



TSCA

TOXIC SUBSTANCES CONTROL ACT

UNITED STATES (U.S.) RISK
EVALUATION AND MANAGEMENT
FOR EXISTING CHEMICALS



FEATURING
CASE STUDY OF
METHYLENE
CHLORIDE

2023



WHAT'S HAPPENING

In 1976, TSCA became the first significant legislation regulating industrial chemicals in the USA.



1982

EPA had published an inventory of 62,000 industrial chemicals reported to be in use. These “existing” chemicals were grandfathered into commercial use as “safe” unless the EPA could prove otherwise. Although the EPA could remove a chemical from the market if it posed an “unreasonable risk,” the latter was not adequately defined. EPA was also required under law to perform a cost-benefit analysis to address the socio-economic impact of regulation and provide “least burdensome” options to address issues. These issues resulted in regulatory delays and stalemates.

2020

Risk evaluations had been completed for the “first 10 chemicals” that the EPA identified to meet the requirements of the amended TSCA and had already announced 20 new chemicals from the **2014 TSCA work plan** that would undergo risk evaluation next. Under this risk evaluation process, the EPA determined which of the chemical's conditions of use presented unreasonable risk to human health or the environment.



2023

EPA began releasing the proposed risk management rules for the “first 10 chemicals”. These rules outline the steps the EPA has proposed to control the unreasonable risks posed by each chemical's identified conditions of use. Risk mitigation measures the EPA has proposed includes, but is not limited to, prohibiting certain conditions of use, requiring workplace protection programs, setting new exposure limits, and allowing certain time-limited exemptions.



2016

TSCA underwent significant amendments under ‘The Frank R. Lautenberg Chemical Safety for the 21st Century Act.’ Among those amendments, authority has been bestowed on the EPA to determine and address unreasonable risk for existing substances. EPA's process for ensuring the safety of existing chemicals includes prioritization of the chemicals for risk evaluation, conducting risk determinations, and managing the risk. EPA identified 10 chemicals that would be assessed first.



2021

EPA announced an important policy change that revised the process for determining unreasonable risk for chemicals undergoing risk evaluation, including for the “first 10 chemicals” for which evaluations had already been completed. Through this action, the EPA rescinded the previous risk determinations for the chemicals individual conditions of use and replaced them with a revised risk evaluation that was based on a “whole chemical” approach. Under this approach, if the EPA finds the majority of a chemical's conditions of use for a chemical present unreasonable risk, then the whole chemical is considered to present unreasonable risk and thus undergo risk management. Under TSCA Section 6, the EPA is required to address unreasonable risks of injury to health or the environment posed by existing chemical substances under the conditions of use.



WHY IT'S IMPORTANT

If your company manufactures, imports, processes, distributes, uses, or disposes of products designated 'High-Priority Substances' under the Toxic Substances Control Act (TSCA), you may be potentially affected by the Environmental Protection Agency's (EPA's) risk management actions on these substances.

This facts sheet is intended to provide a high-level overview of EPA's risk evaluation process and explore how EPA plans to manage the unreasonable risk for existing chemicals using the proposed methylene chloride risk management rule as a case study.

MAY 2023

EPA released a proposed rule to manage the unreasonable risks presented by its conditions of use as documented in the 2020 risk evaluation for methylene chloride.. This is the first of a series of proposed rules the EPA will issue to fulfil its obligations to control the unreasonable risks posed by TSCA's "first 10 chemicals" for risk put in place by the 2016 Frank R. Lautenberg Chemical Safety Act.



A case study of methylene chloride (a chemical included in the first ten prioritized chemicals) describes the EPA's

