

## 8. REFERENCES

- Agency for Toxic Substances and Disease Registry 2003. Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, <https://www.atsdr.cdc.gov/ToxProfiles/tp11.pdf>, accessed 2/11/2020.
- American Nuclear Society 1986. *Glossary of Terms in Nuclear Science and Technology*, LaGrange Park, IL.
- Argonne National Laboratory 2007. Radiological and Chemical Fact Sheets to Support Health Risk Analyses for Contaminated Areas, Argonne National Laboratory, Environmental Science Division, [https://www.remm.nlm.gov/ANL\\_ContaminantFactSheets\\_All\\_070418.pdf](https://www.remm.nlm.gov/ANL_ContaminantFactSheets_All_070418.pdf), accessed 8/29/2019.
- Biological Effects of Ionizing Radiations 1990. *Health Effects of Exposure to Low Levels of Ionizing Radiation*, Committee on the Biological Effects of Ionizing Radiations (BEIR V), National Research Council, National Academy of Sciences, National Academy Press, Washington, D.C.
- Bradburne, J. May 2, 2018. Department of Energy, Portsmouth/Paducah Project Office, Lexington, Kentucky, letter to Bobby D. Smith, Fluor-BWXT Portsmouth LLC, Piketon, OH.
- DOE 1995. Memorandum, Pelletier to Pearson: *Requirements for Control of Settleable Solids*, Air, Water and Radiation Division: EH-412, Washington D.C., December 6.
- DOE 1998a. *Quadrant III Cleanup Alternatives Study/Corrective Measures Study Final Report for Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/OR/12-1360&D3, POEF-ER-4619&D3, U.S. Department of Energy, Piketon, OH, April.
- DOE 1998b. *Quadrant IV Cleanup Alternatives Study/Corrective Measures Study Final Report for Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/OR/12-1332&D3, POEF-ER-4609&D3, U.S. Department of Energy, Piketon, OH, August.
- DOE 2000. *Quadrant I Cleanup Alternatives Study/Corrective Measures Study Final Report for Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/OR/12-1248&D6, U.S. Department of Energy, Piketon, OH, May.
- DOE 2001. *Quadrant II Cleanup Alternatives Study/Corrective Measures Study Final Report for Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/OR/12-1223&D5, U.S. Department of Energy, Piketon, OH, February.
- DOE 2002. *A Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota*, DOE-STD-1153-2002, U.S. Department of Energy, Washington, D.C., July.
- DOE 2003. *Five-Year Evaluation Report for the X-740 Phytoremediation Project at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/OR/11-3135&D1, U.S. Department of Energy, Piketon, OH, October.
- DOE 2007a. *Corrective Measures Plan for the X-735 Landfill at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0019&D4, U.S. Department of Energy, Piketon, OH, October.

- DOE 2007b. *Supplemental Evaluation to the 2003 Five Year Evaluation Report for the X-740 Phytoremediation Area at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0038&D1, U.S. Department of Energy, Piketon, OH, January.
- DOE 2011a. *2010 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0209&D1, U.S. Department of Energy, Piketon, OH, March.
- DOE 2011b. *Derived Concentration Technical Standard*, DOE-STD-1196-2011, U.S. Department of Energy, Washington, D.C., April.
- DOE 2011c. *First Five-Year Review for the X-749/X-120 Groundwater Plume at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0187V1&D1, DOE/PPPO/03-0187V2&D1, U.S. Department of Energy, Piketon, OH, January.
- DOE 2012. *2011 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0309&D1, U.S. Department of Energy, Piketon, OH, March.
- DOE 2013. *2012 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0454&D1, U.S. Department of Energy, Piketon, OH, March.
- DOE 2014. *Final Report for the 7-Unit Interim Remedial Measure at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0606&D1, U.S. Department of Energy, Piketon, OH, October.
- DOE 2015a. *Deferred Units Resource Conservation and Recovery Act Facility Investigation/Corrective Measures Study Work Plan at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0252&D3, U.S. Department of Energy, Piketon, OH, March.
- DOE 2015b. *Record of Decision for 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 2015c. *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 2015d. *Remedial Design/Remedial Action Work Plan for the On-site Waste Disposal Facility Initial Site Preparation and Construction Activities at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0691&D1, U.S. Department of Energy, Piketon, OH, September.
- DOE 2016a. *Addendum to Remedial Design/ Remedial Action Work Plan for On-site Waste Disposal Facility Initial Site Preparation and Construction Activities at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, Phase II Initial Site Construction – Addendum*, DOE/PPPO/03-0691&D1/A1, U.S. Department of Energy, Piketon, OH, September.
- DOE 2016b. *Final Report for the X-740 Pilot Study at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0748&D1, U.S. Department of Energy, Piketon, OH, May.
- DOE 2016c. *Remedial Design/Remedial Action Work Plan and Remedial Design for the Process Buildings Deactivation at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio – Deactivation of X-326, X-330, X-333, X-111A, X-111B, X-232C1, X-232C2, X-232C3, X-232C4, and X-232C5*, DOE/PPPO/03-0665&D2, U.S. Department of Energy, Piketon, OH, April.

