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From the  
**Chemical & Material Risk Management Program,**  
 Office of the Under Secretary of Defense for Acquisition and Sustainment

# Chemical & Material Emerging Risk Alert

## Asbestos

*According to the amended Toxic Substances Control Act (TSCA), the U.S. Environmental Protection Agency (EPA) must issue a final risk evaluation on asbestos.<sup>1</sup> If EPA finds that any of the evaluated conditions present unreasonable risk to health or the environment, EPA will impose final rulemakings to manage those risks within two to three and a half years.<sup>2</sup> This risk alert serves to alert Program Managers that further regulation is coming and what to do in response to this alert.*

### What Is Asbestos?

The Toxic Substances Control Act (TSCA) defines asbestos as the “asbestiform varieties of six fiber types – chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite or actinolite” and “asbestos-containing material” as any material which contains more than one percent asbestos by weight.<sup>3</sup> The general Chemical Abstracts Service Registry Number (CASRN) for asbestos is 1332-21-4.

Asbestos is not currently produced in the U.S. The United States Geological Survey (USGS) states that, in 2019, all of the asbestos minerals imported into and used within the United States consisted of chrysotile.<sup>4</sup> As such, only the uses specific to the chrysotile fiber type of asbestos are currently undergoing risk evaluation. ***EPA will also consider past uses and associated disposal in supplemental documents, which could include the other five asbestiform varieties.***

### How Is Asbestos Used in the United States?

The chlor-alkali industry accounted for 100% of raw asbestos mineral consumption in 2019.<sup>5</sup> Historically, because of its fiber strength and heat resistance, asbestos was used in a variety of building construction materials for insulation and as a fire

retardant, in manufactured goods, friction products (automobiles), heat-resistant fabrics, packaging, gaskets, and coatings.<sup>6</sup> See Sections A-B of EPA’s Risk Evaluation of Asbestos for the ongoing uses that EPA has preliminarily determined have unreasonable risk through the risk evaluation process.

### How Is Asbestos Used in the DoD?

The Department of Defense (DoD) does not have any confirmed ongoing mission critical uses of asbestos and any past asbestos-containing materials are being replaced with alternatives during periodic maintenance. Past uses are uses that are no longer being manufactured or imported but are still *in situ* for their intended use.

DoD past uses may include: transite piping, ceiling and floor tiles, insulation, shingles, windows, mastic, roof coating fibered liquid asphalt, component in packing materials, gaskets, friction linings, sealing compounds, compressed sheeting, mechanical filters and assemblies, roof coating, and previously constructed materials used at installations.

### Why Is It an Emerging Chemical?

Asbestos is considered an emerging chemical because EPA identified it as one of the initial ten



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chemicals to be evaluated for its potential risks to human health and the environment and because DoD continues to rely on some past uses of asbestos. To address any unreasonable risks, EPA must promulgate one or more risk management rule(s). If EPA issues the final risk evaluation for asbestos by the end of 2020, the final risk management rule will be issued by the end of 2022, with a possible extension of up to the end of 2023. DoD will have the opportunity to review the proposed and final rules through the interagency process prior to final issuance.

### What Is the Emerging Health Risk?

In the draft risk evaluation, EPA states that there are unreasonable risks of developing cancer in workers, occupational non-users (ONU), consumers and bystanders due to inhalation of chrysotile asbestos fibers during use. ONUs are workers who do not directly handle the chemical but perform work in an area where the chemical is present.

### EPA's Regulatory Authority under TSCA

Under Section 6(a) of TSCA, EPA is directed to apply one or more requirements to such substance or mixture that it has determined, in its risk evaluation, present an unreasonable risk to health or the environment under the conditions of use, to the extent necessary so that the chemical substance no longer presents such risk. For the ongoing conditions of use that EPA evaluated and preliminarily determined presented unreasonable risks to health, all of them will most likely be regulated.

The requirements range from:

- Complete prohibition/other restriction of the chemical substance or any particular use;

- Limitation on the amount of such substance or mixture which may be manufactured, processed or distributed in commerce;
- A requirement to apply minimum warnings and instructions;
- A requirement to retain records of the processes used to manufacture or process such substances or mixtures; to monitor, or to test;
- A requirement regulating manner or method of commercial use;
- A requirement regulating disposal methods; and
- A requirement to direct manufacturers/processors to give notice of the unreasonable risk determination to distributors and users and replace or repurchase.<sup>7</sup>

EPA also has the ability to issue Significant New Use Rules (SNURs). In April 2019, EPA issued a SNUR that requires manufacturers and importers to notify EPA if they want to re-establish an asbestos use that is not currently ongoing.<sup>8</sup> The SNUR lists all of the uses of asbestos that are subject to the rule, including the manufacturing, importing, mining, or processing of the five (non-chrysotile) asbestos fibers crocidolite, amosite, anthophyllite, tremolite, or actinolite (both raw or as part of an article). All of the uses listed in the SNUR cannot return to the marketplace without EPA having an opportunity to evaluate each intended use for potential risks to health and the environment and take any necessary regulatory action, which may include a prohibition.