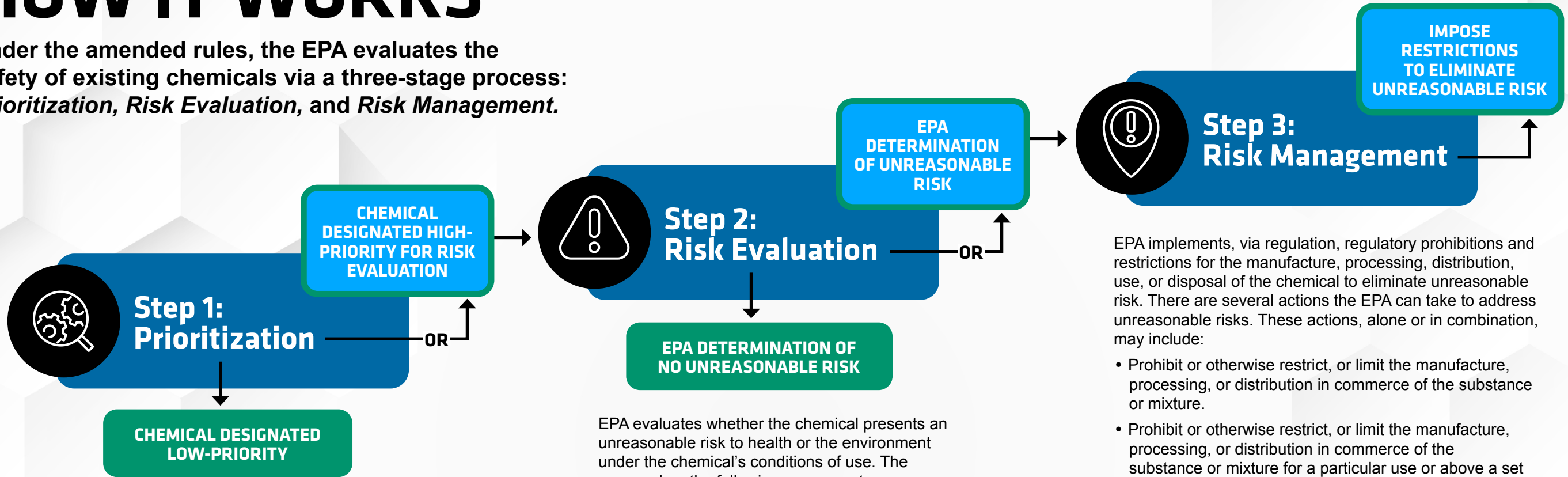
process and the status of decisions at each step. The chemical had been deemed to pose acute and chronic risks to human health and was thereby included in the first set of prioritized chemicals. Comments on the proposed rule were due to the EPA on July 3, 2023.

When the regulation comes into force, the industry may be subject to prohibitions and restrictions, a workplace chemical protection program (WCPP), recordkeeping, and downstream notification requirements. Time-limited exemptions could be facilitated for specific uses to avoid significant disruption to crucial national security and critical infrastructure uses.



HOW IT WORKS

Under the amended rules, the EPA evaluates the safety of existing chemicals via a three-stage process: *Prioritization, Risk Evaluation, and Risk Management.*



The mechanism for the EPA to choose if a chemical is to be reviewed is via prioritization. TSCA requires the EPA to give preferences to prioritizing chemicals on the 2014 TSCA Work Plan and consider criteria such as hazard/exposure, persistence, and bioaccumulation. At least half of all the EPA-initiated risk evaluations must be drawn from the TSCA Work Plan, until that list has been exhausted the EPA's risk-based screening process designates chemical substances as either:

- **High-Priority Substances** (HPS) for risk evaluation; or
- **Low-Priority Substances** for which risk evaluation is not warranted at the time.

In 2016, 10 substances were deemed HPS, including methylene chloride. Since 2019, Additional substances have been added to the list **(FOUND HERE)**.

EPA evaluates whether the chemical presents an unreasonable risk to health or the environment under the chemical's conditions of use. The process has the following components:

- A scope document that provides the public with information on the focus of the risk evaluation;
- hazard and exposure assessments and risk characterization; and
- a risk determination.

EPA implements, via regulation, regulatory prohibitions and restrictions for the manufacture, processing, distribution, use, or disposal of the chemical to eliminate unreasonable risk. There are several actions the EPA can take to address unreasonable risks. These actions, alone or in combination, may include:

- Prohibit or otherwise restrict, or limit the manufacture, processing, or distribution in commerce of the substance or mixture.
- Prohibit or otherwise restrict, or limit the manufacture, processing, or distribution in commerce of the substance or mixture for a particular use or above a set concentration for a particular use.
- Require adequate minimum warnings and instructions with respect to its use, distribution in commerce, or disposal.
- Require recordkeeping, monitoring, or testing by manufacturers and processors.
- Prohibit or regulate manner or method of commercial use.
- Prohibit or regulate manner or method of disposal.
- Direct manufacturers/processors to give notice of the determination of risk to distributors and users and replace or repurchase.

WHAT'S AT RISK

At least half of all the EPA-initiated risk evaluations must be drawn from the 2014 update to the TSCA Work Plan, until that list has been exhausted.

