professional and Business Services identified as strong locally and growing in Pike County would not be permitted to operate on the PORTS site. Similarly, Pike County industries that are considered weak locally but growing would also not be permitted to operate on the PORTS facility because of the industrial use standard of protectiveness. These industries include; Natural Resources and Mining; Trade, Transportation, and Utilities; Financial Services; Education and Health Services; Leisure and Hospitality; and Other Services.

These findings from the Industry Cluster analysis suggest to the Village of Piketon that DOE has presented an unrealistic view of the likelihood of reindustrialization of the PORTS facility. We have witnessed since 2001 the degradation of our local economy from the D&D of the PORTS facility. The decision to construct a low-level nuclear waste and hazardous waste landfill will only further exacerbate the degradation of our economy. Rather, than suggest that the transfer of land for reindustrialization will mitigate the damage already done to our Village economy, we believe the DOE should be offering recommendations on how it can directly mitigate the damages already inflicted on our socio-economic condition.




Industry	LQ 2001	LQ 201 5	Increase /Decreas e	Percent Increase/ Decrease
Base Industry: Total, all industries	1	1	0	0%
Natural resources and mining	0.57	0.75	0.18	31.58%
Construction	0.83	1.68	0.85	102.41%
Manufacturing	2.8	0.8	-2	-71.43%
Trade, transportation, and utilities	0.59	0.91	0.32	54.24%
Information	0.32	0.24	-0.08	-25.00%
Financial activities	0,4	0.51	0.11	27.50%
Professional and business services	0.21	1.77	1.56	742.86%
Education and health services	0.68	0.97	0.29	42.65%
Leisure and hospitality	0.67	0.68	0.01	1.49%
Other services	0.45	0.62	0.17	37.78%
Unclassified	0.2	NC	NC	NC

Table 1. LQ Changes between 2001 and 2015 (Pike County vs. Ohio)

Table 2. Change in Pike County Industry Cluster Employment Levels from 2001-2015

Industry	Employment 2001	Employment 2015	Employment Loss/Gain	Percent Loss/Gain
Base Industry: Total, all industries	9,708	7,794	-1,914	-19.72%
Natural resources and mining	32	38	6	18.75%
Construction	412	576	164	39.81%
Manufacturing	5,544	937	-4,607	-83.10%
Trade, transportation, and utilities	1,332	1,560	228	17.12%
Information	71	30	-41	-57.75%
Financial activities	244	242	-2	-0.82%
Professional and business services	276	2,175	1,899	688.04%
Education and health services	960	1,445	485	50.52%
Leisure and hospitality	673	627	-46	-6.84%
Other services	162	163	1	0.62%
Unclassified	2	NC	NC	NC

Industry	2001 Average Annual Wage (per job)	2001 Average Annual Wage Adjuste d for Inflation to 2015 (33.8%)	2015 Average Annual Wage (per job)	Percent Loss/Gai n (not adjusted for inflation )	Percent Loss/Gain (adjusted for inflation)
Natural Resources and Mining	\$30,050	\$40,216	\$40,868	36.00%	1.62%
Construction	\$40,931	\$54,778	\$67,163	64.09%	22.61%
Manufacturing	\$36,469	\$48,807	\$31,713	-13.04%	-35.02%
Trade, Transportation, and Utilities	\$19,745	\$26,425	\$29,315	48.47%	10.94%
Information	\$49,665	\$66,467	\$38,564	-22.35%	-41.98%
Financial Activities	\$23,652	\$31,654	\$37,185	57.22%	17.47%
Professional and Business Services	\$32,479	\$43,467	\$87,150	168.33%	100.50%
Education and Health Services	\$21,238	\$28,423	\$34,003	60.10%	19.63%
Leisure and Hospitality	\$9,704	\$12,987	\$11,800	21.60%	-9.14%
Other services	\$19,171	\$25,656	\$25,503	33.03%	-0.60%
Unclassified	\$22,480	\$30,085	NC	NC	NC

Table 3. Change in Private Owner Company's Average Annual Pay for Pike County Industry Clusters from 2001-2015

Labor Statistics CPI Inflation Calculator

\* Loss: less than Pike County 2015 Average Annual Pay / Gain: more than Pike County 2015 Average Annual Pav

NC: Not Calculable, the data does not exist or it is zero

#### Location Quotient Time Series Comparison

The Location Quotient Time Series Comparison chart provided below illustrates the change in industry cluster LQ concentrations on a yearly basis over the period of 2001 to 2015. The benefit of this time series graph allows for easy identification of industry concentration growth or decline. When examining the graph, it is important to note, that some industries experienced a drop in LQ between 2009 and 2011. The drop in LQ is reflective of the economic recession which began in 2008 resulting in job loss across the nation. Despite the recession, many industries have begun to slowly recover, reflected by their growth in LQ. Unfortunately, the manufacturing industry has not seen a recovery and until 2013, continued to see a steady decline in LQ. A large contributing factor to the decline can be attributed to the closure of the Portsmouth Plant, with over 19,000 jobs lost since closure.



B-42

#### Poverty

The shutdown of the PORTS facility has had a much larger negative effect on the Village of Piketon than surrounding communities. As seen of Figure 3, the Village of Piketon has consistently experienced an elevated percentage of persons living at or below the rate of poverty as defined by the US Department of Housing and Urban Development. Data taken from the American Fact Finder of the US Census Bureau from 2000 to 2015 reveals that the Village of Piketon has been experiencing much higher rates of persons living in poverty as compared to Pike County, the State of Ohio and the United States. Data from the Census for poverty in Piketon is only available for the years highlighted with a blue star. In all of the blue starred years the Village of Piketon is shown to have a higher rate of persons living in poverty than the other geographic areas. In 2015, the percentage of persons living in poverty in the Village of Piketon was 37.5%!

All Ages in Poverty

Figure 3. Comparison of Poverty in the Village of Piketon, Pike County, the State of Ohio and the United States

Source: American Fact Finder, 2015

DOE's socio-economic analysis in the NEPA EA has focused on the impact PORTS operations have had on the four-county region which includes Pike, Scioto, Jackson and Ross. When such an analysis is undertaken it reflects a generally uniform socio-economic condition for the mainly agricultural based economies of these counties and will by its very nature of analysis not highlight the impact of the PORTS operations and now closure activities have had on the nearest community to the facility – the Village of Piketon. Even a review of data collected by the DOE by Census Tract does not reveal the impact to the Village of Piketon as the Village represents a very small fraction of the land area that constitutes Census Tract 9523.

In real terms, however, the Village of Piketon has borne the greatest burden from both the operation and now the shutdown of the PORTS facility. During times when the PORTS was fully operational, the Village of Piketon provided sewer and water supply facilities from the expected increased population as a result of PORTS. These facilities were sized for a population much larger than currently exists at PORTS. The impact of job losses and PORTS shutdown is that these facilities are now both old and in need of repair as they have infiltration and infill problems, and they are also more costly to maintain because the system is now oversized for the current needs of a much smaller population.

#### **Environmental Impacts**

The Village of Piketon's comments on environmental impacts associated with the conveyance of real property at the PORTS facility are based on information included in the EA report, environmental documents prepared for the PORTS facility and the DOE Guidance entitled "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements Second Edition December 2004 U.S. Department of Energy Environment, Safety and Health Office of NEPA Policy and Compliance." The Village has copied relevant excerpts from the DOE Guidance in bold and italics print which is then followed with a comment and/or a comment and an excerpt from a DOE environmental document.

Page 2 of the DOE Guidance states that "Proposals with clearly small environmental impacts usually will require less depth and breadth of analysis either in identifying alternatives or analyzing their impacts (though the analysis still must satisfy all NEPA requirements). Application of the sliding-scale approach is not, however, a rationale for preparing an EA (even a complex EA) rather than an EIS for a proposal with potentially significant environmental impacts." The Village of Piketon's contends that DOE is incorrectly applying the sliding-scale approach with respect to the PORTS facility. We believe that the PORTS site has known significant environmental impacts to the soil and groundwater media, and numerous buildings are also contaminated with various metals, nuclear waste, PCBs, organic solvents, and other documented contaminants.

By way of example, the groundwater contamination on-site has reached the Berea sandstone, the regional aquifer. Groundwater testing data from the report entitled "U.S. Department of Energy Portsmouth Gaseous Diffusion Plant Annual Site Environmental Report – 2014 Piketon, Ohio reveals that elevated concentrations of Trichloroethene (TCE) in the Berea sandstone as high as 2,000 ug/l. The Safe Drinking Water Act (SDWA) Maximum Contaminant Level (MCL) for TCE is 5 ug/l.



