

A COMPLIANCE GUIDE FOR THE WORKPLACE CHEMICAL PROTECTION PROGRAM UNDER THE TOXIC SUBSTANCES CONTROL ACT (TSCA)

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.** This guide does not stipulate the outcome of ongoing or future rulemaking conducted by the EPA. The statements in this guide are intended solely as guidance to aid you in complying with EPA regulations issued under the Toxic Substances Control Act (TSCA) section 6. 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, 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 specific rule information, consult the EPA's [Risk Management for Existing Chemicals under TSCA resources](#). Fact sheets summarizing information in a given risk management rule may also be available.

FOR FURTHER 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.

Reproduction of the manual

This manual may be reproduced, but if this manual is altered, it may not provide accurate information that owners or operators need to comply with the requirements of the EPA's regulations for the Workplace Chemical Protection Program (WCPP) under TSCA. 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 WCPP in the future. Please check the EPA's website for further information and current amendments.

This manual, titled "A Compliance Guide for the Workplace Chemical Protection Program Under the Toxic Substances Control Act" and other materials related to the WCPP are available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/guidance-regulations-issued-under-toxic-substances>.

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I: Understanding the Workplace Chemical Protection Program Under Section 6 of TSCA

Words or phrases that appear in **bold red text** throughout this guide are defined in [Appendix A: Abbreviation List and Glossary](#).

The EPA evaluates **chemical substances** under section 6(b) of TSCA to determine whether the chemical substance presents an unreasonable risk of injury to health or the environment, without consideration of costs or non-risk factors, including potentially exposed or susceptible subpopulations, under the **conditions of use**. If the EPA determines that a chemical substance presents an unreasonable risk to a potentially exposed susceptible subpopulation such as **workers**, the Agency must then regulate the chemical under section 6(a) of TSCA so that the chemical no longer presents such risk. The resulting regulation is issued for a chemical substance in the Federal Register.

The information in this guide can help you understand and comply with new workplace regulations from the EPA for TSCA section 6 regulated chemical substances. A thorough understanding of the EPA's **Workplace Chemical Protection Program (WCPP)** will help ensure compliance with the applicable WCPP requirements and protect people in the occupational workspace from chemical hazards.

The WCPP is an occupational chemical protection program designed to address unreasonable risk from chemical exposures in the workplace. A WCPP program includes anyone in the workplace who has the potential for exposure to a chemical regulated under TSCA. If a TSCA regulation authorizes conditions of use under a WCPP for a chemical substance, the regulation will include specific WCPP requirements to ensure the safety of persons engaging directly or indirectly in those conditions of use. Such requirements would include actions to protect persons in the workplace from inhalation risk, dermal risk, or both, as well as recordkeeping and other general requirements outlined in [Unit II](#) and [Unit III](#). Though this guide uses the term “occupational” to describe WCPP requirements typically found in a TSCA regulation, it is important to note that the WCPP provisions protect all **potentially exposed persons** within an occupational

setting. Refer to potentially exposed person in [Unit I.B](#), or the [Glossary](#) at the end of this guide for examples.

This compliance guide provides information to help you understand the EPA's WCPP. It is not intended to replace compliance with a specific EPA risk management regulation under TSCA section 6(a). TSCA section 6(a) risk management regulations may be accompanied by individual compliance guides to address small business needs and/or provide a general overview of a specific TSCA section 6(a) regulation. Upon publication of a final rule and prior to its **effective date**, the EPA may post the accompanying chemical-specific compliance guide. Therefore, it is recommended to regularly review the [EPA risk management page](#) for the desired chemical substance(s) to determine whether a compliance guide is available for an individual TSCA section 6 regulation.

This guide aims to provide an overview of the WCPP as it may apply across a wide range of industries. However, no document can anticipate or address every possible industry or situation that may arise. The business landscape is diverse and constantly evolving, and workplace compliance factors can vary significantly depending on industry sector, company size, geographic location, and specific regulatory requirements. Users of this guide should consider their particular circumstances and consult with legal or compliance professionals when dealing with complex or ambiguous circumstances. The information in this document is intended to provide a predictable starting point, and should be carefully reviewed and adapted based on the details of a chemical-specific TSCA section 6(a) regulation and facility circumstances.

This compliance guide for the WCPP:

- Describes the EPA's WCPP and why it is important.
- Helps you understand:
 - Whether it applies to you;
 - Potential responsibilities for a WCPP within a TSCA section 6 rule; and
 - Additional resources to plan for successful implementation.
- Explains how important WCPP concepts affect compliance responsibilities.

- Provides insight into occupational exposure control considerations within the WCPP.
- Provides notes to help you better understand potential compliance responsibilities.

A. Does this guide apply to me?

You may be impacted by the WCPP if you own or operate a business that manufactures (including imports), processes, distributes in commerce, uses, or disposes of a chemical substance for conditions of use that the EPA has identified to present unreasonable risk and has subsequently regulated. This guide also provides entities with information to protect workers and other potentially exposed persons that use or are in the vicinity of the use of chemicals that are regulated due to unreasonable risk. The conditions of use or subsets of conditions of use for which the WCPP would apply will vary from chemical substance to chemical substance based on chemical-specific hazards, occupational exposure, risk characterization, and other factors. While the EPA anticipates that broad principles of the WCPP will be common across rules, individual rule provisions may vary and could potentially include unique requirements necessary to protect individuals from unreasonable risk in the workplace. Consult with the WCPP section of the final TSCA section 6 risk management rule and the accompanying compliance guide, if available, for more details on specific chemicals. Additionally, conditions of use, or subsets of a condition of use, authorized under the WCPP will be specified in the rule for that chemical.

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

Persons who own or operate a facility that use a chemical substance managed under TSCA section 6 are responsible for complying with the prohibitions and other restrictions in a specific TSCA chemical rulemaking, which may include complying with regulatory provisions that are consistent with the WCPP. The EPA has defined “**owner or operator**” to include any person who owns, leases, operates, controls, or supervises a workplace covered within 40 Code of Federal Regulations (CFR) Part 751 (see [40 CFR 751.5](#)). If you are unsure if your business uses a chemical substance managed under TSCA section 6, see the EPA’s final risk management rule for the particular chemical substance and condition of use. For additional information, please visit the [Regulation of Chemicals Under TSCA Section 6](#) webpage.

Other individuals, such as potentially exposed persons, or other representatives acting on behalf of those persons, may want to refer to this guide to understand what protections are required in the workplace under TSCA section 6 regulations that require the WCPP. Potentially exposed persons are those 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 (see [40 CFR 751.5](#)). Potentially exposed persons include workers, employees, independent contractors, employers, university students, volunteers, self-employed persons, and state and local government workers, and all other persons in the workplace where a TSCA-regulated chemical substance is present.

C. Additional regulations

In addition to applicable risk management regulations for chemical substances under TSCA section 6(a), other Federal, state, or local statutes or regulations may also be relevant to you. These statutes or regulations may apply to you in addition to WCPP, or potentially be cross-referenced in a TSCA section 6 rule. Some examples include:

- **EPA**
 - National Emission Standards for Hazardous Air Pollutants (NESHAP), which include:
 - [40 CFR Part 63, subpart F](#) Synthetic Organic Chemical Manufacturing Industry;
 - [40 CFR Part 63, subpart DD](#) Off-Site Waste and Recovery Operations;
 - [40 CFR Part 63, subpart VVV](#) Publicly Owned Treatment Works; and
 - [40 CFR Part 63, subpart VVVVVV](#) NESHAP for Chemical Manufacturing Area Sources.
 - [Comprehensive Environmental Response, Compensation, and Liability Act \(CERCLA\)](#)
 - [Resource Conservation and Recovery Act \(RCRA\)](#)
- **Occupational Safety and Health Administration (OSHA)**
 - [29 CFR 1910 Subpart Z](#) Toxic and Hazardous Substances
 - [29 CFR 1904](#) Reporting Occupational Injuries and Illnesses

- [29 CFR 1910.120](#) Hazardous Waste Operations and Emergency Response
- [29 CFR 1910.132](#) General Requirements (PPE)
- [29 CFR 1910.133](#) Eye and Face Protection
- [29 CFR 1910.134](#) Respiratory Protection (including fit test protocols under Appendix A)
- [29 CFR 1910.138](#) Hand Protection
- [29 CFR 1910.146](#) General Industry Permit-Required Confined Spaces
- [29 CFR 1910.147](#) Control of Hazardous Energy (lockout/tagout)
- [29 CFR 1910.307](#) Hazardous Locations
- [29 CFR 1910.1000](#) Air Contaminants
- [29 CFR 1910.1020](#) Access to Employee Exposure and Medical Records
- [29 CFR 1910.1020](#) Access to Employee Exposure and Medical Records
- [29 CFR 1910.1200](#) Hazard Communication
- [29 CFR 1910.1450](#) Occupational Exposure to Hazardous Chemicals in Laboratories
- [29 CFR 1926 Subpart Z](#) Toxic and Hazardous Substances

Did You Know?

