

# A GUIDE TO COMPLYING WITH THE 2024 PERCHLOROETHYLENE (PCE) DRY CLEANING REGULATION UNDER THE TOXIC SUBSTANCES CONTROL ACT (TSCA) (RIN 2070-AK84)

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This guide includes small entity compliance guidance prepared pursuant to section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. 104-121 as amended by Pub. L. Number 110-28. The statutory provisions and U.S. Environmental Protection Agency (EPA) regulations described in this document contain legally binding requirements. This guide does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, this guide does not, and is not intended to, impose legally binding requirements on the EPA or the regulated community, and may not apply to a particular situation based upon the circumstances. **This guide is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States.** The statements in this guide are intended solely as guidance to aid you in complying with the EPA regulation *Perchloroethylene (PCE); Regulation under the Toxic Substances Control Act (TSCA)* and the implementing regulations in 40 Code of Federal Regulations (CFR) Part 751. The EPA retains the discretion to adopt approaches on a case-by-case basis that differ from this guide where appropriate. The EPA may decide to revise this guide without public notice to reflect changes in the EPA's approach to regulating **chemical substances** generally, PCE under TSCA, or to clarify information and update text.

To get help accessing technical resources on environmental regulations and compliance assistance information contact the [EPA's Small Business Ombudsman](#) or visit the [EPA's small business resources page](#). For information specific to the PCE regulation, consult the EPA's [PCE TSCA risk management website](#). A fact sheet summarizing information from the regulation is at [https://www.epa.gov/system/files/documents/2024-12/pce-fact-sheet\\_english.pdf](https://www.epa.gov/system/files/documents/2024-12/pce-fact-sheet_english.pdf).

The full text of the implementing regulation can be found at 40 CFR Part 751, subpart G and also in the Federal Register ([89 FR 103560, December 18, 2024](#)) and at docket EPA-HQ-OPPT-2020-0720 at <https://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** For PCE technical information contact: email address: [PCE.TSCA@epa.gov](mailto:PCE.TSCA@epa.gov). For general information contact: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554-1404; email address: [TSCA-Hotline@epa.gov](mailto:TSCA-Hotline@epa.gov).

## Reproduction of the manual

This guide may be reproduced, but if this guide is altered, it may not provide accurate information that owners or operators need to comply with the requirements of the EPA's regulation of chemical substances under TSCA, including for PCE. Additionally, altering this guide may prevent potentially exposed persons from properly informing themselves of the protections required by the EPA.

The EPA may issue additional guidance about the PCE regulation and may amend the rule in the future. Please check the EPA's PCE website for further information and current amendments.

This guide, titled "A Guide to Complying with the 2024 Perchloroethylene (PCE) Dry Cleaning Regulation under the Toxic Substances Control Act (TSCA) (RIN 2070-AK48)" and other materials related to PCE are available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-perchloroethylene-pce>.

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# I: Understanding the PCE Dry Cleaning Requirements Under Section 6 of TSCA

Words or phrases that appear in **bold red text** throughout this guide are defined in the glossary in [Appendix A](#). Other abbreviations are also spelled out in the Abbreviation List.

The U.S. Environmental Protection Agency (EPA) issued [Perchloroethylene \(PCE\): Regulation under the Toxic Substances Control Act \(TSCA\)](#) on December 18, 2024 in the Federal Register. These regulations went into effect on January 17, 2025, and updated the Code of Federal Regulations (CFR) at 40 CFR Part 751, subpart G. (This regulation is also referred to throughout this guide as the PCE rule).

The information in this guide can help you understand and comply with the PCE rule. The EPA's new regulation includes requirements for dry cleaners to phase out use of this **chemical substance**; the EPA's PCE rule specifies phased in compliance deadlines to give dry cleaners time to switch to alternatives. More specifics on the phase out and compliance deadlines are in [Unit III](#).

