

The Air You Breathe

Free Quarterly Newsletter from Akron Regional Air Quality Management District

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EPA Prohibits Chrysotile Asbestos

March 18, 2024, the U.S. Environmental Protection Agency (EPA) announced a final rule to prohibit ongoing uses of chrysotile asbestos, the only known form of asbestos currently used in or imported to the United States. The ban on ongoing uses of asbestos is the first rule to be finalized under the 2016 amendments to the nation's chemical safety law, the Toxic Substances Control Act (TSCA), which received near-unanimous support in both the U.S. House of Representatives and the Senate. The action marks a major milestone for chemical safety after more than three decades of inadequate protections and serious delays during the previous administration to implement the 2016 amendments. Exposure to asbestos is known to cause lung cancer, mesothelioma, ovarian cancer, and laryngeal cancer, and it is linked to more than 40,000 deaths in the U.S. each year.

Chrysotile asbestos is found in products including asbestos diaphragms, sheet gaskets, brake blocks, aftermarket automotive brakes/linings, other vehicle friction products, and other gaskets. The use of asbestos in the United States has been declining for decades, and its use is already banned in over 50 countries.

Although there are several known types of asbestos, the only form known to be imported, processed, or distributed for use in the United States is chrysotile. Raw chrysotile asbestos was imported into the United States as recently as 2022 for use by the chlor-alkali industry. Most consumer products that historically contained chrysotile asbestos have been discontinued.

EPA has set compliance deadlines to transition away from each use of chrysotile asbestos, which are as soon as is practicable for each use while also providing a reasonable transition period, which the law requires.

Chlor-alkali Sector

The chlor-alkali sector uses asbestos diaphragms to make sodium hydroxide and chlorine, a critical use of which is to disinfect drinking water and wastewater. There are other ways to disinfect water and other ways to produce chlorine; in fact, two-thirds of the chlorine produced in the U.S. is produced without using asbestos. While there are only eight chlor-alkali plants in the United States that still use asbestos diaphragms, EPA must still ensure that the eight facilities have a reasonable transition time for the phase out of asbestos that does not inadvertently adversely impact drinking or wastewater purification efforts. EPA is banning the import of asbestos for chlor-alkali use immediately to close the door forever on the use of asbestos by this sector. The eight remaining facilities that use asbestos must transition to either non-asbestos diaphragms or to non-asbestos membrane technology, and the final rule ensures that six of the eight will have completed this transition within five years, with the remaining two to follow.

- EPA has determined that converting facilities from using diaphragms that contain asbestos to those that do not within five years provides both a reasonable transition time and is as soon as practicable without disrupting the supply of chlorine that is needed for water purification purposes. EPA also believes that five of the eight facilities likely plan to undergo such conversions.
- EPA has also determined that converting facilities from using diaphragms that contain asbestos to non-asbestos membrane technology requires extensive construction, additional permits, specialized expertise and parts for which there are limited suppliers. EPA has therefore determined that a reasonable transition time for companies that plan to transition multiple facilities to non-asbestos membrane technology is five years to convert their first facility, eight years to convert their second and 12 years to convert their third, and the facilities will be required to certify their continued progress with EPA.

Continued on page 2

Chrysotile Continued

Remaining Uses

The final rule also:

- Bans most sheet gaskets that contain asbestos two years after the effective date of the final rule, with five-year phase-outs for sheet gaskets to be used to produce titanium dioxide and for the processing of nuclear material.
- Allows asbestos-containing sheet gaskets to continue to be used through CY 2037 at the Department of Energy's Savannah River Site to ensure that the safe disposal of nuclear materials can continue on schedule while continuing to protect workers from exposure to radioactive materials.
- Bans the use of asbestos in oilfield brake blocks, aftermarket automotive brakes and linings, other vehicle friction products, and other gaskets six months after the effective date of the final rule.

EPA is requiring strict workplace safety measures to protect workers from asbestos exposure during any phaseout periods longer than two years. EPA is also ensuring that asbestos is disposed of properly, in line with industry standards, Occupational Safety and Health Administration requirements, and the Asbestos National Emission Standards for Hazardous Air Pollutants. The agency is also requiring recordkeeping.

[Learn more about risk management for asbestos.](#)

Toxic Chemical Releases Decline 21% in 10 Years

March 21, 2024, the U.S. Environmental Protection Agency released its 2022 Toxics Release Inventory (TRI) National Analysis showing that environmental releases of TRI chemicals from facilities covered by the program were 21% lower in 2022 compared to 2013. This includes a 26% decrease in air releases. During this 10-year period, releases from manufacturing facilities decreased by 9% while the value added to the U.S. economy from manufacturing increased by 14%. While overall releases increased by 1% from 2021 to 2022, there was a 6.5% increase in the number of pollution prevention activities reported under the TRI program compared to 2021.