WCPP requirements in EPA rules do not supersede OSHA's rules. The regulated community must ensure compliance with all applicable regulations. If OSHA has existing regulations for a chemical substance for which the EPA also promulgates a rule, the EPA anticipates that the provisions of the EPA rule will align with the existing OSHA requirements to the extent appropriate.

II: Key Concepts in the WCPP

The WCPP is a program that can be utilized in TSCA section 6 rules to protect potentially exposed persons in the workplace from unreasonable risk due to exposure to a TSCA regulated chemical substance. WCPP provisions may include a regulatory occupational exposure limit called an **Existing Chemical Exposure Limits (ECEL)**, initial and periodic monitoring, respirator selection criteria, training, recordkeeping, downstream notification, or other provisions to ensure that potentially exposed persons are not exposed to unreasonable risk from a chemical substance. Depending on the chemical substance's particular hazard and exposure characteristics, circumstances, or the EPA's considerations, owners or operators can use the flexibility within the WCPP in deciding how to best prevent exceedances of the EPA's exposure limits for the TSCA regulated chemical substance. Typical WCPP provisions required in chemical specific TSCA section 6 regulations may include:

- An EPA Occupational Exposure Limit (e.g., ECELS or **EPA Short-Term Exposure Limit (EPA STEL)**) designated under TSCA;
- An **ECEL action level**;
- Occupational exposure monitoring;
- **Regulated area(s)**;
- An Exposure Control Plan;
- **Direct Dermal Contact Control (DDCC)**;
- **Personal Protective Equipment (PPE)** Program;
 - Respiratory protection;
 - Dermal/eye and face protection;
- Training requirements;
- Recordkeeping requirements; and
- Downstream notification.

These provisions of a WCPP work together to ensure that potentially exposed persons are protected from unreasonable risk in the workplace from use of a TSCA section 6 regulated chemical. While this guide provides a broad look at useful information to consider, consult the WCPP section within a specific risk management rule for the specific provisions of the WCPP for any individual chemical substance regulated by the EPA.

A. What are the EPA's TSCA ECELS?

A WCPP for a TSCA section 6 rule may include an exposure limit as part of a WCPP. ECELS are legal limits on the amount or concentration of a chemical substance in workplace air. To protect potentially exposed persons from the unreasonable risks from inhalation exposure to chemicals in the workplace, the EPA may establish exposure limits (e.g., an ECEL, EPA STEL, etc.) for conditions of use in a chemical specific TSCA section 6 rule. A given section 6 risk management rule may also include provisions or specific workplace controls for a condition of use that are outside of a WCPP.

An exposure limit (e.g., ECEL) promulgated as part of a TSCA risk management rule may be different from the occupational exposure value (OEV) identified as part of the chemical substance's risk evaluation. The OEV is set in the risk evaluation at the level below which the EPA would not expect any appropriate adverse health effects for a worker exposed to the chemical substance for a working lifetime without exposure-reducing controls in place, such as PPE.

The EPA's ECELS are included in a WCPP when rules are proposed and finalized. The ECEL is typically expressed as an 8-hour time-weighted average (TWA), and is a maximum average airborne concentration of the chemical substance that a person can be exposed to in the workplace. The EPA may also establish an EPA STEL in a final risk management rule, typically expressed as a 15-minute TWA to protect potentially exposed persons from acute occupational inhalation risk.

Did You Know?

You can find all the EPA's TSCA Section 6 ECELS at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/list-final-and-proposed-existing-chemical-exposure>.

As part of a WCPP, owners or operators must ensure that potentially exposed persons are not exposed to concentrations of chemical substances above the ECEL and/or EPA STEL in the workplace. Regulated entities have flexibility within the parameters of the WCPP of a given TSCA section 6 rule in deciding how to best prevent exceedances of the EPA exposure limits for the regulated chemical substance. The flexibility is accomplished by instituting one or a combination of controls that work for the particular facility based on the National Institute for Occupational Safety and Health (NIOSH) hierarchy of controls (see [Unit V.A.](#) for more details on the hierarchy of controls). The hierarchy of controls is a hazardous exposure mitigation model that identifies the preferred order of actions to mitigate workplace exposures and includes:

- Elimination;
- Substitution;
- Implementing engineering controls;
- Administrative controls (if appropriate); and
- Where feasible controls are not sufficient to reduce exposures to or below the ECEL and/or the EPA STEL, supplementing such controls using PPE (e.g., use of respiratory protection in combination with an engineering control when inhalation exposure may occur).

The EPA's risk management rules typically require owners or operators to consider and implement feasible exposure controls before resorting to PPE to reduce exposures to or below the ECEL and/or EPA STEL within a regulated area. Additional information on the hierarchy of controls and the Exposure Control Plan may be found in [Unit II.F.](#) and [Unit III.G.](#)

B. ECEL action level

The concept of the action level is familiar to many in the occupational health profession, from chemical-specific OSHA standards under [29 CFR part 1910, Subpart Z](#), that establish action levels for various chemicals.

An ECEL action level is an airborne concentration of a chemical substance typically identified as an 8-hour TWA. ECEL action levels are not an exposure limit, but they do provide useful occupational exposure information that may trigger additional compliance action(s) by an owner or operator. Not all TSCA section 6 rules for a chemical will include one. As part of a WCPP, the EPA may establish an ECEL action level, typically set at half the regulatory ECEL, established in

the TSCA section 6 rule. For example, air concentrations at or above an established action level may trigger more frequent periodic monitoring or other necessary ancillary requirements to ensure the protection of human health. See [Unit II.C.](#) and [Unit III.C.](#) for additional information on periodic monitoring.

For information on the ECEL action level for a specific chemical substance, consult the WCPP section of the TSCA risk management rule for the chemical substance.

C. Occupational exposure monitoring

Occupational exposure monitoring within a WCPP typically encompasses:

- **Initial monitoring** – monitoring that establishes a baseline exposure for potentially exposed persons to the regulated chemical substance.
- **Periodic monitoring** – monitoring conducted at some minimum interval established in the WCPP and laid out in the regulation for the specific chemical.
- **Additional monitoring** – monitoring where there is a workplace change (e.g., change in equipment) that may increase or otherwise introduce additional sources of exposure to a TSCA section 6 regulated chemical substance.

When conducting monitoring, the owner or operator is responsible for evaluating occupational exposure(s) against one or more of the following established chemical substance-specific air concentrations:

- **ECEL action level**
- **ECEL**
- **EPA STEL**

In general, the WCPP may reflect some basic occupational sampling requirements:

- Minimum accuracy criteria (e.g., accurate to a confidence level of 95% are within plus or minus 25% of airborne concentrations of the chemical substance relative to the 8-hour TWA ECEL);
- Identifying and/or requiring specific analytical methods to be used for occupational sampling(s);
- Identifying and/or requiring specific sampling media for occupational sampling(s) (e.g., intrinsically safe gas metering devices, monitoring

badges, gas chromatography equipment, gas detection tubes, etc.);

- Use of accredited laboratories and facilities for analysis of occupational sampling(s);
- Requiring a safety and health professional for review of certain occupational exposure sampling (e.g., a Certified Safety Professional, a Certified Industrial Hygienist, etc.);
- Sample(s) must be taken from the **personal breathing zone (PBZ)** of a representative population, and without regard to respiratory protection;
- Sample(s) must be taken for potentially exposed person(s) expected to have the highest exposure in an **exposure group**;
- Sample(s) must be taken when and where the operating conditions are best representative of each potentially exposed person's full-shift or short-term exposure;
- Potentially exposed person, or a representative acting on their behalf, must have an opportunity to observe monitoring representative of the exposure; and/or
- Other chemical substance or condition of use-specific requirements.

Did You Know?

There are a wide array of chemical management/industrial hygiene resources available to develop appropriate occupational sampling strategies. NIOSH is currently considering updating the [1977 Occupational Exposure Sampling Strategy Manual \(OESSM\)](#) to reflect advances in the state of the sciences of exposure and occupational risk assessment.

NIOSH has also published more recent [guidance for workplace sampling for some engineered nanomaterials](#).

D. Regulated areas

Within a WCPP, a regulated area means an area established by the regulated entity to distinguish areas where airborne concentrations of a specific chemical substance exceed, or there is a reasonable possibility they may exceed, the applicable ECEL or EPA STEL. Regulated areas must be established as part of a WCPP, serving as an important

engineering/administrative control to limit the number of potentially exposed persons and ensure that only properly authorized, trained and/or certified, and protected individuals enter areas with elevated exposure potential.