Figure 4. TCE groundwater concentrations in the Gallia and Berea formations

Numerous environmental studies have documented the difficulty in remediating TCE and like Dense Non-Aqueous Phase Liquids (DNAPL) in groundwater. According the US Environmental Protection Agency (EPA), the difficulty in remediating DNAPLs in groundwater is due to the chemicals limited ability to dissolve in water and elevated toxicity to humans at very low concentrations. According to EPA, "These two physical characteristics mean that when released into the environment in sufficient

quantity, they can move through soils and groundwater until they encounter a sufficiently resistant layer that will impede further mass vertical movement and allow the liquid to pool. Depending upon the nature of the release, the movement through the subsurface soils can be quite complex as the liquid follows the path of least resistance. For example, soils considered homogenous often have subtle differences in layering that can cause a DNAPL to run and drop many times, creating a complex of thin horizontal and vertical ganglia. Both DNAPL soil residuals, which are the most common form of contamination/spill encountered, and pools become slowly dissolving sources of groundwater and soil vapor contamination. In addition, low conductivity areas into which the DNAPL mass/or and the dissolved-phase plume have diffused or migrated can in turn become sources of low-level contamination after the DNAPL mass has disappeared....While the solubilities of these chemicals are very low (often hundreds to low thousands of parts per million), the level at which they can present a human health or ecological risk is considerably lower (few to hundreds of parts per billion)."

The fact that the TCE DNAPL has migrated into the Berea sandstone regional aquifer - a term used by DOE - suggests to the Village of Piketon that it will be extremely difficult for DOE to remediate the groundwater in this aquifer to the EPA Superfund standard of care in section 300.430 (a)ili (F) of the National Contingency Plan (NCP) which is "EPA expects to return usable ground waters to their beneficial uses wherever practicable, within a timeframe that is reasonable given the particular circumstances of the site. When restoration of ground water to beneficial uses is not practicable, EPA expects to prevent further migration of the plume, prevent exposure to the contaminated ground water, and evaluate further risk reduction." Under either standard of care cited in the NCP for the protection or restoration of the groundwater media, the Village of Piketon finds that it will be extremely difficult for DOE to meet this standard in the next 30 years because the contamination is now so deep in the Berea formation to make it impossible for DOE to dig out the source material as it has indicated will occur with the TCE contamination in the shallower and overlying Gallia sandstone aquifer. As a consequence, DOE will have to use less intrusive measures such as the traditional pump and treat program currently inplace and injection of oxidants and microbes to reduce TCE contaminant levels. These measures have a limited benefit because of the very difficult problem of dispersing chemical treatments to remediate an aquifer through the annulus of one or more treatment wells. The practical experience of groundwater remediation practitioners is that the inability to control or direct the chemical treatment dispersants limits the ability of the treatment to remedy the DNAPL contamination in the aquifer system.

DOE has also documented the existence of 13 legacy landfills that account for at least 101 acres of land area. DOE concedes that these landfills were closed under regulatory standards that are not deemed protective in 2017, and that they are uncertain of the waste types that were buried in them. In addition, DOE has plans to construct a 300-acre OSWDF on PORTS land for the disposal of low-level nuclear waste and hazardous waste from facility operations which in of itself satisfies the standard of potentially significant environmental impacts.

Page 3 of the DOE Guidance states that DOE should "Provide information that a concerned citizen might want, keeping in mind that concerned citizens may need evidence for conclusions that seem obvious to the preparers." As stated further below, DOE has not provided in either of the two RODS relevant information on soil contamination or the quality of on-site groundwater at PORTS. Soil and

groundwater data is included in the RI/FS report; however, the complete assessment of risk to receptors from these environmental media is not included in the RI/FS and must be found in the RCRA Corrective Action documents. DOE understands that an enormous number of environmental studies and remedial actions have been undertaken at the PORTS site. Yet, in order to develop a complete understanding of the scope of work completed and work still to be completed relative to this EA report, the concerned citizen would literally have to read through at least 5,000 pages of technical reports. The Village believes DOE should prepare a more comprehensive EIS report of land transfer that the concerned citizen can readily access and understand the breadth of issues.

On page 3-20 of the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that it "understands the public's desire for improvements to the existing infrastructure to help reindustrialization. The scope of the selected remedy includes the potential removal of essentially all man-made improvements supporting the gaseous diffusion plant (GDP), including site rail, roads, power, and water treatment systems. However, DOE is committed to work with the community, including the Southern Ohio Diversity Initiative, to identify those opportunities where infrastructure can cost effectively remain behind after cleanup is complete. It is important to note that DOE has not currently been appropriated, or expects to be oppropriated, any funds that would allow DOE to spend those funds on maintaining or upgrading existing infrastructure solely for the purpose of reindustrialization by future users of the facility after transfer. DOE's appropriations are for the purpose of cleaning up the GDP. With that said, the reasonably anticipated future land use, i.e., reindustrialization after transfer, is a vital component of the overall cleanup approach." This information is not included in the EA report and is relevant to understanding the likelihood of the GDP ultimately being transferred to a third party for reindustrialization. Essentially, the communities surrounding the PORTS facility have no guarantee that DOE will receive funding to maintain infrastructure that is a critical component to supporting reindustrialization of the facility.

Page 8 of the DOE Guidance states that "Cumulative actions" are those that when viewed with other actions proposed by the agency have cumulatively significant impacts and therefore should be discussed in the same EIS. "Similar actions" are those that when viewed with other reasonably foreseeable or proposed agency actions have similarities that provide a basis for evaluating their environmental impacts together, such as common timing or geography. Also, Page 8 of the DOE guidance provides clarity on the interrelationships of these actions, "Cumulative, connected, or similar actions should not be confused with cumulative impacts, which result from the past, present, or reasonably foreseeable actions of any Federal or non-Federal agency."

The Village of Piketon believes that DOE seeks to undertake "similar actions" at the PORTS facility that has experienced cumulatively significant impacts. DOE has done an outstanding job of documenting the environmental degradation of the environmental media and buildings since the 1990s. These actions taken as a collective of actions constitute significant environmental impacts and, therefore, warrant completion of an EIS.

Page 16 of the DOE Guidance indicates that an EIS should discuss:

- direct and indirect effects
- possible conflicts between the proposed action and the objectives of Federal, regional, state, local, and tribal land use plans, policies, and controls...

Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are reasonably foreseeable effects caused by the action that occur later in time or farther in distance (40 CFR 1508.8).

The Village of Piketon position is that the EA report does not provide sufficient information to quantify direct and indirect effects from the closure of the PORTS facility and the post closure care of the OSWDF. According to Page A-33 of the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "Postclosure care must begin after closure and continue for at least 30 years after that date. The Director may shorten or extend the postclosure period." The Village is aware of DOE's position of being responsible for post closure care in perpetuity; however, we believe DOE is better served by establishing post closure care trust fund for just the OSWDF. This is a common practice at NRC, and RCRA C & D landfills. The fact that a trust fund has not been established for the OSWDF is a direct impact that should be documented in this EA and in the EIS that we support being completed.

The Village of Piketon also believes that DOE has not thoroughly evaluated the cumulative impacts of the environmental investigations and remedial actions of environmental media and buildings as well as the impact of construction of the OSWDF on our local land use plans, policies and controls. The extended period of time to complete remediation of contamination at the PORTS site – estimated by DOE to be in excess of 12-years since the demolition of process buildings and complex facilities is expected to occur over a 12-year period alone – suggests to the Village of Piketon that the DOE has adequately accounted for in this EA the indirect effects to our socio-economic condition. We have documented in the socio-economic section of our response document the significant adverse impact the PORTS facility operations has already had on our economic standing and quality of life. We believe DOE needs to undertake a much more robust evaluation of the impact of current and future PORTS operations as well as the protracted schedule for site remediation on the Village of Piketon.

Page 20 of the DOE Guidance states that "In general, use available data for an EA. If data needed to quantify impacts are not available, qualitatively describe the most relevant impacts. Be aware that inability to satisfactorily characterize an important impact in an EA likely will render it inadequate to support a finding of no significant impact."

In reviewing the two PORTS RODS we note several instances where data is needed to quantify impacts. The lack of data reinforces our position that DOE should not issue a FONSI and instead should complete an EIS for the PORTS facility. The following are relevant excerpts from the two RODS that support the Village's position.

