



INFORMATIONAL BROCHURE PADUCAH GASEOUS DIFFUSION PLANT DEPARTMENT OF ENERGY WATER POLICY RESIDENTS AND BUSINESSES

MARCH 2023

Water Policy Area

Upon discovery of residential well contamination in 1988, the U.S. Department of Energy (DOE) committed to eliminate residents' exposure to trichloroethene (TCE) and technetium-99 (Tc-99) contamination by providing alternate drinking water to residents and businesses potentially affected. This action became known as the DOE Water Policy.

To achieve the goal of eliminating residents' exposure to contamination, DOE paid for extending the West McCracken public water supply to the area within the Water Policy boundary (see map). As defined in the Water Policy Action Memorandum, the affected area is bounded by the Ohio River to the north, DOE property boundary to the south, Metropolis Lake Road to the east, and Bethel Church Road to the west. This area is shown on the map within the line designated as the Water Policy boundary. DOE also asked property owners in the area to sign a license agreement, in which DOE agreed to pay water bills. This agreement permitted DOE representatives access to properties to collect samples and prohibited the property owners from drilling new water supply wells or using existing water supply wells. DOE continues to implement the Water Policy by renewing license agreements with property owners within the Water Policy boundary in accordance with the Action Memorandum.¹

The protectiveness of the Water Policy is reviewed every five years by DOE, the U.S. Environmental Protection Agency (EPA), and the Kentucky Department for Environmental Protection (KDEP). DOE developed this fact sheet to be sent to all residents and businesses within the Water Policy area to ensure they receive information about the contamination in underlying groundwater annually. Since the discovery of the residential well contamination in 1988, DOE has taken actions that have reduced the groundwater concentrations of TCE and Tc-99, including implementing groundwater remedial actions in the northeast and northwest contaminant plumes, which underlie portions of the area within the Water Policy boundary, and reducing some of the source areas responsible for creating the plumes.

DOE continues these actions under the oversight of EPA and KDEP. Potential adverse effects from domestic use of contaminated groundwater include the possibility of increase in cancer and other health risks.² The Agency for Toxic Substances and Disease Registry (ATSDR) conducted a public health assessment of the area and published the findings on May 21, 2002. This document can be viewed online at the DOE Paducah Environmental Information Center:

<https://eic.pad.pppo.gov/Search.aspx?accession=LB09900-0176>.

ATSDR also published a fact sheet for TCE, which can be viewed at:

<https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=172&toxid=30>.

¹ Document can be viewed at <https://eic.pad.pppo.gov/Search.aspx?accession=I-02102-0111>.

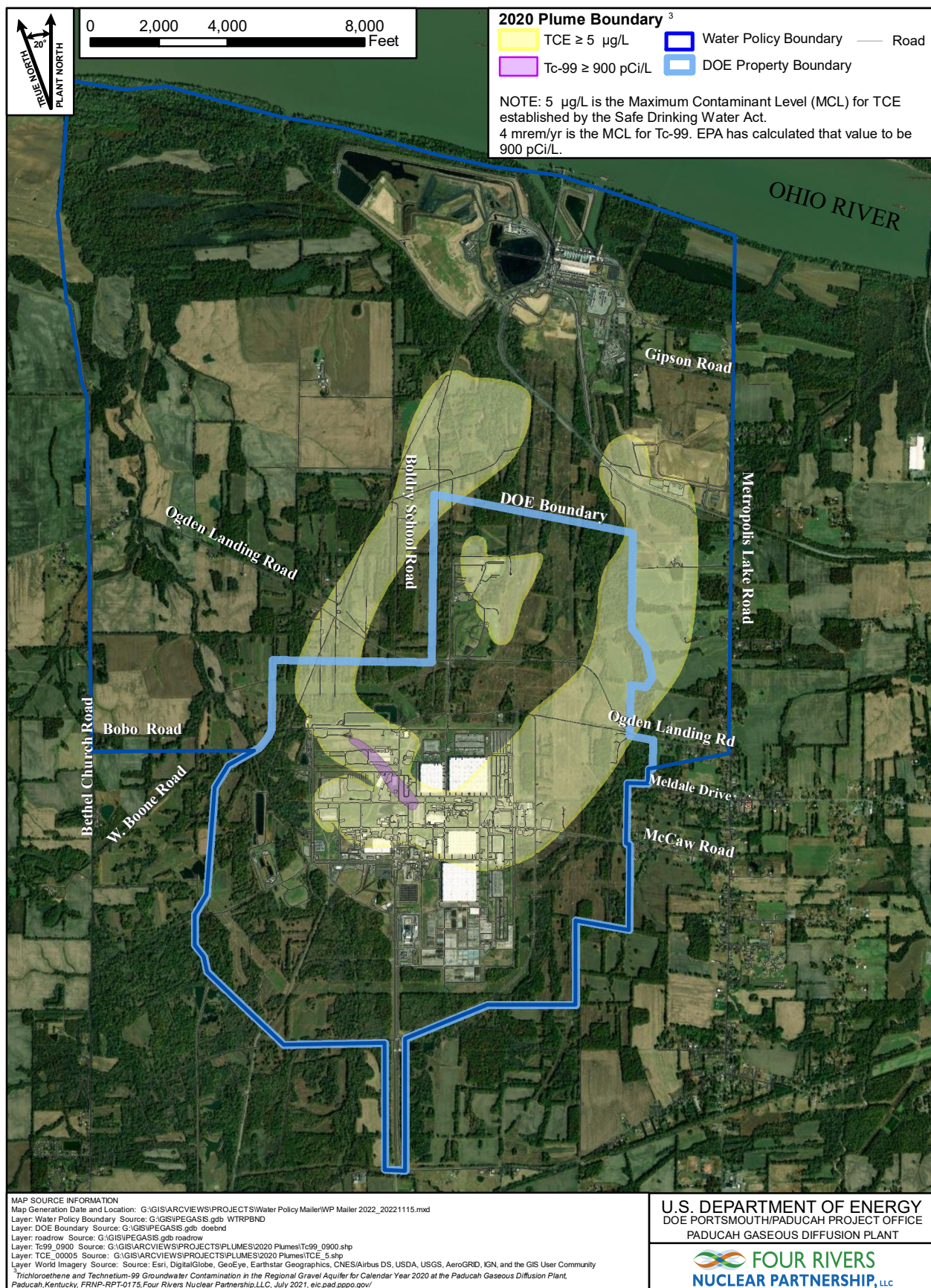
² CH2M Hill 1991, Results of the Public Health and Ecological Assessment, Phase II, <https://eic.pad.pppo.gov/Search.aspx?accession=I-02400-0287>, and Volume 3, Appendix B, "Baseline Human Health Risk Assessment," in *Feasibility Study for the Groundwater Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1857&D2, August 2001; <https://eic.pad.pppo.gov/Search.aspx?accession=I-04611-0129>.

Water Policy Area Need to Know

All residents and businesses are asked not to drill a new water supply well or use any existing water wells in the Water Policy area for any purpose, including, but not limited to, drinking, showering, cooking, gardening, or farming activities.

For more information about the Water Policy contact:

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Location of Water Policy Boundary Relative to DOE Site and Contaminant Plumes