Chemical Name	CASRN	Chemical Group	Final Risk Evaluation	Revised Risk Evaluation	Proposed Risk Management Rule Status***
➤ 1-Bromopropane	106-94-5	Solvents	Aug 2020	December 2022	TBD
➤ 1,4-dioxane	123-91-1	Solvents	Dec 2020	Proposed supplement: July 2023	TBD
➤ Asbestos*	1332-21-4	N/A	Part 1: Dec 2020	Part 2: April 2023	Part 1: March 2023
➤ Carbon Tetrachloride	56-23-5	Solvents	November 2020	December 2022	July 2023
➤ C.I. Pigment Violet 29 (PV29)	81-33-4	Pigments	January 2021	September 2022	TBD
➤ Cyclic Aliphatic Bromide Cluster (HBCD)	25637-99-4; 3194-55-6; 3194-57-8	Flame retardants	August 2020	July 2022	TBD
➤ Methylene Chloride	75-09-2	Solvents	June 2020	November 2022	May 2023
➤ N-Methylpyrrolidone (NMP)	872-50-4	Solvents	December 2020	December 2022	TBD
➤ Perchloroethylene	127-18-4	Solvents	December 2020	December 2022	June 2023
➤ Trichlorethylene (TCE)	79-01-6	Solvents	November 2020	January 2023	TBD



**STATUS FOR
FIRST 10
CHEMICALS
UNDERGOING RISK
EVALUATION**



*For more information on Asbestos rulemakings, please visit [EPA's website](#)

WHAT'S AT RISK

EPA selected the next 20 chemicals to undergo risk evaluation in 2019 from the TSCA Work Plan.

Chemical Name	CASRN	Chemical Group	Risk Evaluation Status*
◆ <u>1,1-Dichloroethane</u>	75-34-3	Solvents	Final scope (Aug 2020)
◆ <u>1,1,2-Trichloroethane</u>	79-00-5	Solvents	Final scope (Aug 2020)
◆ <u>1,2-Dichloroethane</u>	107-06-2	Solvents	Final scope (Aug 2020)
◆ <u>1,2-Dichloropropane</u>	78-87-5	Solvents	Final scope (Aug 2020)
◆ <u>1,3-Butadiene</u>	106-99-0	N/A	Final scope (Aug 2020)
◆ <u>1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [g]-2-benzopyran (HHCB)</u>	1222-05-5	Fragrance additives	Final scope (Aug 2020)
◆ <u>4,4'-(1-Methylethylidene)bis[2, 6-dibromophenol] (TBBPA)</u>	79-94-7	Flame retardants	Final scope (Aug 2020)
◆ <u>Butyl benzyl phthalate - 1,2-Benzene- dicarboxylic acid, 1- butyl 2(phenylmethyl) ester</u>	85-68-7	Phthalates	Final scope (Aug 2020)
◆ <u>Di-ethylhexyl phthalate - (1,2-Benzene- dicarboxylic acid, 1,2- bis(2-ethylhexyl) ester)</u>	117-81-7	Phthalates	Final scope (Aug 2020)
◆ <u>Di-isobutyl phthalate - (1,2-Benzene- dicarboxylic acid, 1,2- bis-(2methylpropyl) ester)</u>	84-69-5	Phthalates	Final scope (Aug 2020)
◆ <u>Di-isodecyl phthalate (DIDP) - (1,2-benzenedicarboxylic acid 1,2-diisodecyl ester)</u>	26761-40-0, 68515-49-1	Phthalates	Final scope (Aug 2021)
◆ <u>Di-isononyl phthalate (DINP) - (1,2-benzenedicarboxylic acid, 1,2-diisononyl ester)</u>	28553-12-0; 68515-48-0	Phthalates	Final scope (Aug 2021)
◆ <u>Dibutyl phthalate (1,2-Benzene- dicarboxylic acid, 1,2- dibutyl ester)</u>	84-74-2	Phthalates	Final scope (Aug 2020)
◆ <u>Dicyclohexyl phthalate</u>	84-61-7	Phthalates	Final scope (Aug 2020)
◆ <u>Ethylene dibromide</u>	106-93-4	N/A	Final scope (Aug 2020)
◆ <u>Formaldehyde</u>	50-00-0	N/A	Final scope (Aug 2020)
◆ <u>o-Dichlorobenzene</u>	95-50-1	N/A	Final scope (Aug 2020)
◆ <u>Octamethylcyclotetra- siloxane (D4)</u>	556-67-2	N/A	Final scope (Mar 2022)
◆ <u>p-Dichlorobenzene</u>	106-46-7	N/A	Final scope (Aug 2020)
◆ <u>Phosphoric acid, triphenyl ester (TPP)</u>	115-86-6	Flame retardants	Final scope (Aug 2020)
◆ <u>Phthalic anhydride</u>	85-44-9	N/A	Final scope (Aug 2020)
◆ <u>trans-1,2- Dichloroethylene</u>	156-60-5	Solvents	Final scope (Aug 2020)
◆ <u>Tris(2-chloroethyl) phosphate (TCEP)</u>	115-96-8	Flame retardants	Final scope (Aug 2020)