Page 1-3 of the D&D ROD indicates that additional characterization is needed to support the remedial design and other criteria, "The selected remedy includes the following key elements: ...Requires

additional building characterization to be performed, as needed, to support remedial design, develop worker safety protocols, and facilitate segregation of waste streams and waste disposition planning. The amount of characterization will depend on the historical use, available process knowledge, and the anticipated disposal facility. An appropriate amount of characterization will be specified during the remedial design phase and such remedial design plans will be submitted for Ohio EPA concurrence and/or approval, as applicable."

On Page 1-6 of the D&D ROD, DOE asserts that "Support of characterization activities in the process buildings that began during the Waste Disposition Project RI/FS will continue under the Phase 1 Sampling and Analysis Plan for the Process Equipment Characterization in Support of the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plan, Piketon, Ohio (DOE 2014) until such time as Ohio EPA concurs with the associated post-ROD RD/RA work plans or other documents, as appropriate."

On Page 2-40 of the D&D ROD, DOE states that "Chemical-specific ARARs provide health- or risk-based concentration limits or discharge limitations in various environmental media for specific hazardous substances, pollutants, or contaminants. The scope of this action is D&D of buildings/structures and infrastructure and does not include remediation of environmental media. Therefore, no chemical-specific ARARs are triggered." Neither the D&D ROD, nor the Site-Wide Disposition Evaluation ROD clearly addresses contamination to environmental media such as the soil and groundwater. The public must review the RCRA Corrective Action files in order to develop an understanding of the scope of investigation and remediation undertaken to date. The complexity and breadth of the PORTS facility environmental investigations suggests to the Village of Piketon that DOE should have at a minimum included in the EA a more comprehensive reporting on environmental media sampling, and also suggests that DOE EA report does not fulfill the criteria for issuance of a FONSI.

On Page 1-4 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that the On-Site Disposal remedy "Requires a final WAC that meets all ARARs and is in compliance with the DFF&O for any constructed OSDC. The Ohio EPA-approved WAC consists of seven components... Several of the components (3 through 7) of the final WAC will require refinements after the final design is completed. Such refinements for these WAC components will be reviewed and approved by Ohio EPA in future OSDC-related regulatory documents as required by the DFF&O." The inability of DOE to provide final WAC does not satisfactorily characterize an important impact in an EA per the Guidance.

On Page 2-8 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that it is in the "process of completing RFIs for various solid waste management units that were deferred." This statement reflects that DOE cannot quantify the impacts of these sites in the EA and, therefore, cannot meet the standard in the guidance of satisfactorily characterizing an important impact.

On Page 2-9 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "Whenever excavation and/or disposal of non-DFF&O waste (Categories RC-2, RC-3, RC-4) is discussed in this document, whether in terms of additional waste or fill, it is to be understood that additional authorization/approval, as applicable, would be required to undertake this activity." This statement also reflects that DOE cannot quantify the impacts of these sites in the EA.

On Page 2-30 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "Because the waste disposition decision made in this ROD is not determining a need to remediate mobile source material, liquid or drummed buried waste, or highly toxic soils, the concept of principal threat wastes does not apply to this decision." This statement again reflects that DOE cannot quantify the impacts on environmental media in the EA.

On Page 2-38 of the ROD for the SITE-WIDE WASTE DISPOSITION EVALUATION PROJECT, DOE states that "The existing landfills inside Perimeter Road are one of the key potential sources of contaminated fill (RC-3). Additional characterization specified in future plans will be conducted to support the excavation of the landfills and to determine WAC compliance of the material excavated. The new data and other information collected will be evaluated to determine CAMU eligibility as well as if there are additional PHCs in the landfill waste." The disposal of land (i.e., existing landfills) to a third party cannot occur until additional characterization and remediation is completed.

#### Conclusions

Based on the foregoing statements conveyed in DOE RODS for the PORTS site, The Village of Piketon cannot support a FONSI. It is clear to us that there is much uncertainty with respect to the scope, timing and funding of required remediations. As a consequence, DOE has failed to make the case for issuing a FONSI for the conveyance of property in this EA report. We respectfully request that DOE prepare an EIS for the PORTS site that addresses all the concerns raised in this response document.

February 17, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, OH 45661

RE: Draft Environmental Assessment: Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio (DOE/EA-1856)

To Whom It May Concern,

The mission of the Ohio Department of Health is to protect and improve the health of all Ohioans. This mission is fulfilled, in part, by ensuring the requirements of the Ohio Revised Code, and the rules promulgated by the Ohio Administrative Code, are met.

ODH has completed its review of the Draft Environmental Assessment, and has found the industrial use risk assessment criteria used by DOE does not meet the standards of protection required by the Ohio Revised Code.

Placing restrictions on the use of a property, such as industrial use, is not consistent with the unrestricted use criteria promulgated in Ohio Administrative Code (OAC) 3701:1-38-22. Ohio's release criteria have been established to ensure the public does not receive greater than 25 millirem per year of dose from all exposure pathways including groundwater. Included in the unrestricted use criteria in OAC 3701:1-38-22(B) is the requirement to use the groundwater exposure pathway for dose risk evaluation. DOE specifically excluded the groundwater pathway in the Draft Environmental Assessment.

A line by line evaluation is not being provided, however examples of inconsistencies with Ohio's regulations are given below:

In Section 2.1.1, page 9, DOE provides a list of anticipated future uses for the site. For risk modeling, the uses listed would be included under the industrial use modeling scenario. Ohio Administrative Code (OAC) 3701:1-38-22(B) only allows unrestricted use; limiting property to industrial use is in effect placing restrictions on the site. For properties released with restrictions, OAC 3701:1-38-22(E) requires a radioactive materials license to ensure that any residual radioactivity will not pose a significant threat to the public's health and safety.

OAC 3701:1-38-22(E) Sates:

(E) When a decommissioning with restrictions is proposed by a licensee, a decommissioning possession only license is required to assure that the provisions of the decommissioning plan as approved by the

director remain effective. The license will contain a condition that the director will not require further cleanup unless he or she determines that the criteria of this rule or terms of the license were not met or that residual radioactivity at the site could result in a significant threat to public health and safety.

In order for a license to be issued, the requirements of OAC 3701:1-38-22(D) must be met. OAC 3701:1-38-22(D) states:

(D) A licensee may decommission a facility and maintain a decommissioning possession only license using alternate criteria greater than the dose criterion specified in paragraph (B) of this rule, provided that the licensee:

(1) Provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than the one millisievert (one hundred millirem) per year limit set forth in this chapter, by submitting an analysis of possible sources of exposure;

(2) Has employed, to the extent practicable, restrictions on site use in minimizing exposures at the site;

(3) Reduces doses to ALARA levels, taking into consideration any detriments, such as traffic accidents expected to potentially result from decontamination and waste disposal; and

(4) Has submitted a decommissioning plan or license termination plan (LTP) to the director indicating the licensee's intent to decommission in accordance with rule 3701:1-40-18 of the Administrative Code, and specifying that the licensee proposes to decommission by restricting use of the site. The licensee shall document in the decommissioning plan or LTP how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice.

In seeking such advice, the licensee shall provide for:

(a) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

(b) An opportunity for a comprehensive, collective discussion on the issues by the participants represented; and

(c) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and disagreement among the participants on the issues.

(5) Has provided sufficient financial assurance in the form of a trust fund to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site.

2) Section 2.1.1, page 10, DOE states "For any uses outside the bounds evaluated in this EA, DOE may transfer the property and place conditions in the deed that require the transferee to obtain all necessary approvals for the use of the real property."

Placing restrictions on property use does not meet the unrestricted use criteria in OAC 3701:1-38-22(B). As explained in the first comment, OAC 3701:1-38-22(E) requires a radioactive materials license, not deed restrictions, to ensure that any residual radioactivity at a site will not pose a significant threat to the public's health and safety.

3) In Section 3.4.2.1, discussion of groundwater impacts from the proposed action, DOE states "Use of groundwater directly beneath DOE property would be prohibited as a condition of the deed for title transfer. The deed restriction would ensure the protection of human health by preventing exposure to contaminants that could potentially be present in groundwater."

OAC 3701:1-38-22(B) specifically requires drinking water from ground water sources be used in the total effective dose equivalent evaluation. As such, DOE's risk assessment does not adequately demonstrate the property will not cause harm from radiological exposure to future owners in accordance with Ohio's regulations.

If you have any questions or comments, please contact Stephen Helmer, Program Administrator or Michael Rubadue, Senior Health Physicist at (614) 644-2727.



From: Craig Galloway [mailto:gal\_lo\_way@yahoo.com] Sent: Friday, February 17, 2017 4:02 PM To: EAComments Subject: Concerns

Hello....I am a resident of Piketon. I grew up here, my family is from here.... and my children will grow up here. I have many concerns regarding the burial of nuclear waste in this area....not only for me and my family but the local wildlife. Has the ODNR been made aware of this potential project? Should they be made aware? What is at risk for the hunters that harvest game from the surrounding area?