The EPA anticipates that regulated areas required by a WCPP for a chemical will be established within a reasonable time period after initial monitoring has been conducted and the airborne concentrations of the chemical substance have been ascertained. Because implementation timeframes may differ between respective TSCA section 6 rules depending on chemical-specific hazards, exposures, risk characterization, and other factors, it is best to consult the chemical-specific regulation.

E. DDCC and dermal PPE

To reduce exposures in the workplace and address the unreasonable risk of injury to health resulting from dermal exposures to a chemical substance, the EPA may include a DDCC component or other dermal control measures in the WCPP. DDCCs are designed to prevent dermal exposures to potentially exposed persons while in the presence of a chemical substance and may include chemical resistant gloves or other PPE. Similar to the requirements for reducing inhalation exposure, DDCC provisions in a risk management rule are likely to require, in accordance with the hierarchy of controls, that feasible controls that are more protective be considered and implemented prior to the use of PPE. Such protective controls include elimination, substitution, engineering, and administrative controls, or a combination of these controls.

For dermal protections, the EPA recommends PPE selection based on the tasks to be performed and the performance and characteristics of the gloves/dermal PPE. Glove selection for chemical protection should be based on the chemical resistance and penetrative properties of the glove material against the particular chemical substance. Some TSCA section 6 risk management rules require the owner or operator to demonstrate that the selected dermal PPE will prevent direct contact with the chemical substance under the expected conditions within the work area by evaluating the manufacturer's specifications or available test data. For information on the dermal PPE requirements for a specific chemical substance, consult the WCPP section of the TSCA risk management rule for that chemical substance.

F. Exposure Control Plan

A regulation of a chemical substance under TSCA section 6 typically requires owners or operators to develop and implement an Exposure Control Plan as part of the WCPP. The purpose of the Exposure Control Plan is to document the consideration and implementation of exposure controls in accordance with the hierarchy of controls to reduce exposure to or below EPA exposure limits. Specifically, the Exposure Control Plan provisions require that owners or operators consider each level of the hierarchy of controls, and document thorough rationale on what exposure controls were available and considered, what exposure controls were or were not implemented, and an explanation of why other exposure controls considered were or were not implemented. The rationale generally must demonstrate compliance with the requirement that the more effective exposure controls were considered and exhausted in order to prevent an overreliance on PPE and provide assurance to potentially exposed persons of their health and safety. As such, the Exposure Control Plan serves to inform potentially exposed persons about how they are being protected, and acts as a conduit for continuous improvement and accountability.

The Exposure Control Plan serves as an important programmatic documentation of the measures taken to mitigate occupational exposure to a TSCA section 6 regulated chemical. The Exposure Control Plan represents the culmination of the earlier elements of the WCPP (e.g., initial monitoring, implementing occupational exposure controls, and documenting other WCPP requirements). The implementation timeframes may differ between respective TSCA section 6 rules depending on chemical-specific hazards, exposures, risk characterization, and other factors.

G. Personal protective equipment

PPE is equipment worn to reduce or mitigate exposure to chemical substances or physical hazards. Examples of PPE include gloves, safety glasses, face shields, and respirators. A PPE requirement may be included as part of a WCPP to serve a role in mitigating occupational exposure. Elements of determining appropriate PPE may include PPE selection, use training, PPE inspection and replacement schedules, storage, and effectiveness monitoring. Under a WCPP, owners or operators are generally not permitted to rely on PPE as a primary method of mitigating exposures without first considering and implementing all feasible

controls in accordance with the hierarchy of controls and documenting the consideration of available controls in the Exposure Control Plan.

An individual TSCA section 6 rule may include an implementation time period for respiratory protection measures and/or PPE program implementation. The implementation timeframes may differ between respective TSCA section 6 rules depending on chemical-specific hazards, exposures, risk characterization, and other factors.

Both OSHA and NIOSH offer valuable guidance and information on PPE and personal protective technology (PPT).

- OSHA offers [guidance on PPE \[OSHA 3151-02R 2023\]](#).
- NIOSH offers [guidance on key PPE resources and PPT research at NIOSH](#).

Respiratory protection

A WCPP may require owners or operators to institute engineering and/or administrative controls, and maintain their effectiveness to reduce employee exposure to or below the ECEL or EPA STEL. Respirators as a means of compliance are generally only allowed under the rules when all feasible engineering controls, work practices, and administrative controls are insufficient. If respiratory protection is relevant to a particular TSCA section 6 regulated chemical substance, the EPA generally intends to align WCPP respiratory protection requirements with OSHA's requirements on respiratory protection, such that the respirator requirements are based on recent exposure monitoring concentrations. Respirator use and accompanying medical evaluation, fit-testing, and training must be in accordance with the requirements in [29 CFR 1910.134](#).

Respirators are an important piece of PPE for potentially exposed persons that safeguards users through two potential ways. One type of respiratory protection filters harmful contaminants from ambient air in the workplace. These respirators include air purifying respirators that may filter particulates or chemicals and gases, depending on the cartridges used with the respirator. Alternatively, some respirators protect potentially exposed persons by supplying clean air from an external source. Supplied air respirator examples include airline respirators and self-contained breathing apparatus (SCBA) respirators.

Dermal, eye and face protection

When issuing TSCA section 6 risk management rules, the EPA considers all routes of exposure that contribute to the unreasonable risk, including inhalation and dermal exposures, and the exposed populations. Depending on the nature of the chemical hazard and the occupational exposures, a WCPP for a specific chemical substance may include dermal PPE requirements and potentially eye and face protection, consistent with OSHA's PPE standards. See [Unit II.E.](#) for more information on DDCC and dermal PPE.

Training

The EPA may include general requirements that owners or operators provide training to all persons required to use respiratory protection (consistent with [29 CFR 1910.134\(k\)](#)) and PPE (consistent with [29 CFR 1910.132](#)) prior to or at the time of initial assignment to a job involving potential exposure to the TSCA section 6 regulated chemical substance. These requirements typically include retraining of all persons required to use respiratory protection or PPE at least annually, or whenever the owner or operator has reason to believe that a previously trained person does not have the requisite understanding or skill to properly use respiratory protection or PPE, or when there are changes in the workplace, or when changes to the respirator or PPE to be used render the previous training obsolete.

As part of the PPE requirements, the EPA may require that owners or operators comply with OSHA's general PPE training requirements under [29 CFR 1910.132](#) for application of a PPE training program, including providing training on proper use of PPE (e.g., when and where PPE is necessary, proper application (donning), wear (clean shaven or securing loose

clothing/jewelry/hair), removal of PPE (doffing), maintenance, storage, useful life, and disposal of PPE). The EPA may also require chemical-specific training related to the chemical's hazard(s) and associated adverse health effects, routes and pathways of exposure, the hierarchy of controls, implemented exposure controls, regulated areas, or other aspects of the WCPP.

The recordkeeping provisions of a WCPP typically require that owners or operators document training(s) associated with a respiratory protection program or a PPE program. See [Unit II.H.](#) and [Unit IV.](#) for more information on WCPP recordkeeping.

H. WCPP recordkeeping

Recordkeeping is an important component of demonstrating compliance with TSCA section 6 rules. An individual TSCA section 6 rule typically includes recordkeeping requirements for the rule (e.g., retention of bills-of-lading to demonstrate compliance with restrictions in a given rule) and/or WCPP recordkeeping requirements. For owners or operators to demonstrate compliance with the WCPP provisions, the EPA requires that owners or operators retain compliance records for five years.¹

In addition to the recordkeeping requirements associated with the Exposure Control Plan discussed above in [Unit II.F.](#), the WCPP recordkeeping requirements document training or re-training of any potentially exposed person, as necessary, to ensure the potentially exposed person has demonstrated understanding of how to use and handle the TSCA section 6 regulated chemical substance and how to appropriately use any required PPE.

¹ EPA's TSCA section 6 recordkeeping requirements do not supplant recordkeeping retention time periods such as those required under [29 CFR 1910.1020](#), or other applicable regulations.

III: Implementing the WCPP

This unit offers some general information about implementation considerations for several key WCPP elements.

A. How do I calculate TWAs for an ECEL or EPA STEL?

As already noted, a WCPP may include monitoring requirements or require that airborne chemical concentrations remain below the chemical substance's ECEL or EPA STEL. TWA calculations are essential for accurately assessing worker exposure, allowing you to compare the true exposure burden against established exposure limits to protect worker health. Below are two TWA calculation examples, one representing an 8-hour TWA (i.e., an ECEL), and the other a 15-minute TWA (i.e., an EPA STEL).