The provisions of the proposed rule, if finalized as written, would prohibit uses that account for approximately one third of the total annual production volume of methylene chloride generated (TSCA and non-TSCA uses), leaving a sufficient supply in circulation to provide a source for these critical or essential uses for which EPA is proposing to allow continued use either under a WCPP or through a TSCA section 6(g) exemption.



CASE STUDY

Methylene chloride is a widely used solvent and processing aid used in various consumer, commercial, and industrial applications.

- Reactant
- Processing aid
- Solvent for batch vapor / in-line vapor degreasing
- Solvent for cold cleaning
- Solvent for aerosol spray degreaser/cleaner
- Adhesives, sealants, and caulks

- Paints and coatings
- Paint and coating removers
- Finishing product for fabric
- Spot remover for textiles
- Lubricants and greases
- Aerosol degreasers and cleaners

- Non-aerosol degreasers and cleaners
- Adhesive and caulk removers
- Metal degreasers
- Production of specialty batteries
- Propellant and blowing agent

- Electrical equipment / component manufacturing
- Plastic and rubber products manufacturing
- Anti-spatter welding aerosol
- Cold pipe insulations
- Bonding agent for acrylic and polycarbonate



Published (final rule for risk evaluation for methylene chloride)

JUN 2020



Published (final rule for revised risk determination for methylene chloride)

NOV 2022



Published (proposed rule for risk management of methylene chloride)

MAY 2023



Deadline for comments (proposed rule for risk management of methylene chloride)

JUL 2023



In force (final rule for risk management of methylene chloride)

SOME PROHIBITIONS ARE IN FORCE 15 MONTHS AFTER PROMULGATION—PROPOSED SECTION 6(G) EXEMPTIONS WILL LAST FOR 10 YEARS AND ARE APPLICABLE TO AD INDUSTRY.

WHY WAS IT INCLUDED IN THE “FIRST 10” PRIORITY LIST?



Step 1: Prioritization

Methylene chloride was selected for prioritization from a list of 90 chemicals from the 2014 TSCA Workplan. EPA chose to evaluate this chemical because of the known hazard properties and other risk factors.

In the proposed rule, the EPA describes methylene chloride as acutely lethal, a neurotoxicant, a likely human carcinogen, and presents cancer and non-cancer risks following chronic and acute exposures. Central nervous system depressant effects can result in loss of consciousness and respiratory depression, resulting in irreversible coma, hypoxia, and eventual death.

CHEMICAL DESIGNATED HIGH-PRIORITY FOR RISK EVALUATION



Step 2: Risk Evaluation

The EPA considered the hazards and exposures, magnitude of risk, exposed populations, the severity of the hazards, uncertainties, and other factors as part of its unreasonable risk determinations for methylene chloride.

In the final revised risk determination (November 2022), the EPA determined that methylene chloride as a whole chemical presented an unreasonable risk of injury to human health under its conditions of use and did not assume the use of personal protective equipment. The unreasonable risk determination was driven by 52 of the 53 conditions of use the EPA evaluated.

EPA DETERMINATION OF UNREASONABLE RISK



Step 3: Risk Management

When final risk determination establishes that a prioritized substance poses unreasonable risks, the EPA is obligated to develop and implement regulation to eliminate or minimize the risk (for exempted/derogated uses). These could include actions imposed singly or in combination (as described in Step 3: Risk Management of the evaluation process).

MAY 2023 PROPOSED RULE ON METHYLENE CHLORIDE:

- ✓ Applies to all manufacturing, importing, processing, and distribution in commerce of methylene chloride for industrial or commercial use, and to all commercial or industrial use of methylene chloride (other than the conditions of use addressed under 751.109(a), and distribution in commerce of methylene chloride for consumer use (other than for the paint and coating removal use addressed under 751.105).
- ✓ Prohibits manufacturing, processing, and distribution of methylene chloride for all consumer uses.
- ✓ Prohibits **most** industrial and commercial uses of methylene chloride (see list A, next page).
- ✓ Establishes a new existing chemical exposure limit more stringent than OSHA.
- ✓ Requires development of a robust workplace chemical protection plan for industrial manufacturing, industrial processing, and federal uses not proposed to be prohibited (see list B, next page).
- ✓ Requires manufacturers (including importers), processors, and distributors to notify companies to whom use methylene chloride of the prohibitions and to maintain records of notification provided.



