Sea Grant
LAW CENTER

PFAS-related Law and Regulatory Provisions

Pennsylvania

Laws

- 72 Pa. Stat. § 1740-L - Pennsylvania Infrastructure Investment Authority (funding for drinking water contaminated by PFAS)
- 73 Pa. Stat. § 850.351.1 - Per- and Polyfluoroalkyl Substances Remediation Program

Regulations

- 25 Pa. Code § 250.304 - MSCs for groundwater
- 25 Pa. Code Chapter 109 - Drinking Water Provisions - *not included due to length*
- 25 Pa. Code Chapter 250 - Administration of Land Recycling Program - Appendix A - *not included due to length*

72 P.S. § 1740-L

§ 1740-L. Pennsylvania Infrastructure Investment Authority

Effective: July 1, 2020
Currentness

<Section 17(2) of Act 2020, Nov. 23, P.L. 1140, No. 114, imd. effective, provides that the amendment of Article XVII-L by that Act shall apply retroactively to July 1, 2020.>

For the 2020-2021 fiscal year, up to $3,970,600 of funds of the Pennsylvania Infrastructure Investment Authority shall be used to fund grants for projects that install infrastructure to ensure clean drinking water to address contamination from PFAS chemicals in a township of the first class with a population between 55,000 and 56,000 based on the most recent Federal decennial census that is also located in a county of the second class A.

Credits

1929, April 9, P.L. 343, No. 176, art. XVII-L, § 1740-L, added 2020, Nov. 23, P.L. 1140, No. 114, § 16, imd. effective, retroactive to July 1, 2020.

72 P.S. § 1740-L, PA ST 72 P.S. § 1740-L
Current through Act 96 of the 2024 Regular Session. Some statute sections may be more current, see credits for details.

73 P.S. § 850.351.1

§ 850.351.1. Per- and Polyfluoroalkyl Substances Remediation Program

Effective: November 27, 2019
Currentness

(a) Establishment.--The Pennsylvania Infrastructure Investment Authority shall establish the Per- and Polyfluoroalkyl Substances Remediation Program.

(b) Purpose.--In addition to any other program of the Pennsylvania Infrastructure Investment Authority, from funds available to the Pennsylvania Infrastructure Investment Authority, the Pennsylvania Infrastructure Investment Authority shall provide grants under the Per- and Polyfluoroalkyl Substances Remediation Program for the costs of remediation relating to the presence of per- and polyfluoroalkyl substances in drinking water which are not related to the presence of a qualified former military installation.

(c) Guidelines.--The Pennsylvania Infrastructure Investment Authority shall establish guidelines for the Per- and Polyfluoroalkyl Substances Remediation Program.

(d) Eligible applicants.--A water provider with per- and polyfluoroalkyl substances present in drinking water may apply to the Pennsylvania Infrastructure Investment Authority for a grant under the Per- and Polyfluoroalkyl Substances Remediation Program.

Credits
2004, Dec. 8, P.L. 1801, No. 238, § 301.1-A, added 2019, Nov. 27, P.L. 695, No. 101, § 3, imd. effective.

73 P.S. § 850.351.1, PA ST 73 P.S. § 850.351.1
Current through Act 96 of the 2024 Regular Session. Some statute sections may be more current, see credits for details.

End of Document

25 Pa. Code § 250.304

§ 250.304. MSCs for groundwater.

Effective: November 20, 2021
Currentness

(a) A person shall implement a remedy under the Statewide health standard that is protective of human health and the environment.

(b) The MSCs for regulated substances in groundwater are presented in Appendix A, Tables 1 and 2. The methodology used by the Department for calculating MSCs in groundwater is detailed in subsections (c)--(f).

