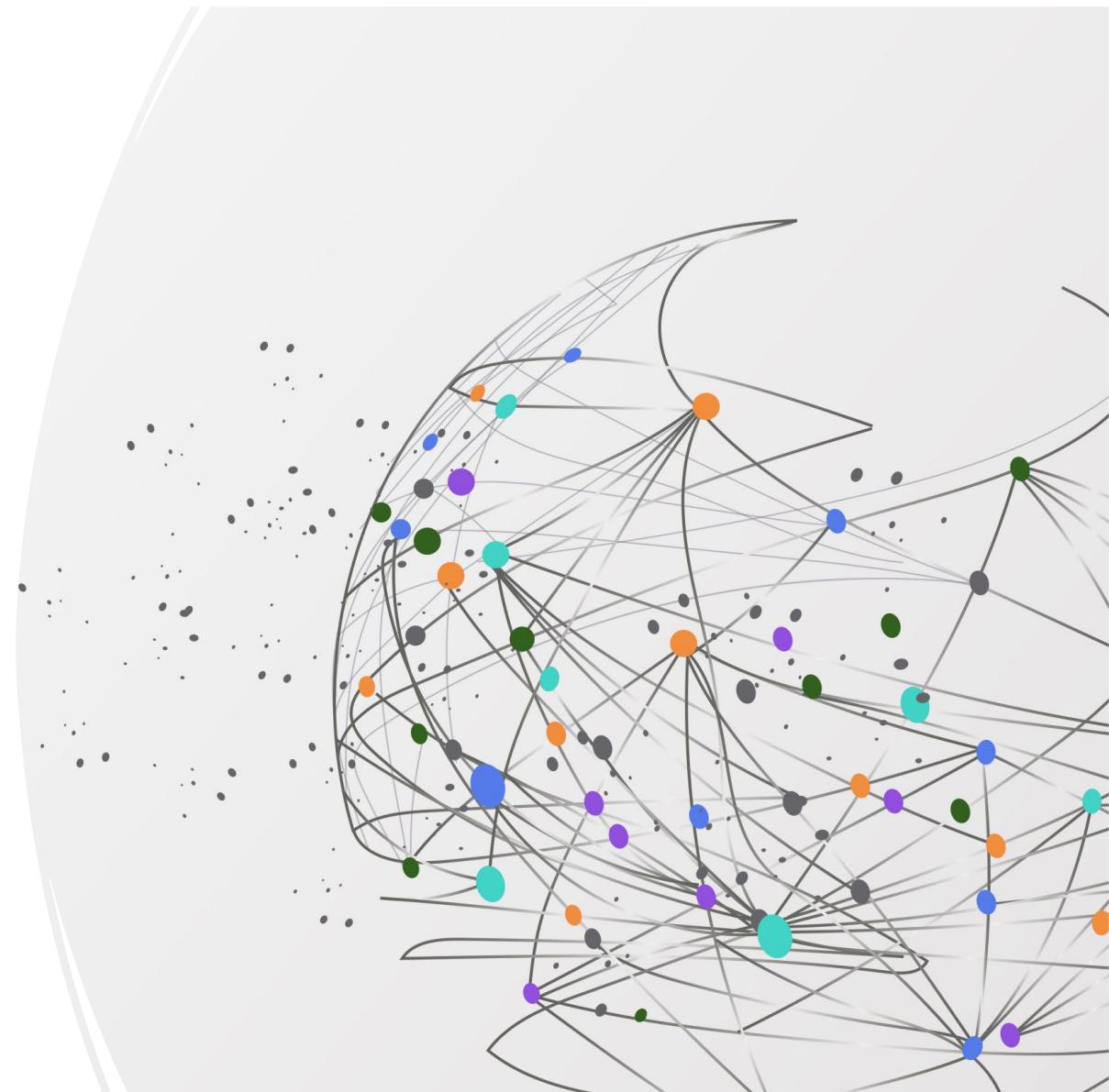


Chrysotile Asbestos

Part 1: TSCA Regulation
Final Rule
Effective May 28, 2024



TSCA Section 6(a) Summary

Prohibits

The manufacture (including import), processing, distribution in commerce and commercial use of chrysotile asbestos, including any chrysotile asbestos-containing products or articles for:

- the chlor-alkali industry and require interim workplace controls;
- sheet gaskets in chemical production and require interim workplace controls for certain commercial uses;
- oilfield brake blocks, aftermarket automotive brakes and linings, other vehicle friction products and other gaskets;
- consumer use of aftermarket automotive brakes and linings and other gaskets

Requires

Establishment of disposal and recordkeeping requirements.



Part 1: Chrysotile Asbestos Conditions of Use

Industrial Use

- Processing and Industrial use of Chrysotile Asbestos Diaphragms in the Chlor-alkali Industry
- Processing and Industrial Use of Chrysotile Asbestos-Containing Sheet Gaskets in Chemical Production
- Industrial Use and Disposal of Chrysotile Asbestos-Containing Brake Blocks in the Oil Industry

Commercial Use

- Commercial Use and Disposal of Aftermarket Automotive Chrysotile Asbestos-Containing Brakes/Linings
- Commercial Use and Disposal of Other Chrysotile Asbestos-Containing Vehicle Friction Products
- Commercial Use and Disposal of Other Chrysotile Asbestos-Containing Gaskets

Consumer Use

- Consumer Use and Disposal of Aftermarket Automotive Chrysotile Asbestos-Containing Brakes/Linings and
- Consumer Use and Disposal of Other Chrysotile Asbestos-Containing Gaskets