CASE STUDY: METHYLENE CHLORIDE





Step 3: Risk Management



CASE STUDY: METHYLENE CHLORIDE

ADDRESSING UNREASONABLE RISK

LIST A:

Industrial uses of methylene chloride proposed to be banned:

- Use as solvent for batch vapor and in-line vapor degreasing
- Use as solvent for cold cleaning
- Use as solvent for aerosol spray degreaser/cleaner
- Use in adhesives, sealants, and caulks
- Use in paints and coatings
- Use in paint and coating removers
- Use in adhesive and caulk removers
- Use in metal aerosol degreasers
- Use in metal non-aerosol degreasers
- Use in finishing products for fabric and textiles
- Use in spot removers for apparel and textiles
- Use in liquid and spray lubricants and greases
- Use in aerosol degreasers and cleaners
- Use in non-aerosol degreasers and cleaners
- Use in cold pipe insulations
- Use as solvent that becomes part of a formulation or mixture
- Use as a processing aid
- Use as propellant and blowing agent
- Use for electrical equipment, appliance, and component manufacturing
- Use for plastic and rubber products manufacturing
- Use as anti-splatter welding aerosol
- Use in carbon remover and brush cleaner

LIST B:

Industrial uses of methylene chloride proposed to not be banned, but subject to WCPP requirements:

- Manufacturing (domestic manufacture) for uses other than those that would be banned
- Manufacturing (import) for uses other than those that would be banned
- Processing: as a reactant (e.g., to manufacture HFC-32)*
- Processing: incorporation into a formulation, mixture, or reaction product for uses other than those that would be banned
- Processing: repackaging for uses other than those that would be banned
- Processing: recycling
- Industrial and commercial use as a laboratory chemical
- Specialized applications for aircraft and spacecraft that are owned or operated by the U.S. Department of Defense, the National Aeronautics and Space Administration, the U.S. Department of Homeland Security, and the Federal Aviation Administration and their contractors
- Disposal



**HFC-32 is likely to be used to facilitate the transition from certain other HFCs and HFC blends with higher global warming potentials in certain applications. EPA expects that, by allowing for the continued use of methylene chloride in the production of HFC-32, this approach would complement the EPA's work under the American Innovation and Manufacturing Act of 2020 (AIM Act).*

EXEMPTIONS

SECTION 751.115

TSCA Section 6(g) permits exemptions for certain conditions of use if EPA finds that compliance with the requirements would significantly disrupt (1) National Economy (2) National Security (3) Critical Infrastructure.

TIME LIMITED EXEMPTIONS (10 YEAR): COMMERCIAL AVIATION AND COMMERCIAL AEROSPACE



Maintenance and Repair facilities operated by air carriers and commercial operators certified under 14 CFR 119



Manufacturers of Aircraft intended for, or capable of being used by, air carriers and commercial operators certified under 14 CFR 119



Any person manufacturing or repairing space craft, space vehicles, or payloads or similar hardware that is intended for, or used in, commercial space transportation operations subject to 14CFR III

CONDITIONS OF USE SUBJECT TO THIS EXEMPTION:

- ✓ Paint or coating removal from safety-critical, corrosion-sensitive components of aircraft owned or operated by air carriers or commercial operators certificated under 14 CFR part 119
- ✓ Paint and coating removal from safety-critical, corrosion-sensitive components of spacecraft used in, or intended for use in, commercial space transportation operations subject to 14 CFR chapter III, including payloads such as satellites and similar hardware



Must meet specific conditions outlined in 751.115 including compliance with the Workplace Chemical Protection Program provisions in 751.109

EXEMPTIONS (CONTINUED)

SECTION 751.115



TIME LIMITED EXEMPTIONS (10 YEAR): EMERGENCY USE

Use of methylene chloride or methylene-chloride-containing products identified in paragraph (b)(4)(i) of this section in an emergency by the National Aeronautics and Space Administration (NASA) and its contractors operating within the scope of their contracted work – until [10 years after date of publication of final rule in the Federal Register]. Emergency Use is defined as a serious and sudden situation requiring immediate action, within 15 days or less, necessary to protect:



Safety of National Aeronautics and Space Administration's or their contractors' personnel