This project will most certainly degrade the value of this area to anyone potentially wanting to locate here. The area is already in dire shape. Has any thought been given about investing in other projects to help the area if this goes through? Possibly the DOE investing in a solar farm for the area. Putting the Village of Piketon on a Smart Grid? This surely would be a positive thing for this area if something so negative as burying nuclear waste in our backyard. Present us with options of help and a positive future for this area instead of burying waste and leaving us to deal with the aftermath that is possible if this site is a go. This will impact us and the area 100%

**Craig Galloway** 

Comment Document #17

From: flint sparks [mailto:flint.sparks@gmail.com] Sent: Friday, February 17, 2017 11:12 PM To: EAComments Subject: Piketon Cleanup

The Piketon uranium enrichment plant has contaminated nearly everyone I know in this area. Most people have either enlarged thyroids or tumors growing on them. It is shocking that there seems to be an effort in place to silence this information. The government should be quantifying the number of people contaminated and gauging the extent of their damage.

Another point is that the present cleanup is allowing breeding age females to come into contact with toxic substances. This cannot be good and is creating an extensive liability in the future. A cleanup in Piketon will never produce a safe and viable commercial district. It is just a government make work project and an expensive one at that. There is quite a bit of local property that could be developed around Piketon and is not, because there is no demand for it. It would be better to just quarantine the area.

Stephen C Sparks

Franklin Furnace OH 45629



The comment is on the attachment, not the link at the bottom.

-----Original Message-----From: mbsbookscanstation@gmail.com [mailto:mbsbookscanstation@gmail.com] Sent: Saturday, February 18, 2017 10:55 AM To: EAComments Cc: cahall.diana6849@gmail.COM Subject: doe/ea-1856

Hello, The attachment is the image(s) scanned by BookScan Station. Thank you. http://www.bookscanstation.com U.S. Department of Energy

P.O. Box 700

Piketon, Ohio 45661

#### eacomments@fbports.com

February 16, 2017

Re: DRAFT ENVIRONMENTAL ASSESSEMNT: CONVEYANCE OF REAL PROPERTY AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO (DOE/EA-1856) Public Comment

÷

The Environmental Assessment (EA) divides the total DOE reservation minus 100 acres set aside for a long term waste disposal facility into two large areas, one area outside the Perimeter Road consisting of about 2,500 acres and the other area of 1,200 acres inside the Perimeter Road. The 1,200 acres inside the Perimeter Road is presumably to be devoted to reuse and industrial development. The process of industrial development supposedly begins with an 80 acre tract DOE is in process of transferring to Southern Ohio Diversification Initiative (SODI). The 2,500 acre area outside Perimeter Road has the onsite, waste disposal facility (OSWDF) closed landfills, and burial grounds. What does DOE envision for future use of this portion of the former federal reservation? How many acres of the 2,500 total are now in closed landfills, burial grounds, and other disposal areas? Will DOE use a categorical exclusion to transfer land adjoining disposal areas? Has DOE developed a 10 Year Plan for the Ports Site? What process is used by DOE for transfer of land that SODI doesn't want?

The 80 acre land transfer is supposedly the beginning of reuse and industrialization on the Portsmouth Site, yet EA doesn't mention the 80 acre parcel in process of being transferred in any of its 81 pages . EA is obviously a site wide decision-making document based upon Portsmouth being designated a Closure Site. Why are these basic facts not made clear to members of the public who wish to offer comment? National Environmental Policy Act (NEPA) mandates opportunity for participation in agency decision-making process by a fully informed public. This EA was so confusing to me that I pursued answers on my own and actually found some explanation in PROTOCOL FOR THE ENVIRONMENTAL REGULATORY PROCESSESS FOR THE TRANSFER OF REAL PROPERTY AT THE U.S. DEPARTMENT OF ENERGY PORTSMOUTH AND PADUCAH SITES, VOLUME 1: UNCONTAMINATED PROPERTY (March 2016). One of the many interesting items of information that this document provided was its date of issue, March 2016. The Site Specific Advisory Board (SSAB) voted upon a request to DOE to designate Portsmouth a Closure Site, 7 months or more after DOE had already declared it a Closure Site.

On page 73 of EA under "CUMULATIVE IMPACTS BY RESOURCE AREA " the other regional industrial developments are in the process of being developed. Cumulative impacts from all actions on land use would be minimal." What are the regional industrial developments? If unknown to DOE how can DOE know the impacts would be minimal?

On page 76, paragraph one, please explain what are the "five other actions" claimed to have no adverse cumulative impacts of minority or low-income populations? From paragraph heading "Waste

Management" what are the projects that could occur in the same timeframe in the region thereby creating "potential adverse cumulative impact on other municipal and/or commercial landfills in the region?"

All public agencies are directed to avoid actions that could foreseeably result in loss of public trust and confidence. DOE needs to reveal the total plan for the PORTS Site. At minimum DOE needs to reveal the plan for the 80 acres being considered for transfer at this time. It is not credible for DOE to claim not to know what type of facility or facilities are to be constructed on the 80 acres since Protocol Document under "Phase 2-Proposal Review Phase" states "The proposal is reviewed to see if it offers a 'good fit' for the site. At this time PPPO determines if the proposal is in the best interest of the Government." The next paragraph concludes with "Transfer processes would not proceed for proposals found not to be in the best interest of the Government." (PROTOCOL FOR THE ENVIRONMENTAL REGULATORY PROCESSES FOR THE TRANSFER OF REAL PROPERTY AT THE U.S. DEPARTMENT OF ENERGY PORTSMOUTH AND PADUCAH SITES, VOLUME 1: Uncontaminated Property, page 6.) What types of facility or facilities are planned for the 80 acre land transfer to SODI? It appears me that a facility which involves 1,100 degree heat is likely some kind of Smelter, but I shouldn't need to offer a best guess. I should be informed.

I am especially concerned that use of categorical exclusion (CX) for property transfers will result in environmental contaminants and health risks being ignored or overlooked. "Some real property may be transferred for the same or similar uses (e.g. office space or industrial development or previously developed land), it is possible in those cases to use a categorical exclusion (CX) to meet the requirements of NEPA found in respective appendix to 10 CFR 1021." (IBID.) What would be considered a similar use for a conversion facility, a uranium centrifuge enrichment facility, or the site where the former uranium processing buildings once stood after D&D is completed? The use of categorical exclusion could result in one polluting industry replacing another and clean up an exercise in making conditions better just to make them worse again.

I have had difficulty understanding the implications of DOE/PPPO actions in these impending property transfers and particularly, in this EA. I would appreciate DOE providing answers to my questions. Thank you for opportunity to comment.

Sincerely,

Diana Cahaee

Diana Cahall

Sardinia, Ohio 45171

Comment Document #19



From: Elizabeth Beekman [mailto:liz\_bee5@yahoo.com]
Sent: Saturday, February 18, 2017 4:00 PM
To: EAComments; Wiehle, Kristi PPPO; joel.bradburn@lex.doe.gov; Edwards, Robert; craig.butler@epa.ohio.gov; maria.galanti@epa.ohio.gov; john\_ryan@brown.senate.gov; steve\_kittredge@portman.senate.gov; john.kasich@ohio.gov
Subject: Comments on the Draft Environmental Assessment for the Piketon, Ohio DOE Site

To whom it may concern:

As a concerned citizen and fence line neighbor, we appreciate to opportunity to comment on the Draft Environmental Assessment. Below are our comments on the Draft Environmental Assessment document dated January 4, 2017 for the DOE site in Piketon, Ohio. Please send the response/answers to these questions to my email address: <u>liz\_bee5@yahoo.com</u>.