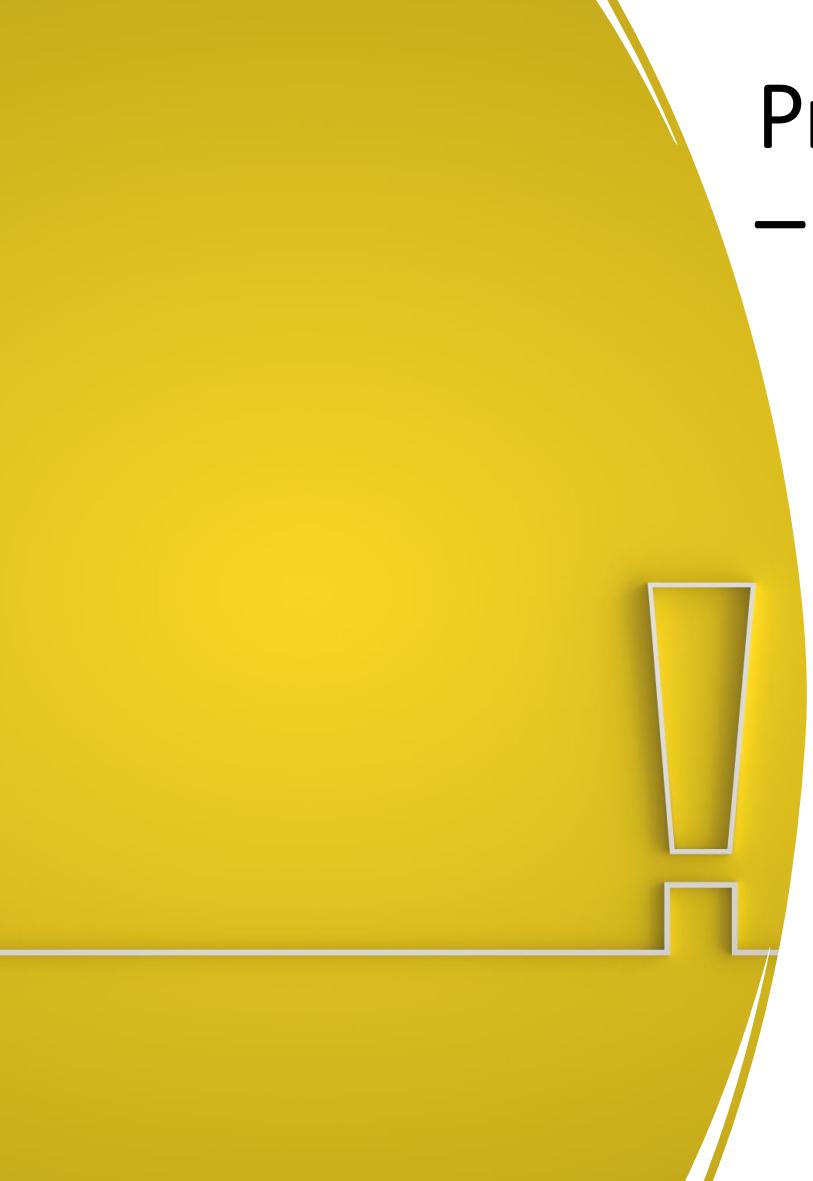


Applies to Chrysotile Asbestos or Products containing any Chrysotile Asbestos for:

- Manufacturers (includes importers to US)
- Processors
- Distributors
- Users or
- Disposers/Disposal

* NOTE: There is no de minimis concentration for Chrysotile.





Prohibition Compliance Deadlines – From May 28, 2024

- Asbestos Diaphragm Phase-Out period - 5-8-12 Years
- Manufacture (including import), processing, distribution in commerce and commercial use of:
 - Chrysotile asbestos-containing sheet gaskets in chemical production within 5-years
 - Use of Chrysotile asbestos sheet gaskets for titanium dioxide production within 5-years
 - Distribution in commerce of chrysotile asbestos sheet gaskets for titanium dioxide production within 2 years.

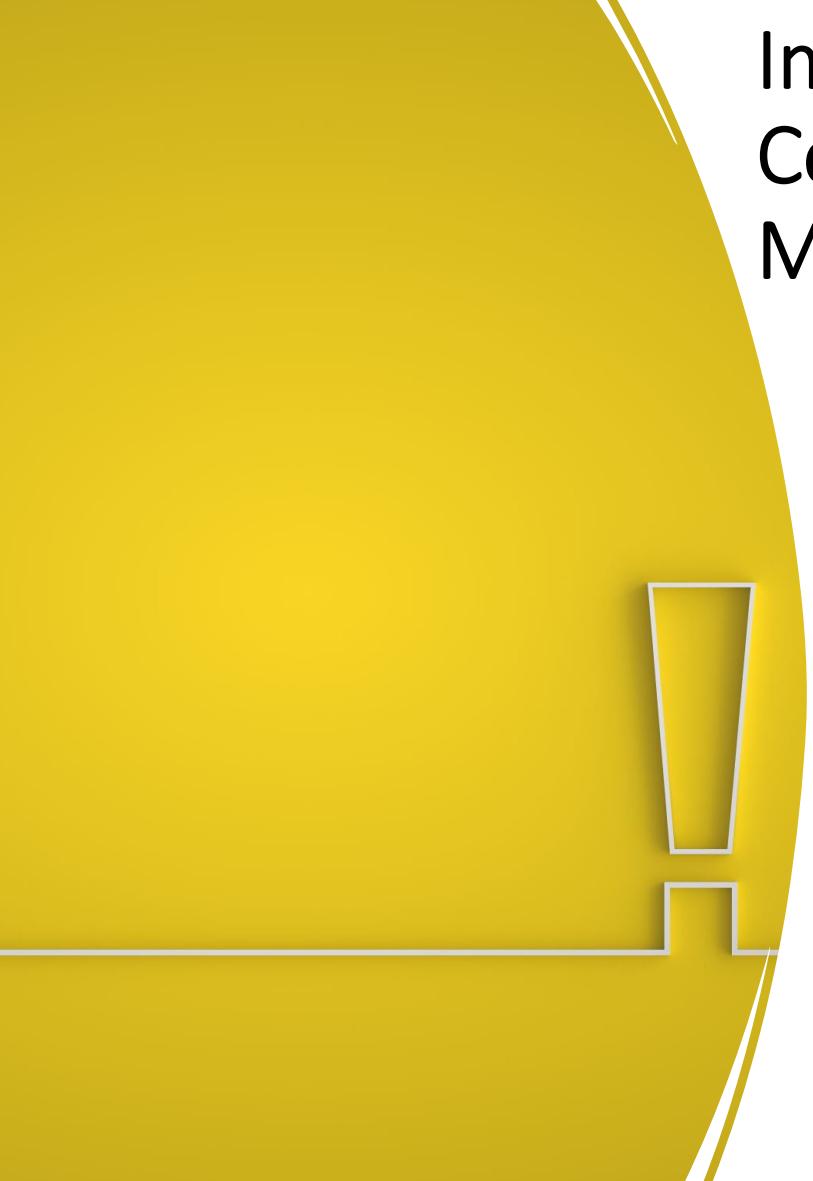
Interim Workplace Controls Specifically Applicable to:



Chlor-Alkali Industry for
Processing and industrial use of
asbestos diaphragms



Industrial use of chrysotile
asbestos sheet gaskets for
Titanium Dioxide production



Implementation Deadlines for the 2 Conditions of Use – 6-Months from May 28, 2024:

- Initial Monitoring – Occupational Users and Non-Users
 - Every 3-months if initial results exceed the existing chemical exposure limit (ECEL)
 - Every 6-months if results are at or below the ECEL
- Comply with ECEL 0.005 f/cc 8-hour TWA for Chrysotile
- Establish Regulated Areas
- Develop Exposure Control Plans
 - One Year after Final Rule
 - Updated at least Annually
- Supply respirators if exposures exceed the ECEL
- Conduct training for each person prior to or at the time of potential exposure to chrysotile asbestos and repeat the training annually.

*Rotating personnel to manage exposures is not allowed.

Interim Workplace Controls for the 2 Conditions of Use for Chrysotile Asbestos

Initial monitoring – 6-months from May 28, 2024, for potentially exposed persons: Workers, non-users, contractors, employers, all other persons in the work area where chrysotile is present under the conditions of use where interim workplace controls apply.

Compliance with EPA exposure limit – 6-months from May 28, 2024
ECEL 0.005 f/cc 8-Hour TWA

Hierarchy of Controls - 6-months from May 28, 2024
Must be applied to ensure no person exposed to at or above the ECEL