- DOE 2016d. *Second Five-Year Review for the X-749/X-120 Groundwater Plume at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0756&D1, U.S. Department of Energy, Piketon, OH, June.
- DOE 2017a. *Deferred Units Resource Conservation and Recovery Act Facility Investigation/Corrective Measures Study Report at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0772&D1, U.S. Department of Energy, Piketon, OH, September.
- DOE 2017b. *Environmental Monitoring Plan for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0009&D5, U.S. Department of Energy, Piketon, OH, April.
- DOE 2017c. *Integrated Groundwater Monitoring Plan for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0032&D10, U.S. Department of Energy, Piketon, OH, August.
- DOE 2017d. *Methods for Conducting Human Health Risk Assessments and Risk Evaluations at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0127&D9, U.S. Department of Energy, Piketon, OH, June.
- DOE 2017e. *The Role of the Portsmouth Gaseous Diffusion Plant in Cold War History*, DOE/PPPO/03-0683&D1, U.S. Department of Energy, Piketon, OH February.
- DOE 2018a. *Comprehensive Deactivation, Demolition, and Disposition Remedial Design/Remedial Action Work Plan for the Process Buildings and Complex Facilities Remedial Action Project and Remedial Design for Deactivation of Complex Facilities at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0751&D1, U.S. Department of Energy, Piketon, OH, August.
- DOE 2018b. *Comprehensive On-site Waste Disposal Facility Remedial Design/Remedial Action Work Plan for the Process Buildings and Complex Facilities Remedial Action/Remedial Design Work Plan for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, Phase III Balance of the On-site Disposal Remedy*, DOE/PPPO/03-0758&D3, U.S. Department of Energy, Piketon, OH, March.
- DOE 2018c. *Fiscal Year 2019 Site Sustainability Plan for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0896&D1, U.S. Department of Energy, Piketon, OH, December.
- DOE 2018d. *Fourth Five-Year Review for the X-611A Prairie at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0856&D1, U.S. Department of Energy, Piketon, OH, May.
- DOE 2018e. *Fourth Five-Year Review for the X-749B Peter Kiewit Landfill at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0866&D1, U.S. Department of Energy, Piketon, OH, September.
- DOE 2018f. *Third Five-Year Review for the Five-Unit Groundwater Investigative Area and X-231A/X-231B Oil Biodegradation Plots at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0884&D1, U.S. Department of Energy, Piketon, OH, November.
- DOE 2018g. *Third Five-Year Review for the X-734 Landfill Area at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0894&D1, U.S. Department of Energy, Piketon, OH, December.
- DOE 2019. *2018 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio*, DOE/PPPO/03-0908&D1, U.S. Department of Energy, Piketon, OH, March.