National Aeronautics and Space Administration's missions




Human health, safety, or property, including that of adjacent communities



The environment

CONDITIONS OF USE SUBJECT TO THIS EXEMPTION:

- ✓ As solvent for cold cleaning
- ✓ As a solvent for aerosol spray degreaser/cleaner
- ✓ In adhesives, sealants, caulks, and caulk removers
- ✓ In metal non-aerosol degreasers
- ✓ In non-aerosol degreasers and cleaners
- ✓ As solvent that becomes part of a formulation or mixture

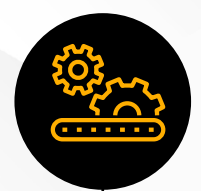
 Must meet specific conditions outlined in 751.115 including compliance with the Workplace Chemical Protection Program provisions in 751.109

 **Step 3: Risk Management**


**CASE STUDY:
METHYLENE
CHLORIDE**

COMPLIANCE DEADLINES

► Effective Dates Following Publication of Final Rule



Manufacturing/
importing
methylene
chloride.

90 DAYS



Processing
methylene
chloride and
methylene
chloride-
containing
products.

180 DAYS



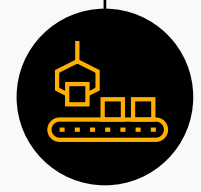
Distributing in
commerce (including
making available)
methylene chloride
and any methylene
chloride-containing
products, for any use.

270 DAYS



Distribution of methylene
chloride and methylene
chloride-containing
products in commerce for
any use (including making
available) by retailers.

360 DAYS



Distribution of
methylene chloride and
methylene chloride-
containing products in
commerce (including
making available) for
any use described
in paragraphs (a)(1)
and (2) of this section
except for those uses
specified in paragraph
(b)(7) of this section.

450 DAYS



Industrial or
commercial use of
methylene chloride
and methylene
chloride-containing
products for uses
listed in paragraph
(a)(2) of this section
except for those uses
specified in paragraph
(b)(7) of this section.

10 YEARS



Manufacturing, importing,
processing, distribution in
commerce, or use of methylene
chloride and methylene
chloride-containing products
by all persons for industrial or
commercial use for paint or
coating removal from safety
critical, corrosion-sensitive
components of aircraft or
spacecraft as described in
751.115(b)(1) through (3).



Step 3: Risk Management



CASE STUDY: METHYLENE CHLORIDE

WORKPLACE CHEMICAL PROTECTION PROGRAM

WORKPLACE CHEMICAL PROTECTION PROGRAM (WCPP) REQUIRED FOR 10 CONDITIONS OF USE – 751.109

Applies to the following conditions of use of methylene chloride unless the conditions of use are prohibited by sections 751.105 and 751.107

- Manufacturing (domestic manufacture)
- Manufacturing (import)
- Processing: as a reactant
- Processing: incorporation into a formulation, mixture, or reaction product
- Processing: repackaging
- Processing: recycling
- Industrial and commercial use as a laboratory chemical
- Industrial or commercial use for paint and coating removal from safety-critical, corrosion-sensitive components of aircraft and spacecraft that are owned or operated by the U.S. Department of Defense, the National Aeronautics and Space Administration (NASA), the U.S. Department of Homeland Security, and the Federal Aviation Administration that is performed by the agency or the agency's contractor at locations controlled by the agency or the agency's contractor
- Industrial or commercial use as a bonding agent for acrylic and polycarbonate in mission-critical military and space vehicle applications, including the production of specialty batteries for applications that are performed by the U.S. Department of Defense, the National Aeronautics and Space Administration, or the U.S. Department of Homeland Security or their contractors at locations controlled by the agency or the agency's contractor
- Disposal

****Note:** Conditions of use subject to time-limited exemptions must also comply with workplace chemical protection requirements as outlined in the rule.



Why is the EPA proposing stricter limits compared to the Occupational Safety and Health Administration (OSHA)?

- EPA specifies that it selects regulatory requirements to the extent necessary that a chemical/substance or mixture no longer presents unreasonable risk.
- EPA believes it is appropriate to evaluate the level of risk present in baseline scenarios to cover susceptible subpopulations (workers and occupational non-users) who may not be covered by OSHA standards.
- EPA argues that the OSHA methylene chloride PEL was last updated as part of the OSHA methylene chloride standard in 1997. In many instances, scientific evidence has accumulated suggesting that the current limits of many PELs are not sufficiently protective.
- EPA claims that a majority of OSHA's chemical standards are outdated or do not sufficiently reduce significant risk to workers.

