U.S. House Committee on Energy and Commerce
Subcommittee on Environment
"Help or Hindrance? The impact of U.S. Environmental Laws on Critical Material Supply Chains, National Security, and Economic Growth."
April 22, 2026
Documents for the Record

1. February 25, 2026, A pamphlet from U.S. Chamber of Commerce titled "The Business Community Urges Implementation of Basel Convention to Boost Domestic Recycling and Critical Minerals Recovery," submitted by the Majority.
2. April 22, 2026, A letter from the American Coatings Association addressed to Chairman Guthrie, Chairman Palmer, Ranking Member Pallone, and Ranking Member Tonko, submitted by the Minority.
3. April 16, 2026, A article from SciTechDaily titled "Century-Old Cleaning Chemical Linked to 500% Increased Risk of Parkinson's Disease," submitted by the Minority.
4. March 18, 2024, A press release from the U.S. Environmental Protection Agency titled "Biden-Harris Administration finalizes ban on ongoing uses of asbestos to protect people from cancer," submitted by the Minority.
5. December 2022, An executive summary from the U.S. Environmental Protection Agency titled "Chlorine Supply Chain," submitted by the Minority.
6. April 13, 2026, A article from the Associated Press titled "Iran war has some US water utilities facing fluoride shortage," submitted by the Minority.
7. June 19, 2025, A press release from the U.S. Department of Health and Human Services titled "NIH to Fund Long-Term Health Studies for East Palestine After Train Disaster," submitted by the Minority.
8. February, 3, 2026, A article from WKBN titled "Uncertainty still clouds East Palestine on derailment anniversary," submitted by the Minority.

U.S. Chamber of Commerce

The Business Community Urges Implementation of Basel Convention to Boost Domestic Recycling and Critical Minerals Recovery

Prepared for the United States Chamber of Commerce

What is the Basel Convention and Why Does it Matter?

What is the Basel Convention and Why Does it Matter?

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal was established to address the growing concerns over the international trade of hazardous waste. It regulates the movement of hazardous waste and certain "other wastes" between Parties to prevent illegal trafficking and require environmentally sound management. "Wastes" are defined broadly and include substances or materials shipped for final disposal (e.g., landfilling) or recovery (e.g., metals recovery). The United States is a signatory to the Basel Convention. The Senate has also provided its advice and consent to U.S. ratification of the Convention (in 1992). But limited gaps in domestic implementing legislation have meant that the United States has yet to accede to the Convention. The United States is therefore not legally bound by its provisions (unlike virtually all other countries) and operates as a "non-party" for purposes of global trade in Basel-controlled wastes. That non-party status means that other countries are legally prohibited from trading in Basel covered wastes – including wastes containing valuable precious metals, critical minerals and feedstock materials – unless the U.S. has special arrangements or agreements in place with those countries that include comparable controls.

Narrow gaps in authority between the Basel Convention and U.S. law means the U.S. is outside the global framework for recycling trade. As a result, industry's potential to access global supply of waste plastics, batteries, electronics and other materials for materials recovery is significantly decreased. Similarly, opportunities to export certain materials for recovery also face unnecessary trade frictions.

Issue: Prior Informed Consent (PIC) Authority

The Basel Convention requires an exporting country to give notice of proposed shipments and obtain explicit consent from the receiving – and transit – country before exporting covered waste. This obligation tracks the approach of U.S. law under RCRA but the Basel Convention covers a larger universe of waste.

EPA currently lacks the regulatory authority to impose controls on imports and exports of certain hazardous and (in particular) "other wastes" like non-hazardous plastic waste and non-hazardous e-waste, consistent with the Convention's obligations.

Issue: Lack of Take Back Authority

EPA lacks clear authority to implement the obligation (under article 9.2) to order the re-importation of wastes in the event of illegal trafficking.

Issue: Assess Sound Waste Management

EPA currently lacks clear domestic authority to stop exports of Basel-controlled waste "when there is reason to believe that the wastes in question will not be managed in an environmentally sound manner" (regardless of the consent of the parties involved).