The 2022 TRI National Analysis summarizes environmental releases of TRI chemicals, as well as how facilities managed their waste. In 2022, facilities reported managing 88.5% of their TRI chemical waste through preferred practices such as recycling, energy recovery and treatment, while releasing 11.5% of their TRI chemical waste into the environment.

The 2022 TRI National Analysis features visualizations and analytical tools to make data more useful and accessible to communities. Readers can view data by state, Tribe, metropolitan area, EPA region and watershed using the "Where You Live" mapping tool. This tool also allows readers to view facility locations overlaid with demographic data to identify potential exposure to TRI chemical releases in communities, including overburdened communities. Community groups, policymakers and other stakeholders can use this information, along with other environmental data, to better understand which communities may be experiencing a disproportionate pollution burden and take action at the local level.

Additionally, the 2022 TRI National Analysis highlights trends and changes in waste management practices for specific sectors and chemicals in the Sector Profile and Chemical Profile sections. This year, the 2022 TRI National Analysis highlights the primary metals manufacturing sector alongside the standard profiles for electric utilities, chemical manufacturing and metal mining.

[View the 2022 TRI National Analysis, including local data.](#)

Former Recycled Energy System Plant Demo

On April 2, 2024 Akron Beacon Journal author Mark Price published a story about the waste incineration plant constructed in the 1970s near downtown Akron that is currently being demolished.

The site was originally constructed to incinerate trash and produce steam heat for downtown buildings. It was seen as a way to alleviate the growing solid waste problem in the City of Akron. Unfortunately, technical and mechanical issues plagued the facility and despite turning to out-of-state garbage suppliers, the site was not remotely close to profitable. The explosions that would occur in 1983 & 1984 would cause well over a million dollars in damages and ultimately kill three contractors and injure seven others.


After the passage of the Clean Air Act of 1990, EPA could now regulate power plants and incinerators for air quality concerns. It turns out that the RES facility was a major polluter, perhaps one of the worst in Ohio, emitting “large amounts of heavy metals.”

A new facility operates on that site, Akron Energy Systems, and is not only profitable, but plans to serve the community for decades to come.

EPA Revises PM_{2.5} Standard

Based on the EPA's reconsideration of the air quality criteria and the NAAQS for PM, EPA is revising the primary annual PM_{2.5} standard by lowering the level from 12.0 µg/m³ to 9.0 µg/m³. The Agency is retaining the current primary 24-hour PM_{2.5} standard and the primary 24-hour PM₁₀ standard. The Agency also is not changing the secondary 24-hour PM_{2.5} standard, secondary annual PM_{2.5} standard, and secondary 24-hour PM₁₀ standard at this time. EPA is also finalizing revisions to other key aspects related to the PM NAAQS, including revisions to the Air Quality Index (AQI) and monitoring requirements for the PM NAAQS. The final rule will be effective May 6, 2024.

[Click for more information.](#)



Revisions to the Air Quality Index (AQI)

- EPA is updating to the **Air Quality Index (AQI)** for PM_{2.5}
 - The AQI is EPA's color-coded tool used by state and local governments to help inform the public about current and daily air quality and recommends steps that individuals can take to reduce their exposure to air pollution
 - The AQI converts PM_{2.5} concentrations to a number on a scale from 0 to 500
- EPA is updating some of the breakpoints to reflect the change to the annual standard and the newest scientific information

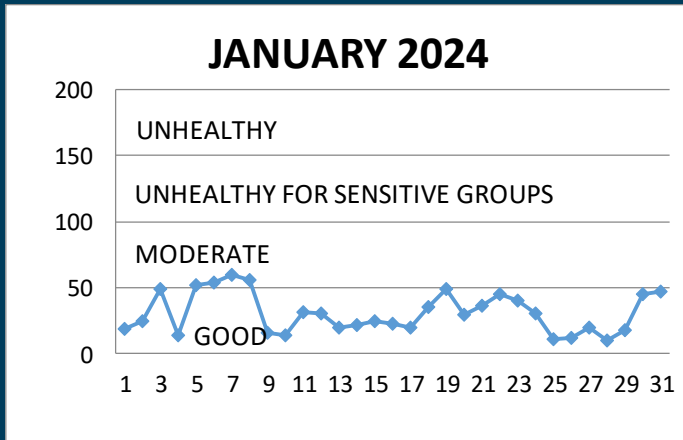
AQI Value	Current [µg/m ³]	Revisions [µg/m ³]
0, Good	0	0
50, Moderate	12	9
100, USG	35	35
150, Unhealthy	55	55
200, Very Unhealthy	150	125
300, Hazardous	250	225
500, Hazardous*	500	325

*The 500 breakpoint is used in conjunction with the 300 breakpoint to calculate AQI values within the hazardous category. The approach does not use the 500 breakpoint to determine other breakpoints values.