Both the ECEL and the EPA STEL are expressed as TWA exposures. The ECEL is a regulatory exposure limit set by the EPA to establish a maximum average airborne concentration of a chemical substance to address unreasonable risk in the workplace. TWA measurements account for variable exposure levels over the course of a work shift, averaging periods of higher and lower exposures. The TWA exposure for an 8-hour work shift is computed using a simple formula:

$$TWA = (C_a T_a + C_b T_b + \dots C_n T_n) / 8$$

TWA is the time-weighted average exposure for the work shift; C is the concentration during any period of time (T) where the concentration remains constant; and T is the duration in hours of the exposure at the concentration (C). The totality of the variables in the formula are then divided by the 8-hour work shift, or "8," as depicted in the formula.

Note: when calculating an ECEL, be sure that all concentration and time units are normalized.

For example, assume that a potentially exposed person is subject to the following exposure scenario to a chemical substance regulated under TSCA section 6, which has an action level of 4 mg/m³, an ECEL of 8 mg/m³, and an EPA STEL of 57 mg/m³:

- Two hours exposure at 10 mg/m³
- Two hours exposure at 5 mg/m³
- Four hours exposure at 1.9 mg/m³

Substituting this information in the formula:

$$TWA = (2 \times 10 + 2 \times 5 + 4 \times 1.9) / 8 = 4.7 \text{ mg/m}^3$$

Since 4.7 mg/m³ is greater than 4 mg/m³, the action level has been exceeded. However, as 4.7 mg/m³ is less than 8 mg/m³, the ECEL has not been exceeded.

Additional information on the ECEL action level is available in [Unit II.B](#).

Now take for example, an employee that is subject to the following chemical substance exposure over a short-term period of 15 minutes (the EPA STEL is 57 mg/m³):

- 15-minute exposure at 25 mg/m³

Substituting this information in the formula (and replacing 8 hours with a 15-minute time interval):

$$TWA = (15 \times 25) / 15 = 25 \text{ mg/m}^3$$

Since 25 mg/m³ is less than 57 mg/m³, the EPA STEL has not been exceeded.

To review an additional example of an 8-hour TWA for a chemical regulated under TSCA section 6, view page 20 of the [Trichloroethylene Compliance Guide](#).

B. When or how should I conduct initial monitoring?

Where TSCA section 6 regulated chemical substances are used in the workplace and pose inhalation risk, a WCPP typically requires owners or operators to perform initial monitoring to:

- Establish a baseline of inhalation exposure for potentially exposed persons (highest likely 8-hour exposures and/or 15-minute inhalation exposures);
- Determine the need for new, revised, or additional exposure controls (such as engineering controls, administrative controls, and/or a respiratory protection program);
- Inform development of the Exposure Control Plan; and
- Determine the frequency of certain compliance activities, such as periodic monitoring or other necessary ancillary actions to protect human health from unreasonable risk.

Initial monitoring requirements require characterization of each potentially exposed person's exposure by taking a PBZ air sample of each person's exposure or by taking PBZ air samples that are representative. Generally, owners or operators may consider PBZ air samples to be representative of each potentially exposed person's exposure when one or more samples are taken for at least one potentially exposed person and the person sampled is expected to have the highest exposure. The EPA also recognizes the utility of exposure groups or grouping potentially exposed persons with a similar exposure profile to a chemical substance or mixture based on the tasks performed, the manner in which the tasks are performed, and the materials and processes with which they work. Sampling should be representative (i.e., taken from the breathing zone of potentially exposed persons and reflect the appropriate duration of exposure) of the most highly exposed persons relevant or the exposure groups.

Air monitoring results from faulty or otherwise unreliable equipment that may be malfunctioning, uncalibrated or has exceeded its calibration schedule, exceeded its inspection schedule as required by the manufacturer, or in any state that the manufacturer has deemed incapable of producing reliable measurements, are not valid samples and require resampling consistent with the provisions in the WCPP section of the TSCA section 6 rule.

Did You Know?

The PBZ is a hemispheric area forward of the shoulders within a six to nine inch radius of a worker's nose and mouth. Exposure monitoring air samples must be collected from within this space.

For each initial monitoring, the EPA generally requires that the owner or operator record relevant information about the monitoring event. This may include who the potentially exposed persons are or who the results are intended to represent, conditions that may affect monitoring results such as humidity or extreme environments, the type of sampling media, workplace ventilation, and more. Occupational exposure data ascertained from initial monitoring will help inform the development of an effective Exposure Control Plan. For more information on the Exposure Control Plan, see [Unit II.F.](#) and [Unit III.G.](#)

C. When or how should I conduct periodic monitoring?

Where regulated chemical substances are used in the workplace and pose inhalation risk, a WCPP requires owners or operators to perform periodic monitoring to:

- Ensure continuity of protections so that potentially exposed persons are not exposed to regulated TSCA section 6 chemical substances at levels above the ECEL and/or EPA STEL;
- Ensure exposure controls are operating within expected parameters and provide advance awareness of potential exposure control deterioration or failure;
- Consider the need for new, revised, or additional exposure controls (such as engineering controls, administrative controls, and/or a respiratory protection program); and
- Inform necessary updates to the Exposure Control Plan.

As noted previously, occupational sampling should be representative (i.e., taken from the breathing zone of potentially exposed persons and reflect the appropriate exposure duration) of the most highly exposed persons in the workplace.

For each periodic monitoring sampling event, the EPA generally requires that the owner or operator record relevant information. This may include who the potentially exposed persons are or who the results are intended to represent, conditions that may affect monitoring results such as humidity or extreme environments, the type of sampling media, workplace ventilation, and more. Periodic monitoring frequency may change depending on the results of the most recent monitoring but will likely be required to be repeated at least once every five years. For more information on the Exposure Control Plan, see [Unit II.F.](#) and [Unit III.G.](#) For an example of how initial monitoring may inform the periodic monitoring frequency, see Table 1 below.

Table 1 – Example of Periodic Monitoring Requirements Based on Initial Exposure Monitoring Results

Air Concentration Condition	Periodic Monitoring Requirement
If the initial exposure monitoring concentration is below the ECEL action level and at or below the EPA STEL .	ECEL and EPA STEL periodic monitoring at least once every 5 years.
If the initial exposure monitoring concentration is below the ECEL action level and above the EPA STEL .	ECEL periodic monitoring at least once every 5 years, and EPA STEL periodic monitoring required every 3 months.
If the initial exposure monitoring concentration is at or above the ECEL action level and at or below the ECEL; and at or below the EPA STEL .	ECEL periodic monitoring every 6 months.
If the initial exposure monitoring concentration is at or above the ECEL action level and at or below the ECEL; and above the EPA STEL .	ECEL periodic monitoring every 6 months and EPA STEL periodic monitoring every 3 months.
If the initial exposure monitoring concentration is above the ECEL and below, at, or above the EPA STEL .	ECEL periodic monitoring every 3 months and EPA STEL periodic monitoring every 3 months.
If 2 consecutive monitoring events have taken place at least 7 days apart that indicate that potential exposure has decreased from above the ECEL to at or below the ECEL, but at or above the ECEL action level .	Transition from ECEL periodic monitoring frequency from every 3 months to every 6 months.
If 2 consecutive monitoring events have taken place at least 7 days apart that indicate that potential exposure has decreased to below the ECEL action level and at or below the EPA STEL .	Transition from ECEL periodic monitoring frequency every 6 months to once every 5 years. The second consecutive monitoring event will delineate the new date from which the next 5-year periodic exposure monitoring must occur.

D. How do I know when to conduct additional monitoring?

Where there is inhalation risk, additional exposure monitoring will likely be required as part of a WCPP after any change that may introduce additional potential sources of exposure to a chemical substance regulated under section 6 of TSCA, or otherwise result in increased exposure to a chemical substance compared to its most recent monitoring event. Examples include changes in production, use rate, process, control equipment, or work practices and start-up, shutdown, or malfunction of facility equipment.

Additional exposure monitoring should not delay implementation of any necessary cleanup or other remedial action to reduce the exposures to potentially exposed persons. Such remedial actions may necessitate consideration of spill kits or to establish a

response program to address exposures that may result from non-routine incidents. The result of additional exposure monitoring may affect the frequency of periodic monitoring in a TSCA section 6 rule.

Unlike initial monitoring, under a typical WCPP, prior monitoring data cannot be used to satisfy additional monitoring requirements. This is due to the nature of additional monitoring requirements which generally address and document changes in production or processes that are unlikely to be represented by previous exposure data and result in increased exposure or additional sources of exposure.