Full Exposure Control Plans implemented – By May 28, 2025

- Specific documentation required

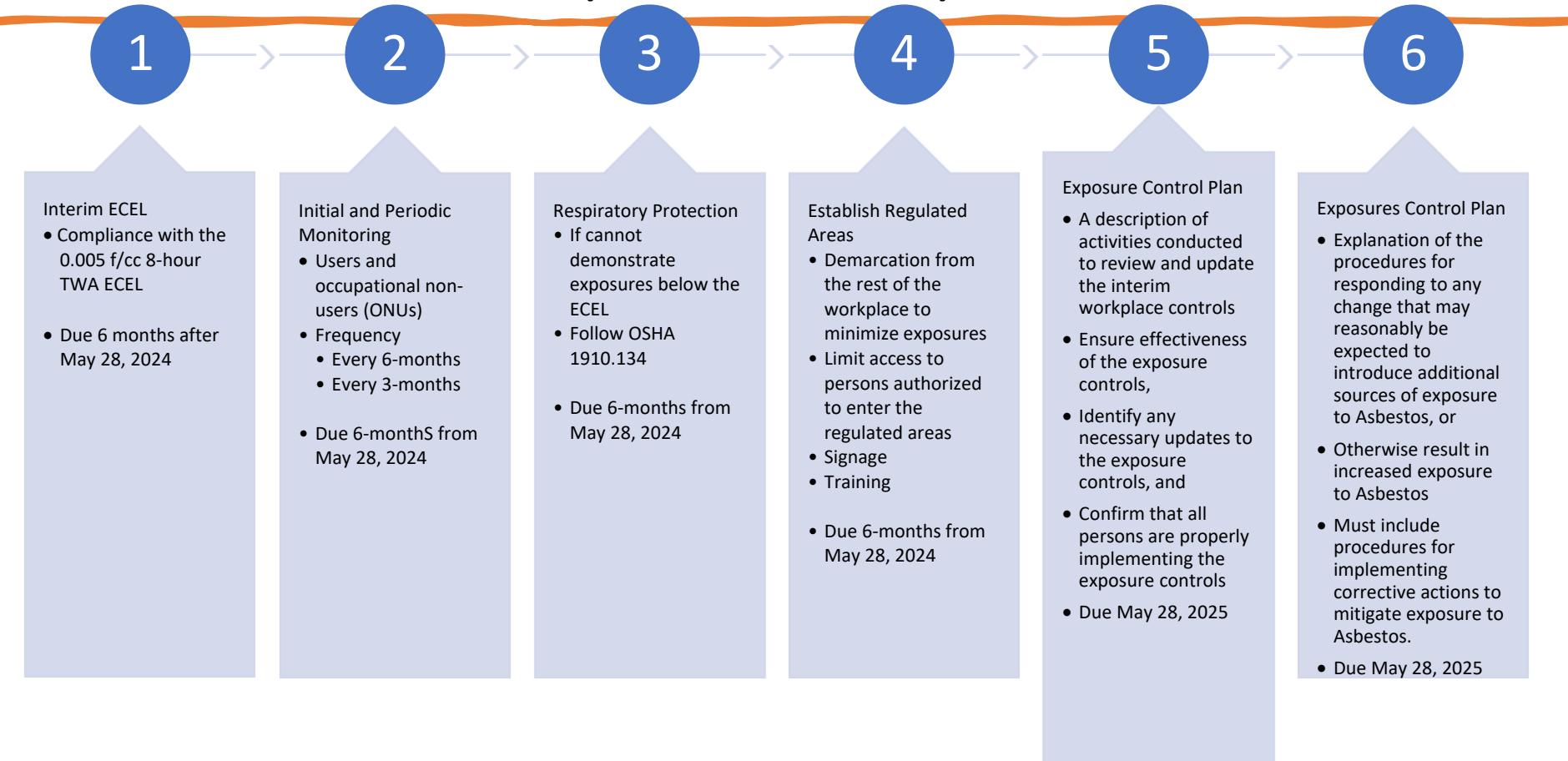
- Establish Regulated Areas

- Conduct training – 6-months from May 28, 2024

- Recordkeeping and notification requirements

TSCA Interim Workplace Control Requirements

- Due 6-months to 1 year from May 28, 2024



Interim Workplace Controls

- Due May 28, 2025



Identification of all engineering and work practices or workplace (administrative) controls that were considered.

Provide adequate respiratory protection if other controls do not control potential exposures below the ECEL.

*Chlor-Alkali Diaphragm work is exempt from engineering controls.

Provide the rationale for the engineering and work practice (administrative) controls identified:

- Feasibility,
- Effectiveness, and
- Other relevant considerations

Document reasoning for selecting or not selecting controls.