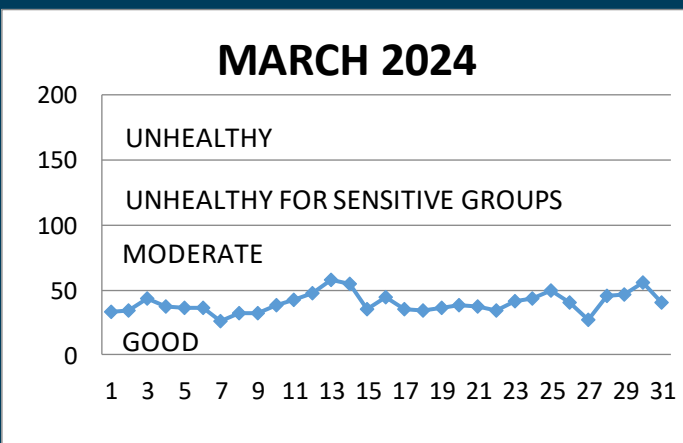
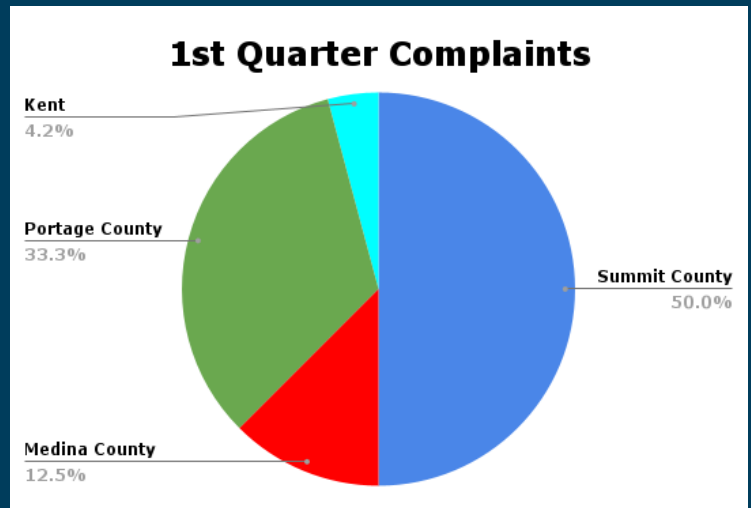
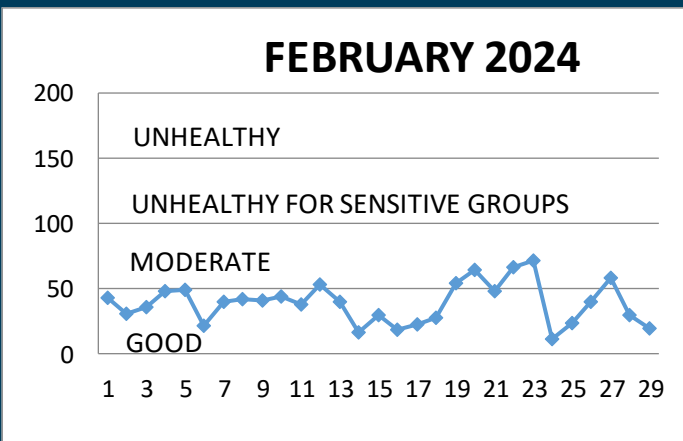
AQ by the Numbers: 1st Quarter 2024

Air Quality Index

Complaints & Inspections



Area/ Health District	Commercial/ Industrial	Residential	Total
Summit County	8	4	12
Medina County	0	3	3
Portage County	5	3	8
Kent	0	1	1



Site Visits	1st Quarter 2024
FEPTIO	4
Title V	11
Non Title V	31
Full Compliance Evaluations	5

Additional

Permits Issued							
1st Quarter 2024	Permit to Install		Permit to Install & Operate		Title V		Permit by Rule
	Draft	Final	Draft	Final	Draft**	Final	
**Includes - Preliminary Proposed Permits & Proposed Permits	2	4	3	13	1	0	8

<u>Asbestos</u>	
1st Q- Notifications	39
1st Q- Inspections	19