E. How do I establish a regulated area?

See [Unit II.D.](#) for an overview of regulated area requirements.

Regulated area locations typically need to be documented in the Exposure Control Plan. The owner or operator is expected to establish and demarcate the regulated area as part of the WCPP. Additionally, as part of a WCPP, the owner or operator is typically required to restrict access to the regulated area from any potentially exposed person who lacks proper training and/or certification, PPE and/or respirators, or is otherwise unauthorized to enter. A regulated area may be established as either a permanent or transient location within the workplace. While the regulated area is not required to be a fixed area, designation of temporary regulated areas may create challenges in documenting the areas in the Exposure Control Plan. For example, the Exposure Control Plan generally requires a description of the regulated areas, how they are demarcated, and persons authorized to enter.

When establishing regulated areas, owners or operators must implement clear, visible signifiers that alert potentially exposed persons to boundaries and the restricted nature of the area. These markings should be tailored to the workforce, including the use of multiple languages, where appropriate. For example, Spanish language signs may be appropriate in workplaces with Spanish-speaking employees.

Once the regulated area is established, the WCPP will likely include additional requirements, such as:

- The owner or operator is required to restrict access to the regulated area by any person that lacks proper training and/or certification, lacks PPE, if required, or is otherwise unauthorized to enter. For example, restricting access could be achieved by implementing a physical barrier that prevents unauthorized entry (e.g., walls, doors, fencing), sensory cues (e.g., signs, lights, audible systems), issuing access credentials, providing informative training, or instituting a combination of these.
- Owners or operators must provide respiratory protection sufficient to reduce inhalation exposures to at or below the ECEL and/or EPA STEL for all potentially exposed persons in the regulated area within a specified time period (e.g., 3 months after receipt of the results of any exposure monitoring).

The WCPP will typically require owners or operators to use all feasible controls to reduce airborne concentrations of regulated chemical substances to the lowest levels achievable and supplement controls as necessary with respiratory protection and/or PPE before potentially exposed persons enter a regulated area.

F. How do I implement a PPE program?

Where all feasible elimination, substitution, engineering, and administrative controls are insufficient in reducing the air concentration of a regulated chemical substance to or below the ECEL and/or EPA STEL, or preventing dermal contact, the WCPP may require owners or operators to provide PPE, including respiratory protection and dermal protection identified in the section 6 rule, and to implement PPE/respirator programs described in the individual rules. The PPE/respirator programs may include respiratory protection, dermal protection, training, and recordkeeping to support an effective PPE program. Elements of the PPE/respirator programs may have unique requirements for particular chemical substances, but will generally align with OSHA standards under [29 CFR 1910.132 \(PPE\)](#) and [29 CFR 1910.134 \(respiratory protection\)](#).

1. What are the respiratory protection requirements?

A WCPP may include a requirement to develop and administer a written respiratory protection program in accordance with OSHA's respiratory protection standard under [29 CFR 1910.134\(c\)\(1\)](#), [\(c\)\(3\)](#), and [\(c\)\(4\)](#). This would also include requisite medical evaluations needed to qualify potentially exposed person for respirator use per [29 CFR 1910.134\(e\)](#) and fit testing protocols under [29 CFR 1910.134 Appendix A](#). If the EPA determines that respiratory protection is necessary to protect human health from unreasonable risk, the EPA anticipates that the required NIOSH Approved respirators would be based on the measured air concentration of the TSCA chemical substance.

The EPA would require training to all persons required to use respiratory protection that aligns with [29 CFR 1910.134\(k\)](#) prior to or at the time of initial assignment to a job involving potential exposure to the chemical substance. Owners or operators would be required to retrain all persons required to use respiratory protection at least annually, or whenever the owner or operator has reason to believe that a previously trained person does not have the requisite understanding or

skill to properly use respiratory protection, or when there are changes in the workplace, or when changes to the respirator to be used render the previous training obsolete. The WCPP may include an implementation period to establish or revisit an existing PPE program as necessary to reflect current workplace conditions. The timeframes may differ between respective TSCA section 6 rules depending on chemical-specific hazards, exposures, risk characterization, and other factors.

NIOSH offers extensive guidance on respirator selection and performance at:
<https://www.cdc.gov/niosh/nppt/topics/respirators/dispart/RespSource.html>.

Did You Know?

There are two recent American Standard for Testing and Materials (ASTM) standards that have replaced obsolete American National Standards Institute (ANSI) American Industrial Hygiene Association (AIHA) standards. These new standards address standard respiratory protections practices and medical qualifications:

ASTM F3387 23 [F3387 Standard Practice for Respiratory Protection](#)

ASTM F3620 [F3620 Standard Practice for Respiratory Protection](#) [Respirator Use](#) [Physical Qualifications for Personnel](#)

2. What are the DDCC and dermal PPE requirements?

To reduce exposures in the workplace and address unreasonable risk of injury to health from dermal exposures to a TSCA section 6 regulated chemical substance, a WCPP may include DDCC requirements. DDCC requirements are generally intended to separate, distance, physically remove, or isolate potentially exposed persons from direct handling of regulated chemical substances and from skin contact from surfaces that may be contaminated with the regulated chemical substance. DDCC elements are not generally applicable to vapor exposure to regulated chemical substances, although the EPA recommends and encourages owners or operators to implement control measures to prevent or reduce dermal exposure to airborne vapors of regulated chemical substances.

Where the DDCC is required, owners or operators can implement from the hierarchy of controls measures to mitigate dermal exposures, except to the extent that the owner or operator can demonstrate that such controls are not feasible. Such control measures should reduce direct dermal contact to the extent achievable by those controls and subsequently supplement those controls with dermal protection measures.

Owners or operators must select and provide appropriate dermal PPE based on an evaluation of the performance characteristics of the dermal PPE relative to the task(s) to be performed, conditions present, and the duration of use.

a) How can I pick the right glove/dermal protection?

To help end-users select the appropriate glove type for their chemical of concern, some glove manufacturers and suppliers now include a rating for glove degradation in addition to permeation efficacy. Some glove types and materials may demonstrate efficient permeation barrier results but may not be fully resistant to degradation from a specific chemical exposure. When this occurs, the glove manufacturer may adjust their glove ratings for expected levels of protection to recognize the potential for a decrease in permeation barrier performance during use due to material degradation. Other factors such as degradation can be evaluated using standard test methods such as select test methods within ASTM Method D 471 Standard Test Method for Rubber Property – Effect of Liquids (e.g., ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension). The WCPP may require documentation of impermeability based on manufacturer specifications or third-party testing. For chemicals undergoing TSCA section 6 regulation, there is a potential that glove performance against these specific chemicals or chemical mixtures has not been previously characterized by glove manufacturers.

b) How can I pick the right eye/face protection?

The EPA generally includes eye and face protection within dermal PPE considerations. Depending on the nature of a chemical-specific hazard(s), an EPA TSCA section 6 rule may also require eye and face protection as part of the WCPP, consistent with OSHA's standard for eye and face protection at [29 CFR 1910.133](#).

G. How do I implement the Exposure Control Plan?

The Exposure Control Plan serves as the owner's or operator's documented strategy for protecting potentially exposed persons and fully implementing the requirements of the TSCA section 6 WCPP for a chemical substance. The following elements may be required in an Exposure Control Plan:

- Identification of possible exposure control measures and the rationale for using or not using available exposure controls in the sequence described by hierarchy of controls based on feasibility;
- For the exposure controls not selected, documentation of the efforts identifying why these are not feasible, not effective, or otherwise not implemented;
- A description of actions the owner or operator must take to implement exposure controls selected, including proper installation, regular inspections, maintenance, training, or other steps taken;
- A description of regulated areas, how they are demarcated, and persons authorized to enter the regulated areas;
- A description of activities conducted by the owner or operator to review and update the Exposure Control Plan to ensure effectiveness of the exposure controls, identify any necessary updates to the exposure controls, and confirm that all persons are properly implementing the exposure controls; and/or
- An explanation of the procedures for responding to any change that may reasonably be expected to introduce additional sources of exposure to a TSCA section 6 regulated chemical substance, or otherwise result in increased exposure to the chemical substance, including procedures for implementing corrective actions to mitigate occupational exposure.

As a reminder, the EPA typically requires owners or operators to consider, use, and document exposure controls consistent with the [hierarchy of controls](#) (i.e., sequentially working through elimination, substitution, then engineering controls and administrative controls) to manage chemical exposure to the extent feasible before using PPE as a means of mitigating occupational exposure(s). See the hierarchy of controls in [Unit V.A.](#) for more detail.