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

February 15, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661 Phone: 888-603-7722 Email: eacomments@fbports.com

To whom it may concern:

As concerned citizens and fence line neighbors, we have reviewed the Draft Environmental Assessment document dated January 4, 2017. We attended the January 24, 2017 public meeting and expressed our disappointment that DOE did not have a public meeting since November 2014. During this greater than two year period when comments were due for the Record of Decision (ROD), why was there not a public meeting to present the ROD and a responsiveness summary? We again appreciate the opportunity to comment on the Draft Environmental Assessment. Our comments are as follows:

#### 1.2 Background

- The document states "Most of the facilities are planned to be removed under DOE's D&D program..." What is planned with the remaining facilities?
  - o Will some of the structures remain standing?
- This section also discusses the waste material will be packaged for disposition. What
  packaging requirements will need to be met?
  - Also, if this material is slated for final disposition in the onsite disposal facility, what are the waste acceptance criteria (WAC) that will have to be met?
    - How will the onsite WAC requirements compare to offsite disposal facilities?
       We would assume the standard would be similar.
- Why would the DOE want to create an additional 300+ acres of unusable land, which has been dedicated to the on-site waste disposal facility, which cannot be reused and could inhibit the reuse of the surrounding land?
- The on-site disposal facility reduces the long term value of residential property in the area. In all of the documents that we have read we have never seen this issue addressed. The original agreement of this property was that the land would be left as it were found, not with a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill in its wake. Although this document seems to discount that there are real people living in this area, what document will address the long term effects of the residents, such as health effects and property value loss in the area, the negative impacts to the tax base that affect school funding, health department funding, etc.?

- 1.3 Scope of This Environmental Assessment
  - Has the study taken into account the potential interest in the area if there is a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill verses removing the waste from the reservation?
  - When will the impacts to the residential property be assessed?
    - What document can be expected to address the concerns along with long term health impacts to this community?
- 2.1 Proposed Action
  - In the event of property transfer, would SODI receive first preference to selling of leasing the property?
    - Would other potential interested parties be offered the same pricing as SODI?
    - What does SODI do in the community and where does the money go that is not spent within the community?
  - Will the 2 acres located in Piketon be considered for sale? Or will the land be given to the Village of Piketon?
  - The document refers to "Real property outside of the centrally developed area...eligible for transfer sooner." Please provide examples of this type of property.
  - Our comments that were submitted on March 10, 2015 on the Record of Decision document referenced in this document were never addressed. To date, we have not received any correspondence or answers to our questions. Please provide me with this information as originally requested or let me know when I can expect this information.
  - What levels of soil contamination are anticipated? As a fence line neighbor, we would assume DOE would expect a clean closure with soil samples to reflect clean closure prior to transfer of any property.
    - If this is the case, please provide the clean closure levels that DOE would be expecting to achieve.
    - o If this is not the case, please provide the level acceptable to transfer property.
  - When an environmental due diligence review is completed; will this be available for review by the public prior to each transfer?
  - Seeing the DOE will evaluate each transfer request on a case by case basis, what stipulations
    or requirements will be used?
  - After a 30 year period, what will happen to any un-transferred property?
    - Will DOE retain the property ownership?
    - Will DOE continue to do any needed maintenance or security on an ongoing basis?
  - If new soil is added to the property to be used as fill, would this take place after clean closure values are obtained? If needed, where will the fill material come from...onsite or offsite?



- 2.1.1 Land Use Scenarios and Assumptions
  - Was the information obtained by Ohio University assuming the site would obtain clean closure prior to any future development?
    - Does the information take into consideration there would be a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill on the property?
    - o Does it assess any health impacts to potential future employees on the site?
    - o Has there been any real potential interest or this all speculation?
  - Will the property be clean but still have the contaminated ground water plumes at the time of transfer?
  - The document discusses deed restrictions. What type of deed restrictions may be required?
    - What are the impacts of any deed restrictions on potential future occupants?
  - What are the site-wide environmental restoration cleanup goals?
- 2.2 No Action Alternative
  - Who decides whether this property can be transferred or no action and retained by DOE?
     Is this a decision of Ohio EPA?
- 2.3.2 Use of Property in a Manner Not Consistent with Expected Future Use
  - Please define the differences between residential use and industrial use cleanup standards.
     Health impacts for extended use of the site must be considered.
- 3. Affected Environment and Environmental Consequences
  - The document references the 2014 Annual Site Environmental Report and the 2015 Annual Groundwater Report. I would like to request a copy of both of these reports. Please provide.
- 3.1.1.1 Land Use
  - In reference to the ROD, many comments were made on this document. Please provide a copy of the questions and answers from this document. Also please provide a copy of the WAC.
  - With the decision to move forward with the onsite waste landfill, who was responsible for making this decision?
  - Who will regulate a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill? As you know there are many regulatory agencies with substantially different regulations in which regulates each type of waste.
  - Who will provide the oversight to all of the extremely different wastes going into the same landfill?
  - How will the public be protected?

Why does SODI have rail access to the DOE reservation?

## 3.2.1.2 Air quality

- What work practices are used to control asbestos emission to the surrounding community?
- Was there any asbestos waste shipped offsite in 2015 or 2016?
- Please provide Greenhouse Gas Emissions information for 2015.
- The document references air quality samples collected form 15 ambient air monitoring stations. Are these sample results available to the public?
- Please provide a list a radionuclides that are evaluated or tested for in the air monitoring.
- With the detection of a number of radionuclides offsite, has there been any studies of
  potential cases of rare cancers in the community, especially in the area of Shyville Road or
  Shuster Road that could be tracked back to the site?
  - How will the large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill being in close proximity to that area affect the community?

## 3.2.2.1 Proposed Action

 There is a reference that commercial businesses and industries are anticipated to be recruited. Who would be doing the recruiting for these businesses?

### 3.3.1.1 Geology

- The bedrock is discussed in this section. The question was posed in our comments on the ROD asking if the bedrock was cracked. We have never received the answer to this question. Is the bedrock cracked? Please provide information on the determination whether the bedrock is or is not cracked.
- How would an earthquake affect the site? If the bedrock were cracked would there be further damage?
  - How did the recent nearby earthquakes in December 2014 and February 2015 affect the bedrock?

## 3.3.1.2 Soils

 With the soil samples being collected annually, was the soil tested for TCE? If so, what were the results?

#### 3.4.1.1 Surface Water

- What remediation efforts will be taken with the stream that leaves plant site that is contaminated and posted with radioactive signs as the water leaves plant site?
- Is the storm water going off site tested? If so, are the results available to the public?

B-63

Where is LBC-SW03 located?

- Have there been any additional detection of radionuclides including transuranics since 2014? If so, what are the results?
- o What will be done about the detection of Pu239/240 offsite?
- Where are LBC-SW01, LBC-SW02, LBC-SW03, LBC-SW04, WDDSW01 and WDD-SW03 located?
  - o What is being done to mitigate the Tc-99 from going offsite in the surface water?
  - o When were these samples collected?
  - o Have the results been trending upward? Please provide the results.
- What do the results show of the breakdown of Uranium (U-233, U-234, U-235, U-238, and naturally occurring) detected?
- With the offsite contamination that is mentioned in this document, how can we or other concerned citizens in the area be included in the environmental monitoring program?

## 3.4.1.2 Groundwater

- Will all five contaminated groundwater plumes be cleaned up prior to any land transfer?
   O What clean numbers will be used?
- With the TCE contamination plumes going offsite, what steps are being taken to prevent the levels from going above the drinking water standards?
  - o What are the chances that this contamination will continue to increase offsite?
- What remediation steps are being taken other than pump and treat to control the groundwater contamination?
- · Have all water wells in the two mile radius been tested?
- · What constituents were tested on the drinking water?
- The document states that DOE has filed a deed notification to restrict the use of groundwater. Will this restriction ever be removed?
- Has it been considered that the drinking water from the offsite wells are used to water livestock?
- With such a small amount of TCE removed from the groundwater per year, what is the estimated timeframe for cleaning the groundwater?
- 3.4.2.1 Proposed Action
  - Is there an assumption that the groundwater will not be cleaned up prior to land transfer?
     If this is the case, what future actions will be taken to ensure offsite groundwater is not affected long term?
- 3.5.1.1 Terrestrial resources
  - What steps will be taken to protect the Indiana bat and the northern long-eared bat?

B-64

o Is there a population of either species on the reservation now?

- 3.5.1.3 Rare, threatened, and endangered species
  - How did the removal of the 200+ acres of potential habitat affect the endangered bat population?
  - Has there been a study conducted to see the effects of the runoff from the site and how it
    effects the threatened or protected fish population?
- 3.5.1.5 Environmentally sensitive areas
  - Will the environmentally sensitive areas be transferred or will DOE retain possession of these areas?
- 3.5.2.1 Proposed Action
  - Was the recommendation of the USFWS taken into consideration when 200+ acres of trees were removed for the large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill?
- 3.6.1 Affected Environment
  - The document states there were four prehistorical archaeological sites found; now there are three. It also states DOE developed mitigation measures to one of these areas. What mitigation measures have been taken or will be taken?
    - o Why could the destroyed prehistoric archaeological site not be avoided?
- 3.7.2.1 Proposed Action
  - This information is nothing but made up numbers used to make the document more positive, when in fact there is no basis for the information. What is the analysis from other closed DOE facilities? How much of those properties have been re-industrialized?
- 3.9.1 Affected Environment
  - As mentioned above, please provide a copy of the WAC for the OSWDF.
- 3.10.1 Affected Environment
  - The 2014 annual site environmental report states the current levels of certain radioisotopes are "low." What standard is "low" compared?
  - This report also states the data collected is consistent with the data collected in previous years. Please supply the data in order to define consistent.
    - Although the effect is stated to be minimal, what are the effects or potential effects?
  - What are the potential health effects of Trihalomethanes and VOCs?
    - o At what levels are these detected?
  - What actions are being taken to reduce the levels of PCBs?