Economic Impacts of Key Industries Affected by U.S. Non-party Status under the Basel Convention*

Industry	Jobs (millions)	Economic Output (2025 $ billions)**
Aerospace and Defense	2.2	$995
Consumer Technology	18.2	$5,833
Medical Technology	1.4	$525
Total	**21.8**	**$7,343**

(*) values include the direct, indirect, and induced economic impacts of each industry.
(**) Adjusted to 2025 dollars where necessary using the BLS CPI Inflation Calculator.

Benefits of Plastic and Electronic Recycling

Extracting valuable critical materials from electronic and plastic waste helps the U.S. strengthen its supply chain, develop a new domestic industry, and gain valuable access to secondary sources of critical minerals, preventing adversarial nations from exerting control of supply. Allowing imports of materials for recovery from all Basel Parties (191 countries) would help ensure U.S. access to critical raw materials and feedstocks. Expanding U.S. controls over exports for recycling would also allow the U.S. to ensure recycling trade aligns with U.S. economic and security interests.

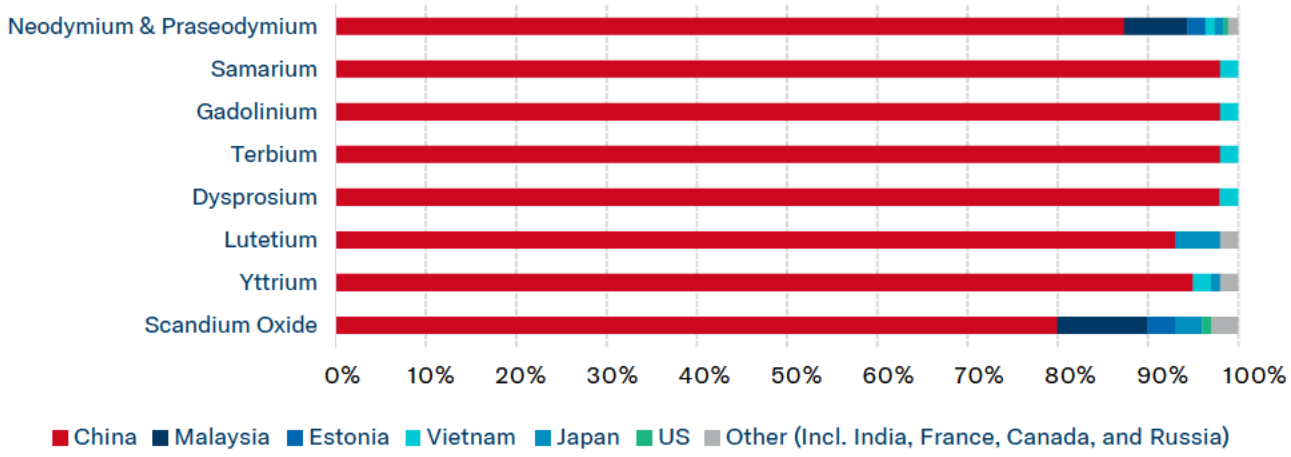
The U.S. is 100% reliant on imports for 12 of the 50 minerals listed on the "2022 Final List of Critical Materials"

80% reliant on rare earths, with China controlling 69% of global rare earth supply.

Other research estimates that China controls more than 80% of the supply for nine of these rare earth minerals, including the key inputs for neodymium magnets.

Source: Mineral Commodity Summaries 2025, USGS

Figure 1: Refined rare earth mineral production by country



Basel Convention Can Supply U.S. Need for Critical Minerals

Critical materials support national security through defense and non-defense industries alike, including healthcare, energy, and telecommunications. Globally, about $57 billion of critical materials is discarded in e-waste each year. Only an estimated 1-2% of critical materials are recovered from e-waste, despite the fact that **global demand for products made with critical materials is projected to triple by 2035.**

Critical mineral applications include advanced defense systems like the F-35 aircraft, submarines, unmanned aerial vehicles and Tomahawk missiles, all of which require neodymium magnets and other critical materials found in e-waste.

Key Facts

Plastic Waste	Electronic Waste
• In 2024, the U.S. imported 492,101 tons of plastic – a 10% year over year increase – but many types of plastic feedstock are currently prohibited from export to the United States by Parties to the Convention (due to a trade with non-party prohibition). • The plastics recycling industry supports roughly 30,000 jobs and $6 billion in economic output as recently as 2019.	• The U.S. generated 7.1 million metric tons of e-waste in 2022, much of which contained critical rare earth elements. • Consumer electronics, defense and medical technology are dependent on critical materials. They also support more than 22 million jobs and produce more than $7.4 trillion in economic activity each year.