## A. Does this guide apply to me?

You may be impacted by the PCE rule if you own or operate a dry cleaning business that uses PCE. The PCE rule prohibits most uses of PCE, including its use as a dry cleaning solvent in machines and in spot cleaners. The rule provides a phaseout period to give dry cleaning businesses time to adapt to the new regulations. **After 10 years, dry cleaners will no longer be able to use PCE as a dry cleaning agent or spot cleaner** (see [Unit III](#) for more detailed information). This guide contains specific information on the prohibition on the use of PCE for dry cleaning and spot cleaning, including in:

- Third generation machines (dry-to-dry machines with refrigerated condenser);
- Fourth/fifth generation machines (dry-to-dry machines with refrigerated condenser and carbon adsorber process controls); and
- Spot cleaning.

This rule does not apply to distribution and use of clothing and articles that have been commercially dry cleaned with PCE. In other words, entities can continue to distribute, use, and import/export clothes that have been dry cleaned with PCE.

## B. What is my role and how might the rule affect me?

Persons who own or operate a facility that uses PCE in dry cleaning and spot cleaning are responsible for complying with the prohibitions and other restrictions of the PCE rule. The EPA has defined the phrase "**owner or operator**" to include any person who owns, leases, operates, controls, or supervises a workplace covered within 40 CFR Part 751 (see [40 CFR 751.5](#)). If you are unsure if your dry cleaning business uses PCE, see [Unit III](#) of this guide for more information.

Other individuals, such as **potentially exposed persons** (see [40 CFR 751.5](#)), may want to refer to this guide to understand what protections are required in the workplace under these regulations, and to understand more about the unreasonable risks from PCE that the EPA has identified. Potentially exposed persons may include those who load/unload clothing from dry cleaning machines or manage a front desk. This guide may also inform consumers, community members, or anyone else that may be affected by exposure to PCE.

Under this TSCA regulation, there are additional prohibitions and requirements for conditions of use of PCE unrelated to dry cleaning; this guide does not contain information on these prohibitions and requirements. See the [final rule](#) at 40 CFR Part 751, subpart G or the [EPA risk management page](#) for more information.

### C. How are people in dry cleaning facilities exposed to PCE?

The EPA expects **worker** exposure at dry cleaning facilities to primarily occur when workers are:

- Unloading and loading garments from machines;
- Performing manual stain removal (i.e., spot cleaning);
- Transferring solvent from a storage container to the machine; and
- Performing infrequent maintenance activities such as:
  - Cleaning lint and button traps;
  - Raking out the still (i.e., the distillation unit residue);
  - Changing the solvent filter; and
  - Disposing hazardous waste.

To minimize exposures before the TSCA section 6 prohibition begins, see [Unit IV](#) of this guide for more information.

### D. How can this compliance guide help me?

This guidance document provides information to help you comply with the requirements of the PCE rule, related to dry cleaning and spot cleaning. It is important to note that the PCE rule covers all **conditions of use** of PCE; there are restrictions and prohibitions on other uses of PCE as well. For more information, visit the EPA's [PCE risk management website](#).

It is also important to note that it is a violation of Federal law to manufacture (including import), process, distribute in commerce, use, or dispose of a chemical substance in a manner inconsistent with TSCA and the PCE rule. Violations may result in penalties and injunctive relief (e.g., preventing certain actions), as appropriate.

This compliance guide:

- Provides a short description of why the EPA is regulating PCE ([Unit II](#));
- Helps you determine whether you are affected by the PCE rule and what your responsibilities may be ([Unit III](#));
- Gives you detailed information on how to comply with the prohibition on the use of PCE in dry cleaning and spot cleaning ([Unit III](#));
- Outlines the dry cleaning and spot cleaning compliance timeframes ([Unit III.A](#));
- Explains how important definitions affect your compliance responsibilities; and
- Provides notes to help you better understand your compliance responsibilities and how the rule applies to you.

## II: The EPA's Regulation of PCE Under Section 6 of TSCA

This unit describes what PCE is as well as why the EPA is regulating PCE under section 6 of TSCA.

### A. What is PCE?

Perchloroethylene (CASRN 127-18-4) —also called tetrachloroethylene, tetrachloroethene, PCE, or perc— is a colorless liquid primarily used in industrial settings to produce fluorinated compounds. This chemical is also a solvent used in dry cleaning and in other industries for cleaning and degreasing, and in lubricants, adhesives, and sealants. PCE is both produced in and imported into the United States and is distributed in commerce, used, and disposed of as part of many industrial and commercial conditions of use.