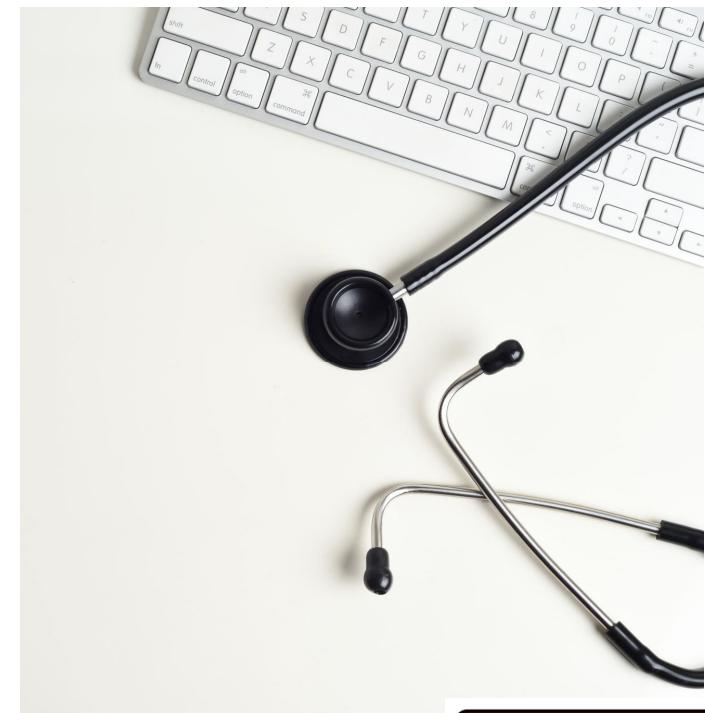
Describe activities conducted during the review and annual update of the exposure control plan to:

- Ensure effectiveness of the exposure controls,
- Identify any necessary updates to the exposure controls, and
- Confirm that all persons are implementing the exposure controls correctly.
- These activities could consist of:
 - Regular inspections or
 - Other types of evaluations of the exposure controls

Describe the corrective actions taken to mitigate the exposures to chrysotile asbestos

Interim Workplace Exposure Control Plan Requirements

- The owner or operator must not implement a schedule of personnel rotation as a means of compliance with the ECEL.
- The owner or operator must maintain the effectiveness of any controls
- The interim workplace exposure control plan must be reviewed and updated as necessary, but at least every year, to reflect any significant changes in the status of the owner or operator's approach.



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Interim Workplace Exposure Control Plan Availability

- Owners or operators must make the exposure control plan and associated records available to potentially exposed persons, including
 - Exposure monitoring records
 - Respiratory protection program implementation
- Owners or operators must notify potentially exposed persons of the availability of the plan and associated records within 30 days of the date that the exposure control plan is completed and at least annually thereafter.
- The owner or operator must provide the specified records at a reasonable time, place, and manner upon request by the potentially exposed person.

Monitoring Requirements

Cannot use historical data

Must conduct initial monitoring

Must monitor

- Every 6-months if at or below the ECEL
- Every 3-months if above the ECEL

Must monitor occupational users and ONUs to **represent** exposures for each job classification

- ONUs - Personnel in the general area but are not working directly with the asbestos containing material
 - Engineers
 - HSE Personnel
 - Individuals walking through the area of use

Exposure Monitoring Record Requirements for Owners/Operators

(1) Monitoring records that include the information described in the OSHA Asbestos Standard and the below:

(2) For each monitoring event of Chrysotile Asbestos required, must also document the following:

- All measurements that may be necessary to determine the conditions that may affect the monitoring results;
- The identity of all other potentially exposed persons whose exposure was not measured and whose exposure is intended to be represented by the area or representative sampling monitoring;
- Use of established analytical methods;
- Compliance with the Good Laboratory Practice Standards or use of a laboratory accredited by the AIHA or another industry-recognized program; and
- Information regarding air monitoring equipment including:
 - Type, maintenance, calibrations, performance tests, limits of detection, and any malfunctions.

(3) Copies of exposure monitoring notifications provided to affected individuals within 15 days

Exposure Monitoring Results Notification

- Within 15 working days after receipt of the results of any exposure monitoring, notify each potentially exposed person whose exposure is represented by that monitoring in writing, either individually to each potentially exposed person or by posting the information in an appropriate and accessible location, such as public spaces or common areas, for potentially exposed persons outside of the regulated area.
- The notice would be required to identify the ECEL, and what it means in plain language, the exposure monitoring results, and any corresponding respiratory protection required.
- If the ECEL 05 0.005 f/cc for 8-hour TWA is exceeded, the notice would also be required to include a description of the actions taken by the owner or operator to reduce inhalation exposures to or below the ECEL which states the actions to be taken to reduce exposures.