EPA consults and coordinates TSCA activities with OSHA and other Federal agencies to avoid duplicative requirements

Provisions supplement OSHA's methylene chloride standard but with some differences

EPA deems that WCPP protects people from unreasonable risk posed by occupational exposures from certain conditions of use:

- Workers are only one of the potentially exposed or susceptible subpopulations (PESS) under TSCA
- EPA consulted with OSHA and NIOSH coordinated on WCPP development and aligned requirements where possible



Step 3: Risk Management



CASE STUDY: METHYLENE CHLORIDE

EXPOSURE CONTROLS REQUIREMENTS FOR OWNERS AND OPERATORS

EXPOSURE LIMITS

- **Meet Existing Chemical Exposure Limit (ECEL):** Ensure that exposure to airborne concentrations of methylene chloride is less than or equal to 2 ppm (8-hour total weight average [TWA])
- **Meet Short-Term Exposure Limit (EPA STEL):** Ensure that exposure to airborne concentrations of methylene chloride is less than or equal to 16 ppm (15-minute sampling period)
- **Establish and maintain regulated areas:** See 29 Code of Federal Regulations (CFR) 1910.1052(e)(2), (4), (5), and (6) within 3 months after receipt of monitoring data results



NOTE: For provisions applying to employees and employers see 29 CFR 1910.1020, 29 CFR 1910.132, 29 CFR 1910.134, and 29 CFR 1910.1052

EXPOSURE MONITORING

Determine each potentially exposed person's exposure to characterize exposure by:

- Personal breathing zone air sampling of each potentially exposed person's exposure (PEPE)
- Personal breathing zone air samples representative of each PEPE considering job classification for every work shift (unless tasks and conditions for other shifts are similar) and person sampled having highest level of exposure
- Methods used for sampling must be accurate 751.107(d)(iii)
- Monitoring data used for compliance must be no older than 5 years
- Conduct initial monitoring 180 days after date of publication of final rule in the Federal Register (with some exceptions)
- Conduct periodic monitoring when initial exposure monitoring results are at or above the ECEL or the EPA STEL [see Table to 751.109 (d)(3) for information on periodic monitoring requirements]
- Conduct additional monitoring if there are process changes resulting in additional exposure to methylene chloride
- Inform potentially exposed persons of monitoring results within 15 working days

WCPP—OWNER OR OPERATOR RESPONSIBILITIES



CASE STUDY:
METHYLENE
CHLORIDE



ECEL CONTROL PROCEDURES

- Institute and maintain effectiveness of engineering controls and work practices to reduce exposure to or below the ECEL and the EPA STEL (except when it can be demonstrated that the controls are not feasible) – use respiratory protection when the ECEL or the EPA STEL is still exceeded
- Include and document certain topics in an exposure control plan
- Supply a respirator to potentially exposed persons who enter a regulated area and ensure respirators are used whenever the ECEL or the EPA STEL are exceeded



RESPIRATORY PROTECTION

- Provide respiratory protection to potentially exposed persons after receipt of the results of any exposure monitoring
- Provides respirator selection criteria [see 29 CFR 1910.1052(g)(3)(i)]
- Establishes minimal respiratory protection requirements
- Workplace participation – document the notice to and ability of any potentially exposed person to access the exposure control plan and other associated records



DERMAL PROTECTION

- Requires donning of gloves chemically resistant to methylene chloride with activity-specific training
- Requires the minimization and protection of potentially exposed persons from dermal exposure [see 29 CFR 1910.1052 (h) and (i)]



TRAINING

- Provide training to potentially exposed persons [see 29 CFR 1910.1052(l)(1) through (6)]
- Provide training to potentially exposed persons if respiratory protection or PPE must be worn [see 29 CFR 1910.132(f)]

ENGAGING WITH THE EPA

CONSIDERATIONS FOR AEROSPACE AND DEFENSE

The EPA has acknowledged there may be instances where an ongoing use of methylene chloride has implications for national security or critical infrastructure as it relates to federal agencies (e.g., DOD, NASA) is identified after the methylene chloride rule is finalized. However, the final law prohibits that use. For such cases, EPA requests comments on an appropriate, predictable process that could expedite reconsideration for uses that federal agencies or their contractors become aware of after the final rule is issued.

