

**U.S. Department of Energy
Portsmouth Annual Environmental Data
for 2009
Piketon, Ohio**

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managing the
Environmental Remediation Activities at the
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This document is approved for public release
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ACRONYMS

°C	degrees Celsius
CFR	Code of Federal Regulations
Ci	curie
cm	centimeter
DCG	derived concentration guide
DOE	U.S. Department of Energy
DOE PORTS	facilities operated by the DOE (not leased to USEC) at the Portsmouth Gaseous Diffusion Plant
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
g	gram
GPD	gallons per day
GWTF	groundwater treatment facility
kg	kilogram
km	kilometer
L	liter
LPP	LATA/Parallax Portsmouth, LLC
m	meter
m ³	cubic meter
µg	microgram
mg	milligram
MGD	million gallons per day
mrem	millirem
na	not analyzed
ND	not detected
ng	nanogram
NPDES	National Pollutant Discharge Elimination System
OVEC	Ohio Valley Electric Corporation
PCB	polychlorinated biphenyl
pCi	picocurie
PK	Peter Kiewit
PORTS	Portsmouth Gaseous Diffusion Plant
SU	standard unit
TUa	acute toxicity unit
UDS	Uranium Disposition Services, LLC
USEC	United States Enrichment Corporation
VOC	volatile organic compound

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1. INTRODUCTION

Environmental monitoring at the Portsmouth Gaseous Diffusion Plant (PORTS) is conducted throughout the year. Monitoring demonstrates that the site is a safe place to work, that plant operations do not adversely affect neighboring communities, and that activities comply with federal and state regulations.

This document is a compilation of the environmental monitoring data for calendar year 2009 and is intended as a tool for analysts in environmental monitoring, environmental restoration, and other related disciplines. The data in this document form the basis for the summary information in the *Portsmouth Annual Environmental Report for 2009* (DOE/PPPO/03-0159&D1).

Radiological monitoring data presented in this Data Report and discussed in the *Annual Environmental Report for 2009* indicate that the maximum dose a member of the public could receive from radionuclides released by PORTS in 2009 or detected by environmental monitoring programs in 2009 is 0.94 millirem (mrem). This dose is significantly less than the 100 mrem limit set by the U.S. Department of Energy (DOE).

Other non-radiological chemicals such as polychlorinated biphenyls (PCBs), metals, and volatile organic compounds (VOCs) are also monitored. Discharges of metals and other chemicals to surface water are controlled by National Pollutant Discharge Elimination System (NPDES) permits. The *Annual Environmental Report for 2009* provides more information about non-radiological chemicals released from PORTS or detected by PORTS monitoring programs during 2009.

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