(c) The MSCs for regulated substances contained in groundwater in aquifers used or currently planned to be used for drinking water or for agricultural purposes are the MCLs as established by the Department or the EPA in § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements). For regulated substances where no MCL has been established, the MSCs are the Lifetime Health Advisory Levels (HAL) set forth in Drinking Water Standards and Health Advisories (DWSHA), EPA Office of Water Publication No. EPA 822-F-18-001 (March 2018 or as revised), except for substances designated in the DWSHA with cancer descriptor (L) “Likely to be carcinogenic to humans” or (L/N) “Likely to be carcinogenic above a specific dose but not likely to be carcinogenic below that dose because a key event in tumor formation does not occur below that dose.” New or revised MCLs or HALs promulgated by the Department or the EPA shall become effective immediately for any demonstration of attainment completed after the date the new or revised MCLs or HALs become effective.

(1) For regulated substances where neither an MCL nor a lifetime HAL has been established and for substances designated in the DWSHA with cancer descriptor (L) or (L/N), the MSCs are the lowest concentration calculated using the appropriate residential and nonresidential exposure assumptions and the equations in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values).

(2) If the Lifetime HAL for a substance designated in the DWSHA with cancer descriptor (L) or (L/N) is less than the MSC calculated under paragraph (1), then the Lifetime HAL shall be the MSC.

(d) For regulated substances contained in aquifers not used or currently planned to be used, the MSCs in Appendix A, Tables 1 and 2 are calculated by the following:

(1) For volatile organic regulated substances with an attenuation factor of less than 20, as calculated by the methodology in paragraph (7), ten times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(2) For volatile organic regulated substances with an attenuation factor of greater than or equal to 20, as calculated by the methodology in paragraph (7), 100 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(3) For semivolatile organic and inorganic regulated substances, regardless of the attenuation factor, 1,000 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(4) For benzene, 100 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(5) For regulated substances with no calculated attenuation factor because of a lack of data in Howard, P. H., R. S. Boethling, W. F. Jarais, W. M. Meylan and E. M. Michalenko. 1991. *Handbook of Environmental Degradation Rates*. Lewis Publishers, Inc., Chelsea, MI, the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(6) For minimum threshold MSCs, 5 micrograms per liter in groundwater shall be used.

(7) The attenuation factor (AF) for an organic regulated substance shall be calculated according to the following formula:

$$AF = K \times KOC$$

Where:

$$K = \text{degradation coefficient} = \frac{0.693}{T_{1/2}}$$

$T_{1/2}$--half-life of organic regulated substance in groundwater as reported in Howard, P. H., R. S. Boethling, W. F. Jarais, W. M. Meylan and E. M. Michalenko, 1991. *Handbook of Environmental Degradation Rates*. Lewis Publishers, Inc., Chelsea, MI.

KOC--organic carbon partitioning coefficient (see Appendix A, Table 5).

(e) If the groundwater in aquifers used or currently planned for use at the site has naturally occurring background total dissolved solids concentrations greater than 2,500 milligrams per liter, the Statewide health standard for a regulated substance dissolved in the groundwater may be adjusted by multiplying the MSC for groundwater in aquifers by 100. The adjusted Statewide health standard shall then be used in calculating the soil to groundwater pathway numeric value as specified in § 250.308 (relating to soil to groundwater pathway numeric values).

(f) In addition to the requirements in this section, the MSCs are further limited by solubility as identified in Appendix A, Table 5. The solubility limits are derived from the references in subsection (g), which are keyed to the numbers in Appendix A, Table 5. The following procedure was used to determine the appropriate solubility value for each regulated substance: where multiple sources are cited in Appendix A, Table 5, the value for the solubility limit is the median of the values in the indicated references.

(1) Using the hierarchy established in subsection (g), the first two references were consulted. If the solubility values agreed within 5%, the selected value is the lower of the two values.

(2) If the values in step (1) did not agree within 5%, the next references in order were consulted until two values that did agree within 5% were found. The selected value is then the median of all the values consulted.

(3) If none of the values in all of the references in subsection (g) agreed within 5%, the selected value is the median of all values in all references.

(g) The references referred to in subsection (f) are:

(1) Lide, D. R., ed. 1996. *CRC Handbook of Chemistry and Physics*, 77th Edition. CRC Press.

(2) Budavari, S., ed. 1996. *The Merck Index*, 12th Ed. Merck and Co.

(3) Perry, R. H., et al. 1997. *Perry's Chemical Engineer's Handbook*, 7th ed. McGraw-Hill, New York.