The EPA encourages, but does not require, owners or operators to develop an Exposure Control Plan with input from potentially exposed persons that the plan may cover. The plan may be prepared as a stand-alone document or as part of an existing industrial hygiene or **chemical management** program. Additionally, owners or operators may prepare a stand-alone Exposure Control Plan for compliance with multiple TSCA section 6(a) regulations, so long as that Exposure Control Plan meets the requirements of each individual chemical substance.

H. What does a downstream notification require?

Downstream notification is intended to spread awareness throughout the supply chain regarding important information in a TSCA section 6 rule (e.g., ECELs for an ongoing use or timeframes for use until prohibition). Chemical manufacturers (including importers), processors, and distributors of regulated TSCA section 6 chemical substances are typically required to provide downstream notification through Safety Data Sheets (SDSs).

1. What is an SDS?

SDSs are required under OSHA's Hazard Communication Standard (HCS) ([29 CFR 1910.1200\(g\)](#)). They include information about the chemical's properties; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. For more detailed information on SDSs, visit OSHA's HCS SDS page at: <https://www.osha.gov/publications/osha3514.html>.

2. Where does TSCA section 6 information go on the SDS?

The EPA typically requires TSCA section 6 information for a chemical substance to be added to the following sections of the SDS:

- Sections 1(c): Prohibitions;
- Sections 8: Exposure Controls/Personal Protection; and
- Section 15: Regulatory Information.

Section 1(c) (Prohibitions)

This section provides dates beyond which the chemical substance is restricted for distribution in commerce and processing, and lists the prohibited uses.

Section 8 (Exposure Controls/Personal Protection)

This section provides the ECEL/EPA STEL for the chemical substance as required in the final rule for the chemical substance.

Section 15 (Regulatory Information)

This section provides dates beyond which the chemical substance is restricted for distribution in commerce and lists the prohibited uses.

IV: Recordkeeping

This unit offers general information about recordkeeping for elements within the WCPP. TSCA section 6 regulations for a chemical substance typically require owners or operators to keep records that document compliance with WCPP requirements, including records of the following:

- Exposure Control Plans;
- Regulated areas and authorized personnel;
- Facility exposure monitoring records;
- Notifications of exposure monitoring results;
- PPE and respiratory protection used and program implementation; and
- Information and training provided by the owner or operator to each potentially exposed person prior to or at the time of initial assignment to a job involving potential exposure to the chemical substance.

All records required in a TSCA section 6 regulation for a chemical substance can be kept in the most administratively convenient form, such as electronic record or paper.

TSCA section 6 rules typically include a requirement to retain records for 5 years. The record retention requirement supports continuous program improvement by ensuring that facilities maintain a comprehensive historical record that aligns with the Exposure Control Plan review cycle. Therefore, when owners or operators conduct their review of the Exposure Control Plan, they have access to a robust set of monitoring results, program changes, and other key documentation. This allows for a thoughtful review and may help identify patterns or trends that may not be apparent over a shorter review cycle.

It is important to note that while the WCPP generally requires records to be maintained for 5 years, this may not fulfill OSHA recordkeeping requirements that have a different retention period. Owners or operators are encouraged to review chemical management recordkeeping requirements to ensure they meet all applicable regulatory record retention requirements.

V: Other Important Information

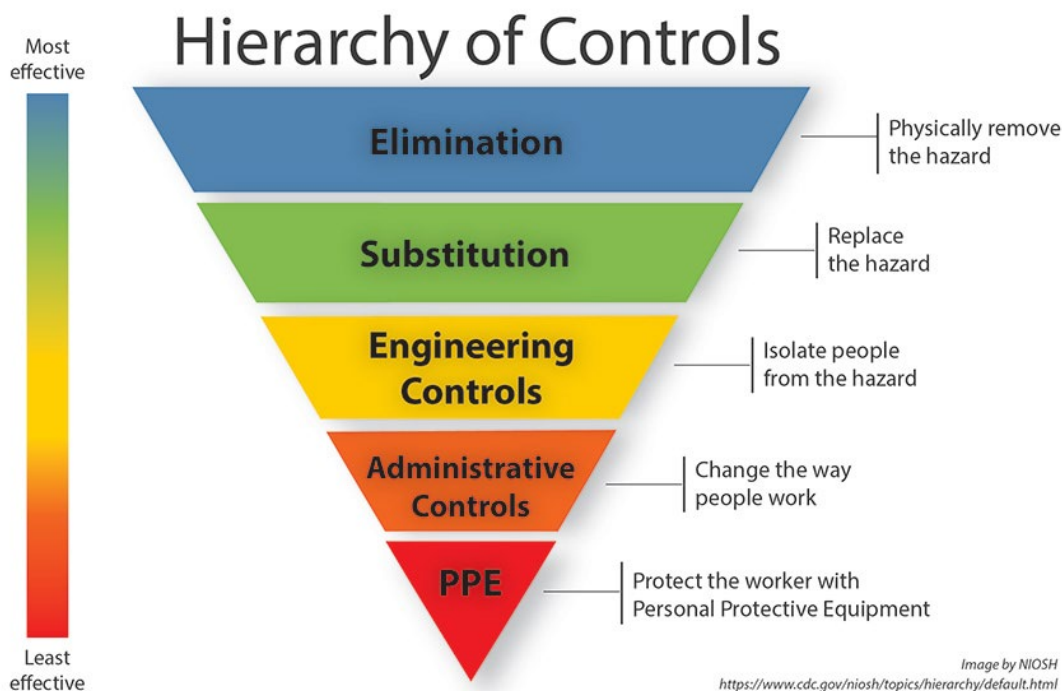
This unit provides other important information regarding the WCPP.

A. What is the hierarchy of controls?

The EPA requires that in the Exposure Control Plan, owners or operators look to the sequence of exposure reductions in the hierarchy of controls to identify possible control measures prior to implementing the use of PPE. The Exposure Control Plan requires the identification of feasible exposure control measures, and a documented rationale for whether these measures have or have not been implemented.

The hierarchy has five levels in a preferred order of actions based on most effective to least effective exposure controls. For more information on the hierarchy of controls, visit the NIOSH website:
<https://www.cdc.gov/niosh/hierarchy-of-controls/about/index.html>.

The hierarchy of controls is a key component of the WCPP—from initial exposure monitoring that characterizes exposure, to periodic monitoring that verifies control effectiveness, and finally, documentation of the Exposure Control Plan. A TSCA section 6 rule for a chemical substance requires that in the Exposure Control Plan, owners or operators evaluate the sequence of exposure reductions in the hierarchy of controls to identify possible exposure control measures, and to document rationale for whether these measures have or have not been implemented. See [Unit II.F.](#) and [Unit III.G.](#) for more information on the Exposure Control Plan within the WCPP.



Owners or operators must follow the hierarchy of controls, and should consider the following:

Elimination – Remove the chemical substance at the source. This could include changing the work process to stop using the chemical substance.

Substitution – Use a safer alternative. When considering a substitute, compare the potential risks of the substitute to those of the chemical substance being replaced. This review should consider how the substitute will combine with other agents in the workplace. Effective substitutes reduce the potential for harmful effects and do not create new risks. The EPA recommends careful review of the available information on potential substitutes (including the chemical substance's Alternatives Assessment that accompanies some TSCA section 6 rules) to avoid a substitute chemical that might later be found to present unreasonable risks or be subject to regulation (sometimes referred to as a “regrettable substitution”).

Engineering controls – Engineering controls can include modifying equipment or the workspace, using local exhaust ventilation, protective barriers, and more to remove or prevent exposure to a chemical substance. Effective engineering controls:

- Remove or block the chemical substance at the source before it comes into contact with the potentially exposed person;
- Prevent users from modifying, tampering, or otherwise interfering with the engineering control itself;
- Need minimal user input; and
- Operate correctly without interfering with the work process or making it more difficult.

Administrative controls/Work practices – Establish work practices that reduce the duration, frequency, or intensity of exposure to hazards (e.g., a chemical substance). This may include work process training, ensuring adequate rest breaks, or limiting access to areas where exposure(s) may be possible. Establishment of a regulated area may be an administrative control. Individual TSCA section 6 rules for a chemical substance may indicate whether owners or operators have the flexibility to use rotating work schedules as an exposure control to comply with the chemical substance's ECEL.

PPE – PPE is equipment worn to reduce or minimize exposure to hazards. Examples of PPE include gloves, safety glasses, and respirators. PPE use should be

accompanied by a PPE/respirator program, which includes such elements as PPE/respirator selection and use training, PPE/respirator inspection and replacement schedules, and effectiveness monitoring. Owners or operators should generally not rely on PPE as a primary method to control hazards when other effective control options are feasible. See more information in the “How do I implement a PPE program?” in [Unit III.F](#) of this guide.