- o What are the health effects to the public?
- 4.3 Cumulative Impacts by Resource Area
  - · What are the chances that the disposal cell leachate will go to the groundwater?
    - o What is expected to be in the leachate?
    - How often will the leachate be tested?
    - o How will it be known if the leachate enters the groundwater?

We are still extremely concerned at the potential of a large radioactive, hazardous waste, mixed waste, PCB, asbestos, solid waste landfill will be in our neighborhood. We have young children and are concerned for their health and future. We appreciate the opportunity to comment on the future of our community. Please respond with the answers to our questions to the following email address: <u>liz bee5@yahoo.com</u>.

Sincerely,

Elizabeth and Josh Lamerson Concerned Citizens and Fence Line Neighbors

Cc: Kristi Wiehle, Department of Energy Joel Bradburn, Department of Energy Robert Edwards, Department of Energy Craig Butler, Ohio EPA Director Rob Portman, United States Senator Sherrod Brown, United States Senator Brad Wenstrup, United States House of Representatives for District 2 John Kasich, Ohio Governor Cliff Rosenberger, Ohio House of Representatives for District 91, Speaker of the House Bob Peterson, Ohio Senator for District 17 Comment Document #20

From:	Teresa Mimter
To:	<u>EAComments</u>
Subject:	EA-1856: Draft Environmental Assessment (Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio)
Date:	Friday, February 10, 2017 7:56:41 PM

#### Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio

I am in support of the Proposed Action as outlined in section 1.1, and the defined proposed action within EA-1856: Draft Environmental Assessment (Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio).

I further recommend that Southern Ohio Diversification Initiative (SODI)who is the Federally Designated Community Reuse Organization (CRO) be the utilized for all such pending and future conveyances of property assets associated with the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio.

SODI has been the central agent within the region of influence and the surrounding 4 county area for the past 20 years, regarding numerous economic development programs and projects. SODI is engaged in existing discussions and has partnering arrangements as well as current grant funding to help facilitate existing end use objectives, as developed by the region of influence interests. SODI's board of directors is comprised of elected officials and community leaders within the region of influence and has ongoing working relationships with Ohio University who conducted the Future End Use survey and associated end use recommendations.

Simply stated SODI is the only organization positioned to assure the transferring of property back to the region of influence is executed fulfilling said interests, and postured to assure such interests are represented, while balancing the future land use objectives regarding the Portsmouth Gaseous Diffusion Plant and associated end use objectives. SODI was developed for this exact purpose, noting this EA-1856: Draft Environmental Assessment is largely based on current and past land transfer requests and the reason that this proposed action was developed.

Inclosing I support the proposed action to proceed with land transfer(s) at the Portsmouth site, as this will provide the opportunity to return assets back to the local community, fostering future economic development opportunities, while reducing the federal governments footprint and continuing long-term surveillance and maintenance mortgage costs.

Submitted 2/10/2017

Daniel J. Minter Lifetime resident of Pike County and former fence line resident, located at the current site of the (OSU Endeavor Center) SODI Vice Chairman Board of Directors (20 years) SSAB Board Member (7 years) Local Union Workforce Representative (15 years) From:Rick WarnerTo:EACommentsSubject:Statement of SupportDate:Thursday, February 09, 2017 2:15:10 PM

To Whom It May Concern:

I support the transfer of property to the SODI for their use in creating economic development opportunities centered on the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century.

The regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to re-industrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Support to Educational attainment
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private-Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

The safe and environmentally sound transfer of property back to the communities that supported the Cold War efforts provides the opportunities for the Community Reuse Organization to re-industrialize the site and avoid the negative impacts resulting from the completed DOE missions.

Respectfully,

Rick Warner

Rick Warner | *Manager, Planning & Integration* Innovative Solutions Unlimited, LLC





February 15, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

The Portsmouth Area Chamber of Commerce supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely,

wa Lisa Carver

**Executive Director** 



342 Second Street, P.O. Box 509, Portsmouth, Ohio 45662 Phone (740) 353-7647 Fax (740) 353-5624

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

# PIKE COUNTY BOARD OF COMMISSIONERS

Pike County Government Center \* 230 Waverly Plaza, Suite 1000 \* Waverly, Ohio 45690 (740) 947-4817 \* (740) 947-5065\* pikecountycommissioners@yahoo.com

Members of the Board of Commissioners Fred Foster, Chairman Blaine Beekman, Member Tony Montgomery, Member April Elliott, Clerk Angela Burggraf, Secretary

Susan Cange Acting Assistant Secretary Office of Environmental Management 1000 Independence Avenue, SW Washington D.C. 20585

Dear Madam Secretary,

The Pike County Commissioners are pleased to comment on our evaluation of the DRAFT ENVIRONMENTAL ASSESSMENT CONVEYANCE OF REAL PROPERTY OF THE PORTSMOUTH GAEOUS DIFFUSION PLANT IN PIKE COUNTY, OHIO. The transfer of land from the Department of Energy to the Southern Ohio Diversification represents much more to the people of Pike County than the number of acres involved.

The 2001 shutdown of the Gaseous Diffusion Plant created economic turmoil in Pike County. Jobs left, but the results of a half century of nuclear enrichment remained. The County banded together to make the best of the situation. A serious dialogue opened with the Department of Energy.

From those initial dialogues a series of critical facts evolved. First, we visited a number of other DOE sites and observed their cleanup issues. By comparison, we learned that the contamination at the Portsmouth site was not so severe that it could not be corrected. Second, there would probably be a number of industries that would be interested in the site once D and D was completed. That would obviously take time. In the meantime, a third factor would hopefully come into play. As certain areas are declared contamination-free, they can be turned over to the Southern Ohio Diversification Initiative for marketing as industrial sites.

Reindustrialization has become the key word in our negotiations with DOE. Pike County officials worked with a number of economic development specialists who were expert in the reclamation of Brownfield sites. The formation of the Joint Economic Development Initiative of Southern Ohio by the Fluor-BWXT economic development funds has provided money for projects in the four-county area. As a result of the extensive community participation in the PORTS FUTURE VISION, plan, a clear community buy-in has evolved.

It now appears we are about to reach the first milestone in reindustrialization with this land transfer. We have evaluated the relevant environmental impact study, agree with its findings and give our full support to a quick and timely transfer.

We view this as a very positive action for all Pike Countians.

Sincerely,

Fred Foster, Chairman

Blaine Beekman, Member

Tony Montgomery, Member

Cc: Senator, Sherrod Brown Senator, Rob Portman Representative, Bill Johnson Representative, Brad Wenstrup Southern Ohio Diversification Initiative Joel Bradburne, U.S. Department of Energy Dennis Carr, Fluor BWXT



919 7th Street • Portsmouth, Ohio 45662 • (740) 353-3025 • www.sciotohealthcoalition.com

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

The Scioto County Health Coalition supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socio-economic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to re-industrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

Regina Tipton, MS Executive Director regina@sciotohealth.com

Our mission is to improve the health and wellness of Scioto County residents through partnerships and programs



PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017



# UNITED ASSOCIATION

of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada Comment Document #25

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 McManus June 2017 General President

> Patrick H. Kellett General Secretary-Treasurer

> Michael A. Pleasant Assistant General President

Founded 1889 Letters should

be confined to

one subject

UA Local Union: P.O. Box 700 Piketon, Ohio 45661

**Environmental Assessment Comments** 

U.S. Department of Energy

Subject: Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

The Plumber and Pipefitters Local #577, Portsmouth, Ohio, support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

Robert E. C.C.M.

Robert E. Cole, Jr. Business Manager, Local 577



# Below is the information regarding submittal of comments:

### SUMMARY

•

DOE is preparing an EA that evaluates the potential environmental consequences associated with the proposed conveyance of land at the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio, for economic development purposes.

## PUBLIC COMMENT OPPORTUNITIES

Comments on the Draft EA should be submitted no later than February 18, 2017, by one of the following methods.