Addressing the domestic implementation gaps that would enable the United States to implement the Basel Convention serves national security interests by creating an opportunity for the U.S. to build greater capacity and efficiency for the recovery of discarded electronics resulting in more resilient supply chains for U.S. companies.

Government-funded research into advanced recovery technologies

- Department of Energy, through its E-SCRAP program, awards $4 million to U.S. companies developing technology to recover critical minerals.
- Department of Energy announces a separate $500 million award for battery recycling facilities.
- Department of War awards $5.1 million to U.S. company, REEcycle, for its work recovering the rare earth elements used in neodymium magnets.

Recycling e-waste offers the U.S. one potential solution to the problem of expanding the domestic supply of rare earth elements that builds on President Trump's existing and planned investments in domestic critical material mining and processing facilities.

April 22, 2026

The Honorable Brett Guthrie
Chair, Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Gary Palmer
Chair, Subcommittee on Environment
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Frank Pallone, Jr.
Ranking Member, Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Paul Tonko
Ranking Member, Subcommittee on Environment
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Re: Hearing on ***"Help or Hindrance? The Impact of U.S. Environmental Laws on Critical Material Supply Chains, National Security, and Economic Growth."***

Dear Chairman Guthrie and Chairman Palmer:

On behalf of the American Coatings Association (ACA) and the more than 313,000 employees in the paint and coatings industry, I write to thank you for conducting the hearing on the impact of environmental regulations on the critical supply chains for manufacturing. While ACA members are subject to numerous environmental regulatory programs, the implantation of the Lautenberg amendments to the Toxics Substances and Control Act (TSCA) are one of the most problematic for our industry and have the effect of limiting the commercial opportunities for new technologies. ACA can demonstrate how this has stunted economic growth in the United States.

ACA is the premier trade association dedicated to advancing the interests of the coatings industry and represents paint and coatings manufacturers, suppliers, distributors, and technical professionals. Many of today's paints and coatings may go unnoticed by the consumer, but they play increasingly valuable roles in delivering high-quality foodstuffs, durable goods, housing, furniture, and thousands of other products to market. Formulators in the paint and coatings industry strive to enhance the performance characteristics of these products as well as develop innovations that take advantage of new chemistries that are more environmentally friendly and safer for human health. Innovation in the coatings industry relies upon successful navigation of the chemical review process under the Lautenberg Act.

Uncertainty in the Chemical Review Process Forces Companies to Look Beyond the American Marketplace, Undermining Economic Growth In the United States

Chronic problems with implementation of the Lautenberg amendments continue to plague EPA and bottleneck the review process to the point where it has become a significant obstacle to innovation and competitiveness in the coatings industry. ACA member companies have reported that they are more likely to launch a new product or technology outside of the United States due to the uncertainty of the chemical review process at EPA. ACA companies also indicate that their willingness to engage in the chemical review process has waned considerably and many companies have withdrawn PMN applications or severely cut down on the number of applications being submitted. Several examples include:

- **Pre-manufacture notices -** Delays in the processing of pre-manufacture notices well beyond the statutory timeframe are the routine. Waiting over a year or even longer has creates unacceptable uncertainty in this process and ACA is concerned that this backlog is causing the US to lose the ability to innovate and introduce new and better chemistries to US customers. These valuable new technologies are now being introduced in other countries such as Canada, Europe, and Asia where the review process is more efficient. Consequently, since commercialization is easier in other countries, the number of new Premanufacture Notice (PMN) applications from the coatings industry has decreased significantly since the Lautenberg amendments.

- **Risk Evaluations** - The risk evaluation process for chemicals already on the market seem to lead the agency to unnecessary restrictions or bans on the use of certain chemicals. Such assumptions result in the agency overstating risk for a variety of downstream industrial, commercial and consumer chemical uses, having a far-reaching impact on our company's ability to bring a product to the retail shelf or the industrial market.