B. What are the deadlines for meeting WCPP requirements?

TSCA section 6(a) risk management rules may include a staggered WCPP compliance timeline to ensure adequate time is afforded to regulated entities for successful implementation of the WCPP. While the compliance timelines are expected to differ for each TSCA section 6(a) rule based on stakeholder input and other considerations, the EPA anticipates that the order of compliance with the WCPP elements will be:

WCPP Implementation Phase 1:

- Conduct initial monitoring
- Consider feasible exposure controls

WCPP Implementation Phase 2:

- Provide and implement PPE/respirators use
- Establish the regulated area
- Ensure that the ECEL/EPA STEL are not exceeded

WCPP Implementation Phase 3:

- Implement Exposure Control Plan

The EPA anticipates that the WCPP implementation sequence follows a data-driven approach that builds protective measures on established occupational exposure information. In Phase 1, initial monitoring is expected to be implemented first because it establishes the baseline of occupational exposure for potentially exposed persons and determines whether new or additional controls are necessary. These initial monitoring data are important for owners or operators to understand the highest likely 8-hour and 15-minute (where applicable) exposures in the workplace.

In Phase 2, once the baseline of exposure is established through initial monitoring, owners or operators can begin the process of implementing appropriate occupational control measures to ensure no person is exposed above the established ECEL (8-hour TWA) and/or EPA STEL (15-minute TWA). This step requires that owners or operators have monitoring

data as a basis to establish regulated areas and consider what engineering controls, administrative controls, or PPE may be necessary, and to begin implementing considered controls within a facility.

Finally, in Phase 3 the Exposure Control Plan is documented as the culmination of previous steps because it needs to incorporate both monitoring data and the exposure controls considered for implementation. The Exposure Control Plan development may be considered in earlier phases and documented as part of this phase. The plan documents the specific actions considered and used to mitigate occupational exposures through the hierarchy of controls framework.

This sequenced approach ensures the Exposure Control Plan reflects actual workplace conditions and control measures in practice, as opposed to theoretical information, making it more effective at protecting potentially exposed persons from risks by chemical exposure.

C. What about multi-chemical exposures in the workplace?

Workplaces have the potential to involve exposure to multiple chemicals, some of which may be subject to TSCA section 6 rules, while others may not. It's important for workplaces to be aware of the potential for multi-chemical exposures and take appropriate precautions.

When developing an Exposure Control Plan as part of a WCPP, it is acceptable for a facility to create a comprehensive plan that covers multiple chemicals regulated under TSCA section 6, as long as the specific requirements are met for each regulated chemical substance. This may allow for a more streamlined approach to chemical management and protection of potentially exposed persons within a facility. As detailed in [Unit II.F.](#), the Exposure Control Plan is expected to detail the engineering controls, work practices, and PPE needed to mitigate occupational exposure for a regulated chemical substance.

The presence of multiple chemicals in the workplace may have implications for the selection and use of PPE. Different chemicals may require different types of PPE, such as specific dermal protection and/or gloves. Within a WCPP, owners or operators may be required to ensure the PPE provided is appropriate for the chemical substances that are present. In some cases, combinations of chemical substances may warrant a

higher level of protection than would be required for each chemical individually. TSCA section 6 rules do not supersede OSHA requirements. As such, it is important to be knowledgeable about OSHA requirements as well for ensuring occupational safety in multi-chemical work environments.

Proactive chemical management is important for an effective occupational health and safety program. Chemical management in the workplace is a systematic and proactive process of identifying chemicals present in the working environment, determining if and how they present hazards to potentially exposed persons, and taking action to prevent or control exposure to hazardous chemicals. In addition to protecting health and safety, chemical management programs can also reduce or eliminate environmental harms.

D. 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:

- Fail or refuse to establish or maintain records as required by the final rule or other regulations promulgated under this chapter;
- Fail or refuse to permit access to or copying of records, as required by TSCA; or
- 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.

Under section 17 of TSCA, U.S. district courts have jurisdiction over civil actions to restrain violations of section 15 of TSCA, restrain prohibited activity under

section 6 of TSCA, and compel the taking of actions required under TSCA.

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. 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, 16, and 17 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.

E. Small business considerations

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 help 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.

Your state’s Small Business Environmental Assistance Program (SBEAP) may provide resources to help transition from a chemical regulated by a TSCA section

6 rule. 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 prohibited chemical substances. No such Federal programs exist as of the publication of this guide. Check with local authorities for programs that may exist in your area.

The EPA encourages small businesses to work with the Agency to discover, disclose, and correct violations, including those related to the WCPP. 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. You can also find technical environmental compliance assistance in your state through the SBEAP here: [States | National Small Business Environmental Program \(nationalsbeap.org\)](#).

For general questions and document requests about TSCA requirements, contact the TSCA Hotline at 1-800-471-7127 or TSCA-Hotline@epa.gov.

For general information or questions on environmental regulations and compliance for small business owners, visit <https://www.epa.gov/resources-small-businesses/asbestos-and-small-business-ombudsman> or contact asbo@epa.gov.

VI: Conclusion

The elements of a WCPP work together to create a comprehensive system protecting potentially exposed persons' health, providing clear documentation for an organization's chemical substance protections regulated under TSCA, and facilitating continuous improvement measures.

Successfully implementing a WCPP for a TSCA section 6 regulated chemical offers a number of organizational benefits beyond regulatory compliance. A well-executed WCPP helps ensure regulatory compliance and protects potentially exposed persons (e.g., employees, workers, independent contractors, etc.) from unreasonable risk associated with occupational chemical exposure. By identifying, assessing, and controlling these risks through WCPP compliance, organizations create a safer work environment and minimize the likelihood of occupational chemical-related injuries and illnesses.

The WCPP's emphasis on initial and periodic occupational exposure monitoring ensures that workplace conditions are accurately assessed and evaluated over time. This data-driven foundation allows organizations to implement appropriate exposure controls and adjust them as needed to create an effective chemical management program. Regulated areas further ensure that access to areas with potential for inhalation and/or dermal exposures are controlled.

Through its systematic exposure control planning process, a WCPP helps organizations make informed decisions about implementing controls according to the hierarchy of controls – prioritizing elimination, substitution, and engineering controls, before turning to administrative controls and use of PPE. This structured approach provides better protection for potentially exposed persons and [can lead to more cost-effective long-term solutions](#). The program's emphasis on documenting occupational exposure controls and the selection rationale creates valuable institutional knowledge that supports consistent chemical management practices.

The WCPP's elements encouraging transparency (e.g., notification of occupational exposure monitoring and maintaining accessible Exposure Control Plans) bolster an informed workforce that understands the chemical hazards and workplace mitigations. Programmatic review is incorporated into the WCPP to maintain program impact and allow for continuous improvement based on operational experience.

Reducing chemical-related injuries and illnesses through a WCPP can help minimize work disruption. A safer workplace often translates to [a more productive workforce](#). While implementing an effective WCPP may require an initial investment, long-term benefits may be realized by reducing owner or operator's legal liabilities, investigations, medical costs, or fines associated with workplace injuries or illnesses.

Frequently Asked Questions (FAQs)

If OSHA already has a chemical-specific standard or other standards that overlap with the EPA's rule, which do I need to follow? Does one supersede the other?

The EPA rules do not supersede OSHA's rules and the regulated community must ensure compliance with all applicable regulations. If OSHA has existing regulations for a chemical substance for which the EPA also promulgates a rule for, the EPA anticipates that the provisions of the EPA rule will align with the existing OSHA requirements to the extent appropriate. When appropriate, the EPA may make certain requirements under the WCPP more stringent to ensure adequate protections are afforded to potentially exposed persons in the workplace.

If my condition of use or subset of a condition of use is identified for prohibition under a rule, am I still required to implement the WCPP until it is phased out?

It depends on the particular rule. Under the appropriate circumstances, certain conditions of use or subsets of conditions of use identified by the EPA may require compliance with a WCPP or specific interim controls until the condition of use is phased out as part of a regulatory prohibition.

Are ECEs and EPA STELs the only TSCA exposure limits from the EPA?

No. The EPA has another type of regulatory workplace exposure limit called New Chemical Exposure Limits (NCEs) under section 5 of TSCA. NCEs are created by the EPA in order to provide adequate protection to human health in workplace settings from unreasonable risks associated with chemical substances that are being introduced into the U.S.

The NCEs provisions, which are modeled after OSHA's Permissible Exposure Limits, include requirements addressing performance criteria for:

- Sampling and analytical methods;
- Periodic monitoring;
- Respiratory protection; and
- Recordkeeping.