## What Should Be Done in Response to this Alert?

Assuming EPA issues the final risk evaluation by the end of 2020, it is possible that EPA will issue a final risk management rule on ongoing uses of asbestos as early as Summer 2022 or as late as Winter 2023. DoD will have the opportunity to comment on the proposed and final rules prior to issuance through the interagency process. ***This risk alert will be updated once the supplemental scope has been released.***

1. Program Managers should anticipate further regulation of asbestos (as stated above). If managed systems have any of the installed/past asbestos uses listed in Sections A. and B. (see below), program managers should ensure that appropriate disposal procedures are in-place and ensure that asbestos-free alternative replacement parts are available. As an additional prudent risk management measure, program managers should inventory all installed/past asbestos parts and materials on their systems.
2. Program Managers utilizing asbestos should expect that EPA may choose to ban asbestos for the uses listed in Sections A. and B. within the next two to three and a half years.
3. Programs should continue to implement and consider the expansion of maintenance procedures that mandate the replacement of any asbestos-containing parts whenever maintenance or inspection of those parts occurs.
4. All programs, to include site restoration and cleanup, drinking water, renovation of buildings, and workplace exposures, should anticipate additional regulations to control exposure from products already in use.

5. DoD should continue to strive to adhere to existing DoD policies on asbestos abatement and management of any exposures.

## EPA's Risk Evaluation of Asbestos

Initially, EPA stated that it would only be reviewing "a handful of very limited, still ongoing uses of asbestos" and would not be evaluating "legacy uses, associated disposals, and legacy disposals ... [which] include asbestos-containing materials that remain in older buildings or are part of older products but for which manufacture, processing and distribution in commerce are not currently intended, known or reasonably foreseen." However, a recent decision by the U.S. Court of Appeals for the Ninth Circuit<sup>9</sup> ruled against EPA's decision to exclude past uses. Therefore, EPA has indicated that it will now widen its risk evaluation scope to address certain past uses and associated disposals of asbestos, potentially of all fiber types. EPA will issue a supplemental risk evaluation scope on past uses later this year for public comment.

### A. "Ongoing" Conditions of Use -- Preliminary Determinations of Unreasonable Risk for Workers and ONUs

EPA evaluated the below COUs related to commercial and industrial use for unreasonable risks to human health and preliminarily determined that all of them present an unreasonable risk of injury to health to workers and ONUs. It is likely that EPA's risk management rule(s) will regulate all of the below COUs:

1. Processing and industrial use of asbestos diaphragms in chlor-alkali industry (producing, handling, and disposing of asbestos diaphragms);
2. Processing asbestos-containing sheet gaskets (sheet gasket stamping);

3. Industrial use of asbestos-containing sheet gaskets in chemical production (e.g., titanium dioxide production);
4. Industrial use and disposal of asbestos-containing brake blocks in oil industry (brake block use);
5. Commercial use and disposal of aftermarket automotive asbestos-containing brakes/linings (commercial mechanic brake repair/replacement) (e.g., foreign aftermarket brakes sold online);
6. Commercial use and disposal of other vehicle friction products (commercial mechanic brake repair/replacement) (e.g., brakes installed in exported cars); and
7. Commercial use and disposal of other asbestos-containing gaskets (commercial mechanic gasket repair/replacement) (e.g., utility vehicles (UTV)).

<sup>1</sup> TSCA Section 6(b)(2)(A), 15 U.S.C. § 2605(b)(2)(A).

<sup>2</sup> TSCA Section 6(c)(1), 15 U.S.C. § 2605(c)(1).

<sup>3</sup> 15 U.S.C. §§ 2642(3) and 2642(4).

<sup>4</sup> USGS, [Asbestos Data Sheet - Mineral Commodity Summaries 2020](#).

<sup>5</sup> *Id.*

## B. “Ongoing” Conditions of Use -- Preliminary Determinations of Unreasonable Risk for Consumers and Bystanders

EPA evaluated the below COUs related to consumer use for unreasonable risks to human health and preliminarily determined that both of them present an unreasonable risk of injury to health to consumers and bystanders. It is likely that EPA’s risk management rule(s) will regulate both of the below COUs:

1. Consumer use and disposal of aftermarket automotive asbestos-containing brakes/linings (Do-it-Yourself consumer brake repair/replacement); and
2. Consumer use and disposal of other asbestos-containing gaskets (Do-it-Yourself consumer gasket repair/replacement) (e.g., utility vehicles (UTV)).

<sup>7</sup> TSCA Section 6(a), 15 U.S.C. § 2605(a).

<sup>8</sup> 84 Fed. Reg. 17345 (25 April 2019).

<sup>9</sup> Safer Chemicals, Healthy Families v. EPA, No. 17-72260 (9th Cir. 2019).