- By email: <u>eacomments@fbports.com</u>
- By mail: Environmental Assessment Comments, U.S. Department of Energy, P.O. Box 700, Piketon, Ohio 45661
- By phone: 1-888-603-7722

# DOCUMENTS AVAILABLE FOR DOWNLOAD

 JANUARY 3, 2017

 EA-1856: Draft Environmental Assessment

 Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio


ounty c

Comment Document #26

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

OFFICE OF COUNTY COMMISSIONERS

BRYAN DAVIS, Chairman MIKE CRABTREE CATHY COLEMAN

February 23, 2017

FFICIAL O COUNT Room 1, Courthouse, 602 Seventh Street

PORTSMOUTH, OHIO 45662 JENN KISH, Clerk ANNETTA NEWMAN, Deputy Clerk AMANDA HOWARD, Deputy Clerk

> Telephone (740) 355-8313 Fax (740) 353-7358

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

We, the Board of Commissioners of Scioto County, Ohio, support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region -
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses -
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of

Sincerely,

SCIOTO COUNTY BOARD OF COMMISSIONERS

Bryan Davis, Chairman

Mike Crabtree, Vice Chairman

athy Coleman

Cathy Coleman, Commissioner

"Scioto County - Somewhere Special" PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

Jerry Hall Jackson, Ohio Paul Haller Jackson, Ohio Ed Armstrong Jackson, Ohio

OFFICE OF JACKSON COUNTY COMMISSIONERS 275 PORTSMOUTH STREET JACKSON, OHIO 45640-1750 (740) 286-3301 FAX (740) 286-4754

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

As President of the Jackson County Board of Commissioners I wish to express my support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation.

These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

semittall Sincerely.

Jerry Hall President

DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017



RANDY R. HEATH, Mayor WILLIAM R. SHEWARD, Director of Public Service / Safety

**CITY OF JACKSON** 

MEMORIAL BUILDING 145 BROADWAY ST. JACKSON, OHIO 45640 (740) 286-3224 (740) 286-2201

February 22, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

As Mayor of the City of Jackson, Ohio I wish to express my support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation.

These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely, 4 R. Heath

Randy R. Heath Mayor



Jackson County Apple Festival Held Annually Third Full Week in September



DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

February 23, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

As Executive Director of the Jackson County Economic Development Partnership I wish to express my support for the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation.

These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely,

acol enne

Jennifer Jacobs

Jackson County Economic Development Partnership, 920 Veterans Drive, Suite A., Jackson OH 45640 Phone: 740-286-2838 Fax: 740-286-9641 E-mail: jennifer@Jacksonfrommty@doweenwcwww.joedb.com/2017



Jackson Area Chamber of Commerce

23

4 Broadway Street Jackson, Ohio 45640 740-286-2722 740-286-8443 (fax) www.jacksonohio.org

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

As Executive Director of the Jackson Area Chamber of Commerce I wish to express my support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation.

These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely,

andy Heart

Randy Heath Executive Director

234 Broadway Street Jackson, Ohio 45640 740-286-2722 740-286-8443 (fax) Www.jacksonohio.org









DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

**Environmental Assessment Comment** U.S. Department of Energy Piketon, Ohio 45661

We make it easu.

ockn

2-23-2017

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I. Mathew H. Setters support the transfer of property to the Southern Ohio Diversification Initiative (SODI ) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills -
- **Opportunities for small businesses**
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

matthe H Satter









PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/201









P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

ockn

We make it easy.

2-23-2017

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,





PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/20/06/14/

úΜ

glockner.com



DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6







P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

2-23-2017

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>MORAHEMS</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerel









PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/00/29/20 F7/TS





CHEVROLET



DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

2-23-2017

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,











DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

2-23-2017

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>AwDT Guochner</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

andy flockmen







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/2010/06/10/10/10





DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

ockner

We make it easy.

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, N = (Feffel) support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursult of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

Nol Freddy







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

2-23-2017







DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

We make it easy.

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

<u>Server</u> <u>hompson</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely, Buida Homps







ALL MAKE PARTS PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

2-23-2017



DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

2-23-2017

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>GREGORT</u> D. <u>GuideR</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017







DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

We make it easy.

**)CK** 

2-23-2017

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>TORD</u> <u>RAMEY</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017







DOE/EA-1856

FBP-ER-GEN-WD-RPT-0076

P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

We make it easu.

ockn

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>lony</u> <u>Krick</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

Tony Kricks







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

glockner.com

2-23-2017







DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6



P.O. Box 1308 • 4368 U.S. Route 23 • Portsmouth, Ohio 45662-6617 Phone: (740) 353-2161 • Toll Free: (800) 319-8660 Fax: (740) 351-2272

Environmental Assessment Comment U.S. Department of Energy Piketon, Ohio 45661

lockner

We make it easy.

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

I, <u>Ralph</u> (<u>Antree</u> support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides and avenue for the taxpayers to realize a return of their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Sincerely,

fl Cartee







PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

2-23-2017



From: Franklin J.C. Wallbrown [mailto:FJW@gmx.us]
Sent: Wednesday, March 01, 2017 1:19 PM
To: EAComments
Cc: hcomer@civitasmedia.com; tshearer@portsmouthoh.org; flewis@civitasmedia.com; tallen@civitasmedia.com; Dratliff@portsmouthoh.org; Dallen@portsmouthoh.org; Kwwjohnson@gmail.com; debbie@thesciotovoice.com; info@ourrevolution.com; feedback@tytnetwork.com
Subject: PORTS Independent Geological Assessment

Has there been an independent geological and/or environmental assessment of the Portsmouth Gaseous Diffusion plant for these purposes or the on-site waste disposal cell?

From:	EAComments
То:	<u>Henneberger, Amanda</u>
Subject:	FW: PORTS Independent Geological Assessment
Date:	Monday, March 06, 2017 6:36:56 AM

From: Derek Allen [mailto:DAllen@portsmouthoh.org]
Sent: Wednesday, March 01, 2017 1:48 PM
To: Franklin J.C. Wallbrown; EAComments
Cc: hcomer@civitasmedia.com; Tracy Shearer; flewis@civitasmedia.com; tallen@civitasmedia.com; Diana Ratliff; Kwwjohnson@gmail.com; debbie@thesciotovoice.com; info@ourrevolution.com; feedback@tytnetwork.com
Subject: RE: PORTS Independent Geological Assessment

#### Dear Mr. Wallbrown:

The Portsmouth Gaseous Diffusion plant is not located in the City of Portsmouth nor is it Scioto County. It is located in Pike County. You would have to contact Pike County or the federal governmental agency regulating the facility. I am unaware of the City of Portsmouth even having a document such as that of which you have described.

Sincerely,

Derek K. Allen, ICMA-CM City Manager City of Portsmouth 728 Second Street Portsmouth, Ohio 45662

Phone: 740.354.8807 Fax: 740.354.8809

From: Franklin J.C. Wallbrown [mailto:FJW@gmx.us]
Sent: Wednesday, March 01, 2017 1:19 PM
To: eacomments@fbports.com
Cc: hcomer@civitasmedia.com; Tracy Shearer <TShearer@portsmouthoh.org>;
flewis@civitasmedia.com; tallen@civitasmedia.com; Diana Ratliff <DRatliff@portsmouthoh.org>;
Derek Allen <DAllen@portsmouthoh.org>; Kwwjohnson@gmail.com; debbie@thesciotovoice.com;
info@ourrevolution.com; feedback@tytnetwork.com
Subject: PORTS Independent Geological Assessment

Has there been an independent geological and/or environmental assessment of the Portsmouth Gaseous Diffusion plant for these purposes or the on-site waste disposal cell?

From: Kerry Tague [mailto:Kerry.Tague@ohio.kdhs.us]
Sent: Tuesday, March 07, 2017 8:30 AM
To: EAComments
Cc: 'draaron@roadrunner.com'
Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

King's Daughters Medical Center Ohio supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected. The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing

Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Kerry Tague KDMC Ohio Business Development & Physician Relations (740)991-4422 office (740)991-6000 fax

------ This e-mail and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return e-mail, delete this e-mail and destroy any copies. Any dissemination or use of this information by a person other than the intended recipient is unauthorized and may be illegal. Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

# Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

<u>The Scioto County Career Technical Center</u> supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely,

hast

Josh Shoemaker, Central Office Administrator

Scioto County Career Technical Center



DOE/EA-1856 FBP-ER-GEN-WD-RPT-0076 Revision 6 June 2017

# **ADAMHS BOARD**

Alcohol, Drug Addiction, Mental Health Services Board of Adams, Lawrence, Scioto Counties Susan Shultz, Executive Director

### 919 7th Street Portsmouth, Ohio 45662-4028

Bobby Hamlin, Chairperson

Scioto County Office: [740] 354-5648 (also TDD) FAX: [740] 353-5327 SECURED FAX: [740] 354-2918 Toll Free: Voice: 1-888-354-5648 E-mail Address: alsbd@adamhsals.org World Wide Web: www.adamhsals.org

March 6, 2017

Environmental Assessment Comments U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Pike County, Ohio"

The Adams, Lawrence and Scioto Counties Alcohol, Drug Addiction and Mental Health Services Board support the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over half a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to the SODI provides an avenue for the taxpayers to realize a return on their investment in the development of this asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region:

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School.