“CRITICAL”

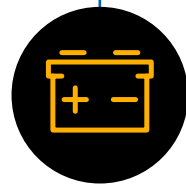
USES OF METHYLENE CHLORIDE WITHOUT SUITABLE ALTERNATIVES THAT DO NOT JEOPARDISE THE SAFETY OR AIRWORTHINESS OF AIRCRAFTS INCLUDE:



Paint and coating removal from safety-critical, corrosion-sensitive components



Bonding agents for acrylic and polycarbonate in mission-critical military and space vehicle applications



Production of specialty batteries



EPA is proposing 10-year time-limited exemptions from requirements for the above uses to prevent significant disruption of national security and critical infrastructure. Exempt uses must document efforts to comply with provisions of the WCPP.



CASE STUDY:
METHYLENE
CHLORIDE

ENGAGING WITH EPA

NEXT STEPS FOR AEROSPACE AND DEFENSE SECTOR ON METHYLENE CHLORIDE PROPOSED RULE



1

An example of an approach could be established by rulemaking of a federal agency category of use that would require implementation of the WCPP and periodic reporting to the EPA on details of the use and progress in discontinuing the use or finding a suitable alternative.

To utilize the category of use, the federal agency would petition the EPA, supported by documentation describing the following:

- the specific use;
- the implications of cessation of this use for national security or critical infrastructure;
- exposure control plan; and
- for the federal agency uses where similar adoption by the commercial sector may be likely, concrete steps are taken to identify, test, and qualify substitutes for the uses.

2

The proposed rule was in consultation phase till 3 July 2023. Impacted stakeholders could share additional information on:

- Critical uses of methylene chloride
- Existing engineering controls and industrial hygiene monitoring that limit exposure
- Compliance programs already in place
- Technical challenges to identifying or transitioning to an alternatives
- Concerns regarding the dates by which they could transition to alternatives

Such comments could support an extended compliance deadline for their uses or a request under TSCA section 6(g) that the EPA exempt certain uses of methylene chloride from the ban.

DOWNSTREAM NOTIFICATION REQUIREMENTS **SECTION 751.111**

In the proposed rule, EPA is amending current downstream notification requirements for consumer use of methylene chloride for paint and coating removers promulgated in 2019 to include references to commercial and industrial uses. New amended requirements (Section 751.111) will supersede rules codified in Section 751.107.

MANUFACTURERS AND IMPORTERS

of methylene chloride-containing products for any use, must prior to or concurrent with shipment notify companies of the restrictions in section 751.105 in writing

After August 26, 2019 and before [150 days after date of publication of final rule in the Federal Register]

PROCESSORS AND DISTRIBUTORS

in commerce of methylene chloride-containing products for any use, must prior to or concurrent with shipment notify companies of the restrictions in section 751.105 in writing

After August 26, 2019 and before [210 days after date of publication of final rule in the Federal Register]

MANUFACTURERS AND IMPORTERS

of methylene chloride-containing products for any use, must prior to or concurrent with shipment notify companies of the restrictions in writing

Beginning on [150 days after date of publication of final rule in the Federal Register]

PROCESSORS OR DISTRIBUTORS

in commerce of methylene chloride or methylene chloride-containing products for any use, must prior to or concurrent with shipment notify companies of the restrictions in writing

Beginning on [210 days after date of publication of the final rule in the Federal Register]



Required notifications must occur by including specific text in sections 1 (c) and 15 of the Safety Data Sheet

RECORDKEEPING REQUIREMENTS

SECTION 751.113



GENERAL RECORDS

- 751.113(a)(1-3)
- Retain records for at least 5 years



EXPOSURE MONITORING RECORDS

- 751.113(b)(1-5)
- Retain records for at least 5 years



EXPOSURE CONTROL RECORDS

- 751.113(c)(i – vi)
- Retain records for at least 5 years



RECORDS RELATED TO 751.115 EXEMPTIONS

- Demonstrate compliance with specific conditions of the exemption



Manufacturers, importers, processors, or distributors in commerce of any methylene chloride after August 26, 2019 must retain records



RESOURCES



› Assessing and Managing Chemicals under the TSCA

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca>

› Risk Management for Existing Chemicals under the TSCA

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca#process>

› Methylene Chloride; Regulation Under the TSCA

<https://www.federalregister.gov/documents/2023/05/03/2023-09184/methylene-chloride-regulation-under-the-toxic-substances-control-act-tsca#p-261>

› Risk Management for Methylene Chloride

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-methylene-chloride>



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72% OF GLOBAL AEROSPACE AND DEFENSE
INDUSTRY ARE IAEG MEMBERS

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FOR IAEG (FULL) MEMBERS

\$712B TOTAL GLOBAL AEROSPACE
INDUSTRY 2021 REVENUES

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