Regulated Areas

- Areas where airborne concentrations of Chrysotile Asbestos are reasonably expected to exceed the ECEL 0.005 f/cc.
- Demarcate regulated areas within 6 months of May 28, 2024.
- Identify and train personnel who are authorized to enter regulated areas.
- Signs must clearly define regulated areas and be in languages of personnel working at the location.
- Must restrict access to authorized personnel
 - Restrict access to the regulated area from any potentially exposed person that lacks proper training, PPE or is otherwise unauthorized to enter.
- Must provide authorized personnel with adequate respiratory protection when entering Regulated Areas
- Ensure persons do not engage in non-work activities which may increase chrysotile asbestos exposure, such as eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics.

Provision of Respiratory Protection



Must provide respiratory protection sufficient to reduce inhalation exposures to below the ECEL (0.005 f/cc for 8-hour TWA) to all potentially exposed persons in the regulated area within six months from May 28, 2024.

Training Requirements

Six months after May 28, 2024 training must be conducted for each person prior to or at the time of potential exposure to chrysotile asbestos.

Training must be conducted annually.

Training must include:

- The health effects associated with exposure to chrysotile asbestos
- The quantity, location, manner of use, release, and storage of chrysotile asbestos and the specific operations in the workplace that could result in exposure to chrysotile asbestos, particularly noting where each regulated area is located
- The specific procedures implemented to protect persons potentially exposed to chrysotile asbestos, such as engineering controls, work practices and personal protective equipment to be used
- The requirements associated with the interim controls, as well as how to access or obtain a copy of these regulations in the workplace
- Conducted in a manner that allows each person potentially exposed to understand the information, in an understandable manner (*i.e.*, plain language) and in multiple languages as appropriate (*e.g.*, based on languages spoken by potentially exposed persons)

Disposal Requirements – effective 180 Days after May 28, 2024

- Conditions of use, regulated entities must adhere to waste disposal requirements described in OSHA's Asbestos General Industry Standard in 29 CFR 1910.1001, including 1910.1001(k)(6), which requires waste, scrap, debris, bags, containers, equipment, and clothing contaminated with asbestos that are consigned for disposal to be disposed of in sealed impermeable bags or other closed, impermeable containers.
- For the chrysotile asbestos sheet gaskets in chemical production condition of use, regulated entities must adhere to waste disposal requirements described in OSHA's Asbestos Safety and Health Regulations for Construction in 29 CFR 1926.1101.
- For the chrysotile asbestos diaphragm condition of use, as well as oilfield brake blocks, other vehicle friction products, and any commercial use of other gaskets and aftermarket automotive brakes and linings, EPA is cross-referencing the disposal requirements of Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR part 61, subpart M) at 40 CFR 61.150. The asbestos NESHAP reduces exposure to airborne asbestos by generally requiring sealing of asbestos-containing waste material from regulated activities in a leak-tight container and disposing of it in a landfill permitted to receive asbestos waste. EPA is not cross-referencing this same NESHAP waste disposal provision for the disposal of chrysotile asbestos- containing waste from sheet gasket processing and use because EPA did not find unreasonable risk for the disposal of sheet gaskets.
- EPA is also requiring that each manufacturer (including importer), processor, and distributor of chrysotile asbestos, including as part of products and articles, for consumer uses subject to this proposed regulation, dispose of regulated products and articles in accordance with specified disposal provisions. These consumer uses are aftermarket automotive brakes and linings, and other gaskets. These consumer use supply chain disposal requirements are consistent with those for disposers of aftermarket automotive brakes and linings, and other gaskets, intended for commercial use. EPA does not generally have TSCA section 6(a) authority to directly regulate consumer use and disposal, but under TSCA section 6(a) EPA may nonetheless regulate the disposal activity of suppliers of these products, including importers, wholesalers and retailers of asbestos-containing aftermarket automotive brakes and linings, and other gaskets.