### B. What are the risks to health from PCE?

PCE's health risks are [well established](#). Some of the adverse effects from breathing PCE or skin contact with PCE can be experienced immediately following short-term (acute) exposure or long-term (chronic) repeated exposure. Health effects include neurotoxicity, kidney and liver effects, immune system toxicity, reproductive toxicity, developmental toxicity, and cancer.

### C. Why is the EPA regulating PCE?

The EPA determined that PCE presents an unreasonable risk of injury to health under the conditions of use, including use for dry cleaning and spot cleaning. This is based on a [risk evaluation](#) under TSCA section 6(b) for PCE that the EPA issued in 2020. The EPA's revised [unreasonable risk determination](#) was finalized in December 2022.

### III: The EPA’s Prohibition and Recordkeeping Requirements for PCE in Dry Cleaning

This unit provides information on the staggered prohibitions and recordkeeping requirements under the final rule.

#### A. How is the EPA prohibiting the use of PCE in dry cleaning?

The EPA issued a rule under TSCA that prohibits most uses of PCE, including its use as a dry cleaning solvent in machines and in spot cleaners. As described in the below timeline, the rule provides a phaseout period to give dry cleaning businesses time to adapt to the new regulations (see graphic). The 10-year phaseout period ends on December 19, 2034. After

December 19, 2034, dry cleaning businesses may no longer use PCE in their operations. In addition, the manufacture (including import), processing, and distribution in commerce of PCE for use in dry cleaning and spot cleaning will also be prohibited after December 19, 2034.

#### What are the prohibitions on PCE in spot cleaning?

As described in the following timeline, PCE may no longer be used in dry cleaning or related spot cleaning in third generation dry cleaning machines after December 20, 2027. After December 19, 2034, PCE may no longer be used for any spot cleaning.

### Phaseout Timelines

FR publication date + 6 months	FR publication date + 3 years	FR publication date + 10 years
The phaseout begins with a prohibition on the use of PCE in any dry cleaning machine acquired after <b>June 16, 2025</b> , or later.	After <b>December 20, 2027</b> , PCE may no longer be used in dry cleaning or related spot cleaning in third generation machines.	After <b>December 19, 2034</b> , PCE may no longer be used in any dry cleaning machine (including fourth and fifth generation machines), nor may PCE be used for spot cleaning.

## B. What generation of PCE dry cleaning machine do I have?

PCE dry cleaning machines are typically categorized into five generations:

1. **First generation, or transfer machines**, require manual transfer of wet laundry from one washing unit to another unit for drying. These first generation machines release the most PCE emissions and are fully prohibited under the EPA's 2006 amendment to the [National Emission Standards for Hazardous Air Pollutants \(NESHAP\) for dry cleaning facilities using PCE](#).
2. **Second generation, or dry-to-dry, vented machines** wash and dry laundry in the same unit. These machines are vented, and the air used to dry garments is released from the machine, leading to off-cycle emissions (OCE). Second generation machines are also already prohibited under the 2006 NESHAP, referenced above.
3. **Third generation, or dry-to-dry, non-vented machines with refrigerator condensers** wash and dry laundry in the same unit. These machines came to market in the late 1970s and early 1980s. They are not vented and use a refrigerator condenser to recirculate air back through the machines. This reduces PCE emissions from the machines as compared to second generation machines.
4. **Fourth generation, or dry-to-dry, non-vented machines with refrigerator condensers and secondary vapor control** use both a refrigerated condenser and carbon adsorbent to reduce the PCE emissions. These machines were introduced in the 1990s and are more effective at recovering solvent vapors than previous generation machines.
5. **Fifth generation machines, or dry-to-dry, non-vented machines with refrigerator condensers, plus secondary vapor control** are similar to fourth-generation machines, but **also have a monitoring system for added safety**. These machines measure the level of PCE inside the unit and will not allow the machine to open if there is too much PCE detected. These machines are widely used in Germany but are uncommon in the United States.

## C. What are the recordkeeping requirements?

If you use PCE in dry cleaning and spot cleaning, there are near term requirements for recordkeeping regarding PCE.

