

What is perchloroethylene (PCE)?

Perchloroethylene (CASRN 127-18-4) – also called PCE or perc – is a colorless liquid and a volatile chemical with a mildly sweet odor. PCE is a solvent that is widely used for consumer uses such as brake cleaners and adhesives, in commercial applications such as dry cleaning, and in many industrial settings. For example, PCE is used as a chemical intermediate in the production of refrigerants and as a processing aid at petroleum refineries.

In December 2024, EPA issued a [final rule](#) regulating PCE under the Toxic Substances Control Act (TSCA) to protect people from health risks such as damage to the kidney, liver, and immune system, neurotoxicity and reproductive toxicity, and cancer from inhalation or dermal exposures.

Who is subject to the PCE regulation?

Anyone who manufactures (including imports), processes, distributes in commerce, uses, or disposes of PCE or products containing PCE may be impacted by EPA's regulation of the chemical.¹ The table below is a summary of key points; full details are in the [final rule](#).

What is the PCE regulation² under TSCA?

PCE Workplace Chemical Protection

A workplace chemical protection program (WCPP) is required for several occupational conditions of use of PCE. These include:

- Domestic manufacturing.
- Import.
- Processing as a reactant.
- Processing into formulation, mixture, or reaction product.
- Repackaging.
- Use in maskant for chemical milling.
- Use in petrochemical manufacturing as a processing aid in catalyst regeneration.
- Use in solvent-based adhesives and sealants.
- Use as a processing aid in sectors other than petrochemical manufacturing.
- Use as a solvent for open-top batch and closed-loop batch vapor degreasing.
- Use as a solvent for cold cleaning of tanker vessels.
- Recycling.
- Disposal.

The WCPP requires that owners and operators of facilities using PCE take appropriate measures to meet a new inhalation exposure limit (0.14 ppm as an 8-hour time weighted average),³ prevent skin contact, and develop and implement an exposure control plan, among other requirements. Additional details on the WCPP requirements and compliance timeframes are available on page 3.

Recordkeeping and Downstream Notification

Manufacturers, processors, and distributors are required to update [Safety Data Sheets](#) to spread awareness throughout the supply chain. Relevant SDS must be updated by **February 18, 2025**, for manufacturers and **June 16, 2025**, for processors and distributors. Manufacturers, processors, distributors, and users are required to maintain ordinary business records that demonstrate compliance with the rule.

Prohibitions for Consumer Uses of PCE

Distributing PCE for consumer use will be phased out, with distribution by retailers for all such uses prohibited after **March 8, 2027**.

Prohibitions for Commercial Uses of PCE⁴

Most commercial uses will be phased out, with all such uses prohibited after **June 7, 2027**.

Prohibitions for PCE in

Use of PCE for dry cleaning and spot cleaning will be phased out in stages beginning **June 16, 2025**, with all such uses prohibited after **December 19, 2034**.

Workplace Controls for PCE in Energized Electrical Cleaning

After **March 13, 2026**, owners and operators must provide dermal and (in certain cases) respiratory protection (or comply with the WCPP) and self-certify compliance with the rule to purchase and use PCE for energized electrical cleaning. Manufacturers, processors, and distributors of PCE-containing energized electrical cleaner must include a warning label on each product, as specified at [§ 751.611\(c\)](#).

Workplace Controls for PCE in Laboratory Use

After **December 15, 2025**, owners and operators must use laboratory ventilation devices and provide dermal protection in laboratory settings.

¹ Products containing PCE up to 0.1% by weight are excluded from this regulation.

² Details of these requirements are in 40 CFR Part 751, subpart G, available at <https://www.federalregister.gov/documents/2024/12/18/2024-30117/perchloroethylene-pce-regulation-under-the-toxic-substances-control-act-tsca>.

³ The inhalation exposure limit and related requirements do not apply to recycling and disposal. All other WCPP requirements apply.

⁴ There is a 10-year TSCA section 6(g) exemption for the emergency use of PCE for NASA in furtherance of its mission-critical needs. Only NASA and its contractors are exempted for a narrow set of conditions of use.

Compliance Timelines for Prohibitions

EPA prohibits manufacturing (including importing), processing, and distributing in commerce PCE for all consumer and most industrial and commercial uses. The final rule imposes prohibitions in a staggered timeframe, beginning at the top of the supply chain.