We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio

Sincerely,

Susan Shultz



PORTS/REAL PROPERTY CONVEYANCE FINAL REV 5/06/29/2017

Susan Shultz, Executive Director

"Empowering residents to be mentally and physically healthy and to lead addiction free lifestyles"



-----Original Message-----From: draaron@roadrunner.com [mailto:draaron@roadrunner.com] Sent: Sunday, March 19, 2017 9:07 PM To: EAComments Subject: Public Comment on DOE/EA-1856 Importance: High

Environmental Assessment Comments U.S. Department of Energy O.O. Box 700 Piketon, Ohio 45661

Subject: Public Comment on DOE/EA-1856, "Conveyance of Real Property at the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio"

The Scioto County Health Coalition supports the transfer of property to the Southern Ohio Diversification Initiative (SODI) for their use in creating economic development opportunities in alignment with their strategic plans for the re-industrialization of the site. The operations at the DOE reservation have been a key contributor to the economic and socioeconomic stability of the region for well over a century, and the regulated methodology utilized to provide for the transfer of the land from the DOE to the SODI provides an opportunity for continued safe and environmentally responsible use of the assets that exist on the DOE Reservation. We are supportive of activities that ensure the safety and health of the plant employees and neighbors are protected.

The transfer of the land from the DOE to SODI provides an avenue for the taxpayers to realize a return on their investment in the development of the asset. Providing the SODI the opportunity to reindustrialize the site addresses many of the issues important to our region.

- Wealth creation through job creation
- Growth in economic development opportunities within the region
- Driving force for the pursuit of advanced educational and technical skills
- Opportunities for small businesses
- Development of leaders to serve within our local communities

The transfer of land to the SODI aligns with their goals of attracting private industry and developing Private Public Partnerships to create industrial opportunities on the reservation. These opportunities can align with the interests of the regional community as identified in the Public Outreach work performed by the OU Voinovich School. We strongly urge you to approve this transfer of property as you consider the positive impacts this will have on the economy of southern Ohio.

Aaron Adams, D.O., F.A.A.F.P. Kings Daughter's Medical Center-Ohio Medical Director Scioto County Health Coalition, Chairman

## **Andie Otto**

To:	
Cc:	
C	<b>.</b> .
Subjec	τ:

ecomments@fbports.com mickey99@ptd.net draft environmental assessment

U.S. Department of Energy P.O. Box 700 Piketon, Ohio 45661

April 19, 2017

Re: Draft Environmental Assessment: Conveyance of Real Property At The Portsmouth Gaseous Diffusion Plant In Pike County, Ohio (DOE/EA-1856) Public Comment

I have spent most of the last five weeks attempting to determine DOE intentions for the Portsmouth Site. It seems that the best explanation is the most obvious one. Beginning with this 80 acre transfer DOE plans to reindustrialize the 1,200 acre portion inside the Perimeter Road. The 80 acres most probably is destined for reuse/recycling of the 20,000 cylinders of depleted uranium currently in some stage of conversion to uranium oxide. DOE has explored the use of uranium for canisters and/or casks for high level radioactive waste storage and disposal since the mid 1990's. Do the plans for the 80 acres contain a research laboratory and/or visitor center? Has DOE addressed the health impacts to workers and the public from use of depleted uranium which is contaminated with transuranics? What happens to the "heels" at the bottom of the cylinders when the DUF6 is converted to uranium oxide? The conversion process leaves the "heels" in the bottom to the cylinders which contain a higher concentration of transuranics. What properties are currently proposed for future transfer to SODI which DOE PPPO has designated as Parcels 2, 3, and 4 and what use(s) does DOE intend for each of them? (PROTOCOL FOR THE ENVIRONMENTAL REGULATORY PROCESSES FOR THE TRANSFER OF REAL PROPERTY AT THE U.S. DEPARTMENT OF ENERGY PORTSMOUTH AND PADUCAH SITES, Volume 1: Uncontaminated Property, March 2016.) Does DOE or another party have plans to recycle contaminated steel at the Portsmouth Site for use in the manufacture of high level radioactive waste storage and/or disposal canisters? Are canisters or casks using DUCRETE, DUAGG, and/or Cermet presently approved as transport containers?

DOE intends to approve this 80 acre transfer based upon "the best interest of the government." (IBID) It seems rather obvious that reuse of DOE's considerable supply of depleted uranium at Portsmouth and Paducah, 800,000 metric tons, which DOE has been paying to convert, transport, and dispose as waste at Nevada National Security Site would save the government (DOE) considerable expense. Twenty thousand cylinders are currently on site at Portsmouth in process of being converted to uranium oxide. DU used as DUCRETE and DUAGG casks for shielding of spent nuclear fuel and high level radioactive waste storage has the potential to use DOE's entire inventory. Cost savings in production makes these casks economically attractive as an alternative to steel casks. "Preliminary design cost estimates indicate that DUCRETE and steel transportation and storage cask(s) could be sold for about \$500,000. compared to steel casks selling for over \$1

Million...." (NUCLEAR NEWS, December 2000.) DUCRETE casks require steel components to perform adequately during transport, but significant transport problems could be solved by limiting transport from inside Perimeter Road to the 2,500 acres outside Perimeter Road.

1

In January 2013 Idaho National Laboratory hosted a conference on Spent Nuclear Fuel Management that concluded with a draft report which recommended a used fuel demonstration project be conducted and that a U.S. Regional Interim Storage Facility Pilot be established. Shortly after the President's Blue Ribbon Commission recommended that DOE give "consideration of transport and storage of government owned used nuclear fuel and high level waste at a proposed interim storage facility." Is some sort of pilot and/or interim storage facility for DOE high level waste and spent nuclear fuel envisioned for Portsmouth 2,500 acres outside the Perimeter Road? As of April 10, 2017 DOE "Acquisition and Forecast Opportunities " website listed 42 separate sites and offices that expect to solicit and/or award contracts in the current fiscal year and beyond. This list did not include the Hanford and West Valley Sites which both have high level waste requiring management, as does Idaho National Laboratory Site.

Atomic Energy Act of 1954 and 10 CFR Part 770 provide DOE authority to transfer property at less than full market value to help local communities recover from the economic effects of government downsizing. The creation of a high level radioactive waste "solution" hardly seems consistent with "recovering" from the effects of economic downsizing. DOE needs to implement the mandates of National Environmental Policy Act (NEPA) in its treatment of the local Piketon Community and the surrounding region of influence which actually includes most of Southwest Ohio. DOE's environmental assessment is not only vague and uninformative, it is deceptive about the future that awaits a community that has served the national interest for over sixty years. As DOE's consent based siting criteria in 2016 and in 2017 indicate a community cannot consent to what it does not know. Transparency is essential to community based consent, but apparently not in DOE's treatment of Piketon. I have spent much of the last weeks trying to determine the overall plan behind this environmental assessment. Participation by an informed public is crucial to informed consent and to democratic process. DOE needs to develop a plan for Portsmouth future that the community has likelihood of supporting, rather than visiting the "gaps" in the nuclear fuel cycle upon one region. The front end gap in the nuclear fuel cycle is created by the uranium enrichment process which produces a ratio of 8,000 metric tons of depleted uranium for every 1,000 metric tons of enriched uranium. The back end of the gap in the nuclear fuel cycle is created by no viable solution for safely isolated highly radioactive waste for the thousands and hundreds of thousands of years it poses a threat to human health and the natural environment. DOE is attempting to close both the front end gap inside the Perimeter Road and the back end gap outside the Perimeter Road by creating a sacrifice zone at the Portsmouth Site.

I would like to thank the Village Council and Mayor of the Village of Piketon for requesting an extension of the comment period and to DOE for granting this extension.

Respectfully submitted, Diana Cahale Diana Cahall

Sardinia, Ohio 45171

B-99

This page is intentionally left blank.