Persons who own or operate a dry cleaning business that uses PCE are required to maintain ordinary business records that demonstrate compliance with the EPA's regulation of PCE under TSCA. Examples of ordinary business records include bills-of-lading, invoices, and receipts. Specific records that may be relevant to dry cleaning facilities include notices about which solvent is used in dry cleaning and spot cleaning, permits or certificates, and receipt of PCE purchases. These records are necessary to demonstrate that PCE is being used in compliance with the prohibitions and restrictions of the PCE rule.

These records must be maintained for five years from the date of the record's creation (see [§ 751.615\(f\)](#)). This requirement begins at the **effective date** of the EPA's PCE rule on January 17, 2025.

## D. Will other TSCA regulations affect dry cleaners?

In addition to regulating PCE under TSCA, the EPA is required to evaluate other existing chemicals and address any unreasonable risk identified. Some of the other chemicals evaluated by EPA may be used in dry cleaning and spot cleaning. For example:

- The EPA issued a [risk evaluation under TSCA section 6\(b\) for trichloroethylene \(TCE\)](#) in November 2020 and a final regulation under TSCA section 6(a) in December 2024 (see [89 FR 102568](#)) to address the identified unreasonable risk from uses that include TCE in spot cleaners in dry cleaners.
- The EPA issued a [risk evaluation under TSCA section 6\(b\) for 1-bromopropane \(1-BP\)](#) in August 2020 and a proposed regulation under TSCA section 6(a) in August 2024 (see [89 FR 65066](#)) to address the identified unreasonable risk from uses that include 1-BP in dry cleaners.

For a list of ongoing and completed risk evaluations under TSCA, including the status of any related risk management action, see the [EPA's webpage](#). To keep up to date on EPA's risk management activities, [sign up to get EPA's email updates](#).



#### **E. Are there additional requirements?**

In addition to applicable risk management regulations for PCE under TSCA section 6(a), other federal, state, or local statutes or regulations may also be relevant to you. Some examples:

- Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL);
- National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities (PCE Dry Cleaning NESHAP);
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and
- Resource Conservation and Recovery Act (RCRA).

As a dry cleaning business owner or operator, under the Clean Air Act (CAA) you must continue to comply with all applicable requirements of the PCE Dry Cleaning NESHAP. Compliance with the NESHAP will not excuse any non-compliance with the PCE rule under TSCA. The EPA encourages dry cleaning owners and operators to visit the EPA's [PCE Dry Cleaning NESHAP website](#).

## IV: Other Important Information

This unit provides other important information regarding the PCE rule including steps to take prior to prohibition, alternatives to PCE, and steps to transition from PCE.

### A. What should I do before PCE is prohibited?

Although not required under TSCA, regular maintenance, combined with detection and repair of identified leaks of dry cleaning equipment, is vital to preventing PCE exposure. The Occupational Safety and Health Administration provides [guidance](#) on how to minimize PCE exposure, including through suggested daily, weekly, and monthly maintenance activities. It is important to clean lint traps and other filters regularly. Using and maintaining exhaust fans may also reduce exposure. These activities may be required under other federal regulations.

### B. Are there alternatives to PCE?

There are a variety of alternatives to using PCE in dry cleaning including wet cleaning, hydrocarbon-based cleaning systems, methyl siloxane cleaning solvents, or glycol ether-based solvents. The best alternative for your business will depend on your unique circumstances. The EPA encourages owners and operators of dry cleaning establishments to contact local agencies for information on alternatives to PCE as a dry cleaning solvent and spot cleaner. The National Small Business Environmental Assistance Program (SBEAP) details alternatives at [https://nationalsbeap.org/compliance/dry\\_cleaners](https://nationalsbeap.org/compliance/dry_cleaners).

### C. Are there programs to help me transition away from PCE?

Your state's SBEAP may provide resources to help transition from PCE. The National SBEAP maintains [a list of contact persons for state SBEAPs](#). Some state and local governments or other agencies provide resources, including training or funding to businesses to help transition away from PCE. No such federal programs exist as of publication of this guide. Check with local authorities for programs that may exist in your area.