Requirement*		Compliance Date
Prohibition on manufacturing		
Manufacturers (including importers)	All persons are prohibited from manufacturing (including importing) PCE except for industrial and commercial uses that will continue under the WCPP or other workplace controls and dry cleaning (see § 751.605(b)(1)).	June 11, 2026
Prohibition on processing		
Processors	All persons are prohibited from processing PCE, including any PCE-containing products, except for industrial and commercial uses that will continue under the WCPP or other workplace controls and dry cleaning (see § 751.605(b)(2)).	September 9, 2026
Prohibition on all distributors		
Distributors	All persons are prohibited from distributing in commerce (including making available) PCE, including any PCE-containing products, to retailers for any use other than dry cleaning (see § 751.605(b)(3)).	December 8, 2026
	All persons are prohibited from distributing in commerce (including making available) PCE, including any PCE-containing products, except for industrial and commercial uses that will continue under the WCPP or other workplace controls and dry cleaning (see § 751.605(b)(5)).	March 8, 2027
Prohibition on distribution by retailers		
Retailers	All retailers are prohibited from distributing in commerce (including making available) PCE, including any PCE-containing products (see § 751.605(b)(4)).	March 8, 2027
Prohibition on industrial and commercial use		
Industrial and commercial users	All persons are prohibited from industrial or commercial use of PCE, including any PCE-containing products, except for uses that will continue under the WCPP or other workplace controls and dry cleaning (see § 751.605(b)(6)).	June 7, 2027
Prohibition on use of PCE in newly acquired dry cleaning machines		
Dry cleaners	All persons are prohibited from industrial or commercial use of PCE in dry cleaning machines acquired after June 16, 2025 (see § 751.605(b)(7)).	June 16, 2025
Prohibition on dry cleaning and related spot cleaning in 3rd generation machines		
Dry cleaners and spot cleaners	All persons are prohibited from industrial or commercial use of PCE in dry cleaning and related spot cleaning in 3 rd generation machines (see § 751.605(b)(8)).	December 20, 2027
Prohibition on all dry cleaning and related spot cleaning		
Dry cleaners and spot cleaners	All persons are prohibited from manufacturing (including importing), processing, distribution in commerce, or industrial or commercial use of PCE for dry cleaning and spot cleaning (see § 751.605(b)(9)).	December 19, 2034

* These prohibitions do not apply to the manufacturing, processing, or distribution of PCE solely for export. Additionally, there is an extended timeframe for prohibitions related to industrial or commercial use of PCE in an emergency by NASA or its contractors (see [§ 751.605\(b\)\(10\)](#)).

Compliance Timelines[†] for the Workplace Chemical Protection Program

Initial Monitoring	Exposure Limit and Dermal Protections	Workplace Information and Training	Exposure Control Plan	Other Exposure Monitoring
<p>Complete initial monitoring to determine airborne concentration of PCE in the workplace that persons may be exposed to.</p> <p>Demarcate regulated area within 3 months of initial monitoring data.</p> <p><u>Existing Facilities</u> Before December 15, 2025 (360 days after final rule publication).</p> <p><u>New Facilities</u> Within 30 days of initiating the use of PCE for a condition of use allowed to continue under the rule.</p>	<p>Ensure that PCE inhalation exposures do not exceed the ECEL for all potentially exposed persons (e.g., workers and others in the workplace).</p> <p>Ensure all persons are separated, distanced, physically removed, or isolated from direct dermal contact with PCE.</p> <p>Provide respiratory and/or dermal protection as applicable.</p> <p><u>Existing Facilities</u> Before March 13, 2026 (450 days after final rule publication).</p> <p><u>New Facilities</u> Within 4 months of initiating PCE use.</p> <p><u>All Facilities</u> Respiratory protection within 3 months of exposure monitoring indicating ECEL exceedance.</p>	<p>Develop and implement a program to train potentially exposed persons (e.g., workers and others in the workplace) on the rule's requirements.</p> <p>Ensure potentially exposed persons (e.g., workers and others in the workplace) participate in a training and information program by March 13, 2026 (450 days after final rule publication).</p>	<p>Develop and implement an exposure control plan.</p> <p>Notify potentially exposed persons (e.g., workers and others in the workplace) of the availability of exposure control plan within 30 days of its completion.</p> <p>Potentially exposed persons can request certain records that must generally be provided within 15 working days of request.</p> <p><u>Existing Facilities</u> Before June 7, 2027 (900 days after final rule publication).</p> <p><u>All Facilities</u> Update at least every 5 years or when circumstances change significantly.</p>	<p><u>Periodic Monitoring</u> Conduct at a minimum every 5 years, but could occur as frequently as every 3 months, dependent upon initial monitoring or most recent exposure monitoring results.</p> <p><u>As Needed Monitoring</u> Conduct additional monitoring within 30 days after any change that may result in new or additional PCE exposures.</p>

[†] There are longer timeframes for Federal agencies and contractors acting for or on behalf of those agencies. See final rule for details.

For More Information

- For information or questions on the regulation of PCE under TSCA, and for additional compliance guidance that the EPA intends to release regarding the use of PCE in dry cleaning and energized electrical cleaning, visit <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-perchloroethylene-pce> or contact PCE.TSCA@epa.gov.
- For general questions and document requests about TSCA requirements, contact the TSCA Hotline at 1-800-471-7127 or tsca-hotline@epa.gov.
- To read a non-technical summary of the risk evaluation for PCE, visit https://www.epa.gov/system/files/documents/2022-12/PCE_Non%20Technical%20Summary_12-5-22-final.pdf.
- For general information or questions on environmental regulations and compliance for small business owners, visit <https://www.epa.gov/resources-small-businesses> or contact asbo@epa.gov.