General Recordkeeping Requirements

, EPA's final recordkeeping provisions include additional requirements to maintain records regarding:

- Interim workplace controls of chrysotile asbestos exposures
- Business Records
- Disposal Records and
- Records of certifications of compliance for the chlor-alkali industry.

Interim Workplace Controls Record Retention Requirements



FACILITY EXPOSURE
MONITORING RECORDS



NOTIFICATIONS OF
EXPOSURE MONITORING
RESULTS



EXPOSURE CONTROL PLAN
AND IMPLEMENTATION



RESPIRATORY PROTECTION
USED AND PROGRAM
IMPLEMENTATION



REGULATED AREAS AND
AUTHORIZED PERSONNEL



INFORMATION AND
TRAINING REQUIRED UNDER
OSHA ASBESTOS STD

Business Records Retention

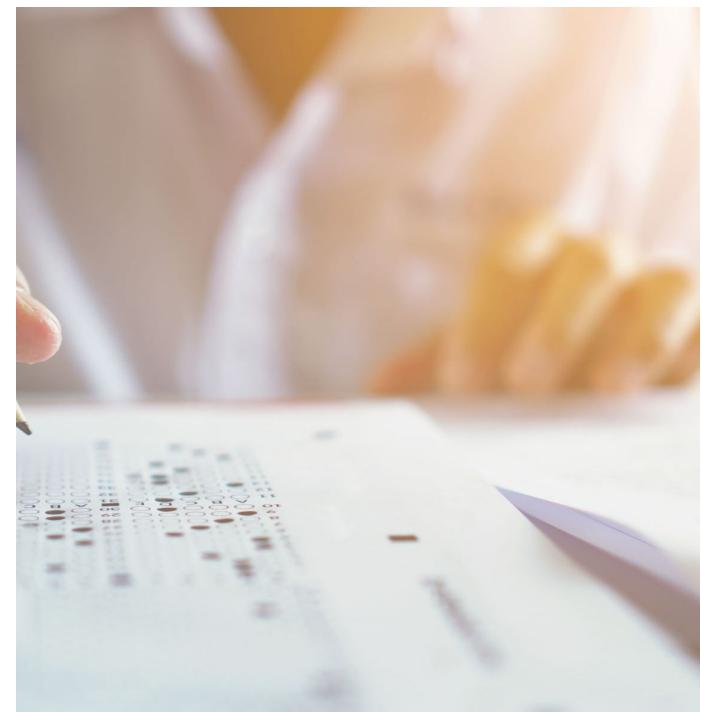
Must maintain ordinary business records in one location at Headquarters or facility where records were generated, such as:

- Invoices
- Bills-of-lading
- Disposal Records

Records must demonstrate compliance with restrictions and other provisions of this final regulation:

- Must maintain such records for a period of five years from the date the record is generated.
- Must make records available to EPA for inspections.

* This requirement begins 180 days from May 28, 2024.



Access to Records, Exemptions and Retention

Availability of exposure control plans.

- Owners or operators must document the notice to and ability of any potentially exposed persons to access the exposure control plan and other associated records

Minimum record retention period.

- The records required under this section must be retained for at least 5 years from the date that such records were generated.
- Exposure control plan and associated records available to potentially exposed persons, at a reasonable time, place, and manner, within 15 working days of receiving a request.

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OSHA Referenced Standards

Any provisions applying to “employee” in 29 CFRs below apply equally to potentially exposed persons

- 1910.134
- 1910.1001 and
- 1926.1101

Any provisions applying to “employer” in 29 CFRs below apply equally to any owner or operator for regulated areas

- 1910.134
- 1910.1001 and
- 1926.1101

Questions??

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