### D. How do I dispose of my PCE dry cleaning machine once I have replaced it?

Check with your local or state government to learn about proper decommissioning and disposal of your

PCE dry cleaning machine. Generally, scrap metal companies will receive a dry cleaning machine as long as it is clean. The scope of the work, location, size, and other factors to clean and dispose of the machine will vary among dry cleaning businesses. You may require third party assistance. Some local or state agencies give information about and assistance in decommissioning PCE dry cleaning machines.

## V: Violations of the PCE Rule

This unit describes violations of the PCE rule for dry cleaning and spot cleaning, including for small businesses.

### A. What if the EPA discovers a violation?

In accordance with section 15 of TSCA, it is unlawful to fail or refuse to comply with any requirement under TSCA, or with any rule promulgated under TSCA. Therefore, any failure to comply with the final rule would be a violation of section 15 of TSCA. It is also unlawful under section 15 of TSCA for any person to use for commercial purposes a chemical substance or mixture which such person knew or had reason to know was manufactured, processed, or distributed in commerce in violation of TSCA section 6.

In addition, under section 15 of TSCA, it is unlawful for any person to:

- (1) fail or refuse to establish or maintain records as required by the final rule or other regulations promulgated under this chapter;
- (2) fail or refuse to permit access to or copying of records, as required by TSCA; or
- (3) fail or refuse to permit entry or inspection as required by section 11 of TSCA.

Violators of the regulations under TSCA section 6 may be subject to both civil and criminal liability.

- Under the penalty provision of section 16 of TSCA, any person who violates section 15 could be subject to a civil penalty for each violation. Each day in violation of the final rule could constitute a separate violation.
- Knowing or willful violations could lead to the imposition of criminal penalties for each day of violation and imprisonment. In addition, other remedies are available to the EPA under TSCA. In addition, it is unlawful to knowingly and willfully make or submit in writing materially false, fictitious, or fraudulent statements.

Individuals, as well as companies, could be subject to enforcement actions. Sections 15 and 16 of TSCA apply to “any person” who violates various provisions of TSCA. The EPA may, at its discretion and where appropriate, proceed against individuals as well as companies.

### B. How does the EPA address violations by small businesses?

To maximize compliance, the EPA implements a balanced program of compliance assistance, compliance incentives, and traditional law enforcement. Compliance assistance information and technical advice like this guide helps small businesses to understand and meet their regulatory requirements of protecting potentially exposed persons’ health and the environment. Compliance incentives, such as the EPA’s Small Business Policy, apply to businesses with 100 or fewer employees and encourage persons to voluntarily discover, disclose, and correct violations before they are identified by the government (more information about the EPA’s Small Business Policy is available at <https://www.epa.gov/enforcement/small-businesses-and-enforcement>). The EPA’s enforcement program is aimed at protecting the public by ensuring compliance with regulations under TSCA section 6.

The EPA encourages small businesses to work with the Agency to discover, disclose, and correct violations. The [EPA’s Audit Policy](#), which provides incentives for regulated entities to voluntarily discover and fix violations of federal environmental laws and regulations, may be helpful for this process. The Agency has developed self-disclosure, small business, and small community policies to mitigate penalties for small and large entities that cooperate with the EPA to address compliance problems.

For more information on compliance assistance and other EPA programs for small businesses, please contact the EPA’s Small Business Ombudsman Program via their toll-free hotline at 800-368-5888 or by email at [asbo@epa.gov](mailto:asbo@epa.gov). You can also find technical environmental compliance assistance in your state through the Small Business Environmental Assistance Program here: [States | National Small Business Environmental Program \(nationalsbeap.org\)](#).

## Frequently Asked Questions (FAQs)

### ***Where can I go if I have questions or need further assistance?***

Please contact the EPA's TSCA Hotline with questions by telephone at (202) 554-1404 or by email at [tsca-hotline@epa.gov](mailto:tsca-hotline@epa.gov) or [PCE.TSCA@epa.gov](mailto:PCE.TSCA@epa.gov). For small businesses, please see the [EPA's Small Business Ombudsman Website](#). Small businesses may find the national [Small Business Environmental Assistance Programs \(SBEAP\)](#) helpful for providing resources and information about this PCE regulation.