- FBP 2014. *Comprehensive Summary Report of Cultural Resource Investigations Conducted at the Portsmouth Gaseous Diffusion Plant (PORTS Facility), Scioto and Seal Townships, Pike County, Ohio*, FBP-ER-GEN-BG-RPT-0055, Revision 4, Gray & Pape, Inc., Cincinnati, OH, May.
- Hamby, D. M. 1991. *LADTAP XL: An Improved Electronic Spreadsheet Version of LADTAP II*, DE93003179, Westinghouse Savannah River Company, Aiken, SC.
- Health Physics Society 2010. *Environmental Radiation* (Fact Sheet – Adopted January 2010), available at [hps.org](http://hps.org) (accessed March 2, 2016).
- Jannik and Dixon 2006. *LADTAP-PA: A Spreadsheet for Estimating Dose Resulting from E-Area Groundwater Contamination at the Savannah River Site*, Savannah River National Laboratory, Aiken, SC.
- McGraw-Hill 1989. *McGraw-Hill Dictionary of Scientific and Technical Terms*, 4<sup>th</sup> ed., McGraw-Hill, Inc., NY.
- National Council on Radiation Protection 2009. *Ionizing Radiation Exposure of the Population of the United States*, NCRP Report No. 160, National Council on Radiation Protection and Measurements, Bethesda, MD.
- Ohio EPA 1996a. *Decision Document Peter Kiewit Landfill, U.S. DOE Portsmouth, Pike County, Ohio*, Ohio Environmental Protection Agency, Columbus, OH, May.
- Ohio EPA 1996b. *Decision Document X-611A Solid Waste Management Unit U.S. DOE Portsmouth, Pike County, Ohio*, Ohio Environmental Protection Agency, Columbus, OH, June.
- Ohio EPA 1999a. *Ohio Environmental Protection Agency's Decision Document for Quadrant III of the Portsmouth Gaseous Diffusion Plant*, Ohio Environmental Protection Agency, Columbus, OH, March.
- Ohio EPA 1999b. *The Decision Document for the X-734 Landfill Area in Quadrant IV of the Portsmouth Gaseous Diffusion Plant*, Ohio Environmental Protection Agency, Columbus, OH, September.
- Ohio EPA 2000. *U.S. DOE Portsmouth QIV Decision Document*, Ohio Environmental Protection Agency, Columbus, OH, September.
- Ohio EPA 2001. *U.S. DOE Portsmouth Quadrant I Decision Document Portsmouth Gaseous Diffusion Plant*, Ohio Environmental Protection Agency, Columbus, OH, March.
- Ohio EPA 2003. *Ohio EPA's Decision Document for the X-701B SWMU in Quadrant II of the U.S. DOE Portsmouth Facility, Piketon, Ohio*, Ohio Environmental Protection Agency, Columbus, OH, December.
- Ohio EPA 2010. *State of Ohio Cooperative Fish Tissue Monitoring Program Sport Fish Tissue Consumption Advisory Program*, State of Ohio, Columbus, OH, October.
- Ohio EPA 2012. *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*, Ohio EPA, Columbus, OH, July 16.

Ohio EPA 2019. *Ohio Sport Fish Consumption Advisory*, Ohio EPA Division of Surface Water, Columbus, OH, March.

U.S. Census Bureau 2019. U.S. Census Bureau, census.gov, population estimates for 2018, (accessed July 24, 2019).

U.S. EPA 1988. *Federal Guidance Report No. 11 (FGR 11) Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Immersion, and Ingestion*, EPA-520/1-88-020, U.S. Environmental Protection Agency, Washington, D.C.

U.S. EPA 1997a. *Exposure Factors Handbook*, EPA/600/P-95/002Fa, U.S. Environmental Protection Agency, Washington, D.C.

U.S. EPA 1997b. *Record of Decision/Statement of Basis Peter Kiewit Landfill United States Department of Energy Portsmouth Gaseous Diffusion Plant Pike County, Ohio*, U.S. Environmental Protection Agency, Washington, D.C. May.

U.S. EPA 2019. Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1) April 2019, Screening level for PCB-1254/PCB-1260 in residential soil, epa.gov/risk/risk-based-screening-table-generic-tables (accessed August 20, 2019).

Westinghouse Savannah River Company 1994. *Savannah River Site Environmental Report for 1993, Summary Pamphlet*, Savannah River, GA.