The EPA has created an NCEs table that lists the actual NCE concentrations established by the EPA for specific chemical substances. The NCEs table is intended to provide a convenient list of all NCEs established by the EPA (up to the date of internet posting). The NCEs table can be found at <https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/non-confidential-list-tsca-new>.

Does the Design for the Environment (DfE) come into play for TSCA Work Plan Chemicals?

The EPA uses alternatives assessment to look for commercially available alternative chemicals. DfE alternatives assessments are conducted as risk management actions when warranted for TSCA Work Plan Chemicals.

They have also been conducted as part of a Chemical Action Plan. By identifying and evaluating the safety of alternative chemicals, this approach may:

- Complement regulatory action by showing that safer and higher functioning alternatives are available;
- Encourage industry to move to safer alternatives; and/or
- Limit chemical substitution for a particular use.

More information on DfE can be found at: <https://www.epa.gov/saferchoice/design-environment-alternatives-assessments>.

Can exposure monitoring conducted after the rule was proposed be considered as initial monitoring for a final rule?

Occupational exposure monitoring data collected from within the previous 5 years of the publication date of a final rule, including after the proposed rule was issued, may be used to comply with initial monitoring requirements in some cases. You should consult the rule for the specific chemical substance to determine whether it is permitted in your situation.

If exposure monitoring indicates that air concentrations of a chemical substance are below the ECEL or action level identified by the EPA for that chemical substance, is an Exposure Control Plan still required?

Yes. Anyone using a chemical substance in accordance with its WCPP needs an Exposure Control Plan as part of compliance with the requirements. If you are monitoring below the action level, the Exposure Control Plan can serve as a useful way to document best practices and provide additional certainty to regulated entities that they are complying with all WCPP and recordkeeping requirements. It would also provide assurances to potentially exposed persons that they are being adequately protected against exposure to a chemical substance.

Can an Exposure Control Plan be integrated as part of an existing occupational safety program such as a Chemical Hygiene Plan?

Yes. The EPA has no issue with using elements of an existing chemical safety program such as the Chemical Hygiene Plan of Cal/OSHA 5191(e) or OSHA's 1910.1450(e) to meet the requirements for an Exposure Control Plan. The EPA encourages regulated entities to make use of information, tools, and procedures that are already in place, so long as they have the required elements of the Exposure Control Plan required by the chemical-specific rule.

Does the EPA require specific, accredited laboratories to analyze monitoring samples?

Generally, analyzing air monitoring samples may be conducted by any accredited laboratory including GLP AIHA (AIHA Laboratory Accreditation Programs, LLC Policy Module 2A/B/E of Revision 17.3), or other analogous industry-recognized program.

Are there conditions of use or subsets of conditions of use that TSCA section 6 rules do not apply to?

Yes. TSCA section 3 excludes uses that are considered outside the scope of a "chemical substance" as defined under TSCA. Such exclusions, for example, include drugs which are defined under the Federal Food, Drug, and Cosmetic Act (FFDCA) section 201 when being manufactured, processed, or distributed in commerce for such use. See chemical substance in the Glossary below for more information.

Will the EPA release a format guide or standardized compliance documents for implementing the WCPP?

The WCPP components laid out in this document are meant to serve as general guidance by highlighting elements that regulated entities can expect to see in TSCA section 6 rulemakings. For each chemical-specific regulation, the EPA may release a Fact Sheet and a Compliance Guide specific to that regulation to assist with compliance.

Will the EPA allow passive monitoring for compliance with the exposure limits and WCPP?

Some chemical-specific regulations under TSCA section 6 may require specific types of air monitoring media or allow flexibility in choosing the type of air monitoring media, depending on its efficacy with the chemical substance. The EPA will generally provide greater flexibility, including passive monitoring, as long as it is capable of meeting accuracy criteria that would be established within the chemical-specific rule.

Will I be able to choose what analytical sampling method to use?

Some chemical-specific regulations under TSCA section 6 may identify specific analytical methods for use or allow any method so long as it is capable of meeting accuracy criteria that would be established within the chemical-specific rule.

Will laboratories be required to comply with WCPPs in the same way industries must, even if the chemical substance use is infrequent, in small volumes, or if the OSHA lab standard under [29 CFR 1910.1450](#) applies?

The EPA may require that laboratories conduct air monitoring, similar to industry users, depending on the chemical substance, existing regulations, or other relevant considerations. The EPA may also, under the appropriate circumstances of a given chemical substance, consider exempting infrequent and negligible volume uses in laboratories from certain requirements of the WCPP.

Will the EPA make the WCPP universally applicable to all conditions of use for a chemical substance?

Under TSCA, the EPA must address unreasonable risk to human health or the environment from exposure to a chemical substance. If there is insufficient information on a specific condition of use to determine it can continue safely under a WCPP, the EPA may determine that prohibition of that use would be more appropriate to address the unreasonable risk. Therefore, the EPA does not provide blanket coverage for all conditions of use under a WCPP unless there is robust information supporting such a determination.

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. For small businesses, please see the [EPA's Small Business Ombudsman Website](#). Small businesses may find the national [SBEAPs](#) helpful for providing resources and information about a chemical-specific regulation. <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 may update this guide without public notice. The most up-to-date version of the compliance guide will be available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/guidance-regulations-issued-under-toxic-substances>.

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 can be found 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.

Appendix A: Abbreviation List and Glossary

Abbreviation List

AIHA	American Industrial Hygiene Association
ANSI	American National Standards Institute
ASTM	American Standard for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DDCC	Direct Dermal Contact Control
DfE	Design for the Environment
ECEL	Existing Chemical Exposure Limit
EPA	U.S. Environmental Protection Agency
EPA STEL	EPA Short-Term Exposure Limit
FAQs	Frequently asked questions
HCS	Hazard Communication Standard
NCEL	New Chemical Exposure Limit
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
OESSM	Occupational Exposure Sampling Strategy Manual
OEV	Occupational exposure value
OSHA	Occupational Safety and Health Administration
PBZ	Personal breathing zone
PPE	Personal protective equipment
PPT	Personal protective technology
RCRA	Resource Conservation and Recovery Act
TWA	Time-weighted average
SBEAP	Small Business Environmental Assistance Program
SDS	Safety Data Sheet
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).

Chemical management – A systematic and proactive process of identifying chemicals present in the working environment, determining if and how they present hazards to workers, and taking action to prevent or control workers’ exposure to hazardous chemicals.

Condition 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.

Direct dermal contact control (DDCC) – Direct handling of a chemical substance or mixture or skin contact with surfaces that may be contaminated with a chemical substance or mixture.

ECEL action level – An air concentration that indicates when certain compliance activities would need to be taken, and at which frequency, to prevent exceedances of the ECEL.

Effective date – The date on which a regulation takes effect and becomes enforceable.

EPA Short-Term Exposure Limit (EPA STEL) – A short-term exposure limit, which is an EPA regulatory limit on workplace exposure to an airborne concentration of a chemical substance, based on an exposure of less than eight hours.

Existing Chemical Exposure Limits (ECELs) – An Existing Chemical Exposure Limit is an airborne concentration, typically calculated as an 8-hour TWA. When implemented along with other WCPP measures, unreasonable risk under the conditions of use identified is no longer presented at or below the air concentration level of the ECEL.

Exposure group – ([40 CFR § 751.5](#)) A group of potentially exposed persons with a similar exposure profile to a chemical substance or mixture based on the substantial similarity of tasks performed, the manner in which the tasks are performed, and the materials and processes with which they work.

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

Personal breathing zone (PBZ) – A hemispheric area forward of the shoulders within a six- to nine-inch radius of a worker's nose and mouth and requires that exposure monitoring air samples be collected from within this space.

Personal protective equipment (PPE) – Equipment worn to reduce or mitigate exposure to chemical substances or physical hazards. Examples of PPE include gloves, safety glasses, face shields, and respirators.

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, university students, volunteers, self-employed persons, state and local government workers not covered by an OSHA state plan, and all other persons in the workplace where a TSCA-regulated chemical is present.

Regulated area – ([40 CFR § 751.5](#)) An area established by the regulated entity to demarcate areas where airborne concentrations of a specific chemical substance exceed, or there is a reasonable possibility they may exceed, the applicable ECEL or EPA STEL.

Worker – Person who performs work in areas where a chemical substance is present, including both those who handle chemical substances and those who do not directly handle chemical substances.

Workplace Chemical Protection Program (WCPP) – A program to protect potentially exposed persons 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 chemical protection program for a TSCA-regulated chemical. WCPP provisions include a regulatory ECEL, initial and periodic monitoring, respirator selection criteria, recordkeeping, and downstream notification for a TSCA-regulated chemical to ensure that potentially exposed persons are no longer at risk.