### ***Where do I send PCE used in a dry cleaning machine for disposal?***

Under the PCE rule, facilities that treat, dispose, and recycle PCE used in dry cleaning are subject to the **Workplace Chemical Protection Program (WCPP)** requirements (see [40 CFR 751.607](#)). The EPA does not expect many dry cleaning facilities to treat, store, and dispose of hazardous waste generated from dry cleaning machines.

Under RCRA, PCE that has been used and cannot be used further without being processed would likely be a hazardous waste, bearing the hazardous waste codes F002 and D039. For general information on hazardous waste identification and management under RCRA, see the [small business guide for managing hazardous waste](#). If it is not hazardous waste, then it would be subject to local and state solid waste management requirements. For focused information on the management of PCE and other hazardous wastes from dry cleaning operations, see the [SBEAP's compliance guide on RCRA's resources for dry cleaning](#).

For further questions, you may also contact the EPA's TSCA Hotline with questions by telephone at (202) 554-1404 or by email at [tsca-hotline@epa.gov](mailto:tsca-hotline@epa.gov) or [PCE.TSCA@epa.gov](mailto:PCE.TSCA@epa.gov). For small businesses, please see the EPA's Small Business Ombudsman Website, <https://www.epa.gov/resources-small-businesses/asbestos-and-small-business-ombudsman>.

### ***Is this guide updated?***

This manual is the first version of the compliance guide. The EPA will ensure that the latest updated compliance guides are available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-perchloroethylene-pce>.

### ***What if I become aware of a violation?***

To report a violation, please see instructions at <https://www.epa.gov/report-violation>. The [EPA's Audit Policy](#), which provides incentives for regulated entities to voluntarily discover and fix violations of federal environmental laws and regulations, may also be helpful for this process.

### ***Where can I find more information?***

More information on how the EPA is addressing the unreasonable risk from chemical substances is at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca>. You may also contact the EPA's TSCA Hotline by telephone at (202) 554-1404 or by email at [tsca-hotline@epa.gov](mailto:tsca-hotline@epa.gov).

For PCE, additional information is available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-perchloroethylene-pce>. The regulations can be found in the Federal Register Notice at <https://www.federalregister.gov/documents/2024/12/18/2024-30117/perchloroethylene-pce-regulation-under-the-toxic-substances-control-act-tsca> or at docket EPA-HQ-OPPT-2020-0720 at <https://www.regulations.gov>. You can also email [PCE.TSCA@epa.gov](mailto:PCE.TSCA@epa.gov) with information or questions.

## Appendix A: Abbreviation List and Glossary

### Abbreviation List

1-BP	1-bromopropane
CAA	Clean Air Act
CASRN	Chemical Abstracts Service (CAS) Registry Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FAQs	Frequently Asked Questions
FR	Federal Register
NESHAP	National Emission Standards for Hazardous Air Pollutants
OCE	Off-cycle emissions
OSHA	Occupational Safety and Health Administration
PCE	Perchloroethylene
PEL	Permissible exposure limit
RCRA	Resource Conservation and Recovery Act
SBEAP	Small Business Environmental Assistance Program
TCE	Trichloroethylene
TSCA	Toxic Substances Control Act
WCPP	Workplace Chemical Protection Program

## Glossary

**Chemical substance** – Defined in TSCA section 3(2) to mean organic or inorganic substance of a particular molecular identity, including:

- (1) Any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and
- (2) Any element or uncombined radical.

Such term does not include:

- (i) any mixture,
- (ii) any pesticide (as defined in the Federal Insecticide, Fungicide, and Rodenticide Act) when manufactured, processed, or distributed in commerce for use as a pesticide,
- (iii) tobacco or any tobacco product,
- (iv) any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 and regulations issued under such Act),
- (v) any article the sale of which is subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (determined without regard to any exemptions from such tax provided by section 4182 or 4221 or any other provision of such Code) and any component of such an article (limited to shot shells, cartridges, and components of shot shells and cartridges), and
- (vi) any food, food additive, drug, cosmetic, or device (as such terms are defined in section 201 of the Federal Food, Drug, and Cosmetic Act) when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

The term “food” as used in clause (vi) of this subparagraph includes poultry and poultry products (as defined in sections 4(e) and 4(f) of the Poultry Products Inspection Act), meat and meat food products (as defined in section 1(j) of the Federal Meat Inspection Act), and eggs and egg products (as defined in section 4 of the Egg Products Inspection Act).