(4) Howard, P. H. 1991. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals. Vol. III Pesticides*, Lewis Publishers.

(5) Verschueren, K. 1977, *Handbook of Environmental Data on Organic Chemicals*, Van Nostrand Reinhold.

(6) MacKay, D., et al. 1997, *Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals*, 5 Volumes. Lewis Publishers, New York.

(7) Montgomery, J. H. 1991, *Groundwater Chemicals Desk Reference*, Vol. II. Lewis Publishers and Montgomery, J. H., and L. M. Welkom. 1990, *Groundwater Chemicals Desk Reference Vol I*, Louis Publishers.

(8) Milne, G.W.A., ed. 1995, *CRC Handbook of Pesticides*, CRC Press, Inc.

(9) National Library of Medicine (Grateful Med), Hazardous Substances Databank.

(10) EPA.1994, *Superfund Chemical Data Matrix. Office of Solid Waste and Emergency Response*, EPA 540-R-94-009.

(11) Mabey, et al. 1982, *Aquatic Fate Process Data for Organic Priority Pollutants*, SRI. EPA Contract Nos. 68-01-3867, 68-03-2981.

(12) Yalkowsky, S.H. and R.M. Dannenfelser. 1992. *Aquasol Database of Aqueous Solubility.* Version 5. College of Pharmacy, University of Arizona--Tucson, AZ. PC Version.

(13) Estimate from Log Kow.

(14) Bennett, S.R., J.M. Bane, P.J. Benford, and R.L. Pyatt. 1984. *Environmental Hazards of Chemical Agent Simulants.* CRDC-TR-84055, Aberdeen Proving Ground, Md.

(15) Munro, N.B. et al. 1999. *The Sources, Fate, and Toxicity of Chemical Warfare Agent Degradation Products.* Environ. Health Perspect. 107(12): 933-4.

(16) Monteil-Rivera, F., C. Groom, and J. Hawari. 2003. *Sorption and Degradation of Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine in Soil.* Environ. Sci. Technol. 37:3878--3884.

(17) Seidell, A.1941. *Solubilities of Organic Compounds.* New York, NY. D. Van Nostrand Co. Inc.

(18) Riddick, J. A., et al. 1986. *Organic Solvents; Physical Properties & Methods of Purification. Techniques of Chemistry.* 11th Edition. New York, NY: Wiley-Interscience.

(19) ATSDR (Agency for Toxic Substances and Disease Registry). 2015. *Toxicological Profile for Perfluoroalkyls. Draft for Public Comment.* Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. Accessed May 2016. http://www.atsdr.cdc.gov/ToxProfiles/tp200.pdf.

(20) Hekster, F.M., R.W. Laane, and P. de Voogt. 2003. *Environmental and toxicity effects of perfluoroalkylated substances. Reviews of Environmental Contamination and Toxicology* 179:99--121.

(21) HSDB (Hazardous Substances Data Bank). 2012. U.S. National Library of Medicine, Bethesda, MD. Accessed May 2016. http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB.

(22) Kauck, E.A., and A.R. Diesslin. 1951. *Some properties of perfluorocarboxylic acids. Industrial & Engineering Chemistry Research* 43(10):2332--2334.

(23) SRC (Syracuse Research Corporation). 2016. PHYSPROP Database. Accessed May 2016. http://www.srcinc.com/what-we-do/environmental/scientific-databases.html.

(24) OECD (Organisation for Economic Co-operation and Development). 2002. *Hazard Assessment of Perfluorooctane Sulfonate (PFOS) and its Salts.* ENV/JM/RD (2002) 17/FINAL. Report of the Environment Directorate, Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology, Co-operation on Existing Chemicals, Paris, November 21, 2002.

Credits

Amended Nov. 24, 2001; Jan. 8, 2011; Aug. 27, 2016; Nov. 20, 2021.

Current through Pennsylvania Bulletin, Vol. 54, Num. 38, dated September 21, 2024. Some sections may be more current, see credits for details.

25 Pa. Code § 250.304, 25 PA ADC § 250.304