**Conditions of use** – Defined in TSCA section 3(4) to mean the circumstances, as determined by the EPA, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of.

**Effective date** – the date on which a regulation takes effect and becomes enforceable. In this case, the effective date is on January 17, 2025.

**Owner or operator** – (40 CFR § 751.5) Any person who owns, leases, operates, controls, or supervises a workplace.

**Potentially exposed person** – (40 CFR § 751.5) Any person who may be exposed to a chemical substance or mixture in a workplace as a result of a condition of use of that chemical substance or mixture. The term includes workers, employees, independent contractors, employers, and all other persons in the workplace where PCE is present. In the context of this compliance guide, potentially exposed persons are dry cleaning workers and others in the workplace.

**Worker** – Person who performs work in areas where PCE is present, including both those who handle PCE and those who do not directly handle PCE.

**Workplace Chemical Protection Program (WCPP)** – A program to protect workers from unreasonable risk posed by exposure to a regulated substance for certain conditions of use under TSCA. The WCPP includes a suite of measures to work together to create a workplace safety program for PCE. WCPP provisions include a regulatory ECEL, initial

and periodic monitoring, respirator selection criteria, recordkeeping, and downstream notification for PCE to ensure that workers are no longer at risk.

## Appendix B: Fact Sheet

The next page reproduces the EPA's fact sheet providing an overview of the 2024 regulation of PCE under TSCA. The fact sheet is available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-perchloroethylene-pce>.



## 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.<sup>1</sup> The table below is a summary of key points; full details are in the [final rule](#).

## What is the PCE regulation<sup>2</sup> 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),<sup>3</sup> 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 PCE<sup>4</sup>

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.

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

<sup>2</sup> 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>.

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

<sup>4</sup> 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
<b>Prohibition on manufacturing</b>	
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 <a href="#">§ 751.605(b)(1)</a> ). <span style="float: right;"><b>June 11, 2026</b></span>
<b>Prohibition on processing</b>	
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 <a href="#">§ 751.605(b)(2)</a> ). <span style="float: right;"><b>September 9, 2026</b></span>
<b>Prohibition on all distributors</b>	
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 <a href="#">§ 751.605(b)(3)</a> ). <span style="float: right;"><b>December 8, 2026</b></span>
	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 <a href="#">§ 751.605(b)(5)</a> ). <span style="float: right;"><b>March 8, 2027</b></span>
<b>Prohibition on distribution by retailers</b>	
Retailers	All retailers are prohibited from distributing in commerce (including making available) PCE, including any PCE-containing products (see <a href="#">§ 751.605(b)(4)</a> ). <span style="float: right;"><b>March 8, 2027</b></span>
<b>Prohibition on industrial and commercial use</b>	
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 <a href="#">§ 751.605(b)(6)</a> ). <span style="float: right;"><b>June 7, 2027</b></span>
<b>Prohibition on use of PCE in newly acquired dry cleaning machines</b>	
Dry cleaners	All persons are prohibited from industrial or commercial use of PCE in dry cleaning machines acquired after June 16, 2025 (see <a href="#">§ 751.605(b)(7)</a> ). <span style="float: right;"><b>June 16, 2025</b></span>
<b>Prohibition on dry cleaning and related spot cleaning in 3<sup>rd</sup> generation machines</b>	
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 <sup>rd</sup> generation machines (see <a href="#">§ 751.605(b)(8)</a> ). <span style="float: right;"><b>December 20, 2027</b></span>
<b>Prohibition on all dry cleaning and related spot cleaning</b>	
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 <a href="#">§ 751.605(b)(9)</a> ). <span style="float: right;"><b>December 19, 2034</b></span>

\* 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<sup>†</sup> 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 <b>December 15, 2025</b> (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 <b>March 13, 2026</b> (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 <b>March 13, 2026</b> (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 <b>June 7, 2027</b> (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 <b>every 5 years, but could occur as frequently as every 3 months</b>, 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](mailto: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](mailto: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](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](mailto:asbo@epa.gov).