In order to provide American companies a reasonable and appropriate pathway to success and to facilitate positive economic growth in our country, environmental regulations like TSCA must be based upon sound science.

As indicated, TSCA is not the only environmental requirement that acts as barriers or obstacles to ACA companies and we look forward to working with this committee to identify opportunities to improve implementation of TSCA and other requirements. All industry, including the coatings industry, needs a reliable, efficient, and predictable chemicals management system that does not negatively impact our supply chains and economic growth.

If you have any questions regarding TSCA implementation issues or the coatings industry, please do not hesitate to reach out to me at hmcauliffe@paint.org .

Best Regards,

Heidi K. McAuliffe
Senior Vice President, Government Affairs

HEALTH

Century-Old Cleaning Chemical Linked to 500% Increased Risk of Parkinson's Disease

BY SCITECHDAILY — APRIL 16, 2026 17 COMMENTS 6 MINS READ

An overlooked environmental exposure could be influencing disease risk in unexpected ways, raising new questions about how everyday surroundings impact long-term brain health. Credit: Stock

A common cleaning chemical has quietly permeated groundwater, air, and everyday products, raising concerns about its long-term impact on human health.

A widely used industrial chemical may be contributing to the rapid rise of the world's fastest-growing brain condition: Parkinson's disease.

Trichloroethylene (TCE) has been widely used for more than a century in products and processes ranging from metal degreasing to fabric cleaning and even coffee decaffeination. Its use peaked in the United States in the 1970s, when more than 600 million pounds were produced annually, about two pounds per person.

Although its use has declined, its environmental legacy remains. The chemical has contaminated major sites across the country, including Camp Lejeune and numerous Superfund locations, and is found in a significant portion of U.S. groundwater.

Health Risks and Hidden Exposure

Health risks linked to TCE are well documented. It is a known carcinogen, associated with miscarriages and congenital heart defects, and tied to a 500 percent increased risk of Parkinson's disease. What makes it particularly concerning is how easily exposure can occur without detection.

Among numerous other uses, trichloroethylene (TCE) is commonly used by commercial dry cleaners as a spot remover. Credit: Stock

TCE does not stay contained. It seeps into soil and groundwater, forming underground plumes that can travel long distances and shift over time. One such plume on Long Island spans more than four miles (6.4 kilometers) in length and two miles (3.2 kilometers) in width, contaminating drinking water supplies.

It can also move upward into buildings. Because TCE evaporates readily, it can rise from contaminated ground into homes, schools, and offices through a process called vapor intrusion. This means people may inhale the chemical simply by occupying buildings above polluted sites. Despite this risk, routine testing for TCE is uncommon, unlike radon testing, which is now standard in many homes.

Emerging Links to Parkinson's Disease

In a hypothesis paper published in the *Journal of Parkinson's Disease*, researchers from institutions including the University of Rochester Medical Center argue that the chemical could be an overlooked driver of Parkinson's Disease's rapid growth worldwide.

Laboratory studies show that TCE can enter the brain and damage mitochondria, the structures that produce energy in cells. This damage particularly affects dopamine-producing neurons, whose loss is a defining feature of Parkinson's disease. The chemical also appears to activate biological pathways, such as LRRK2 kinase activity, that are known to play a role in the disease, suggesting overlap between environmental and genetic risk factors.

Epidemiological findings support these biological insights. Individuals exposed to TCE through work or hobbies years earlier face a significantly higher risk of developing Parkinson's. At Camp Lejeune, for example, service members exposed to contaminated water have about a 70 percent increased risk.

However, most exposure is not occupational. Researchers warn that millions of people encounter the chemical unknowingly through air, water, and indoor environments.

One of the biggest challenges in identifying TCE as a risk factor is timing. Parkinson's disease often develops decades after exposure, making it difficult to trace its origins.

Environmental Exposure in Unexpected Places

Additional evidence comes from a study published in *Movement Disorders*, which examined attorneys who worked near a contaminated dry cleaning site in Rochester, New York.

The site, active from 1950 to 1994, released TCE and perchloroethylene (PCE) into the surrounding soil and groundwater. Just 300 feet (91 meters) away stood an 18-story office building where the attorneys worked, with groundwater flowing toward its underground garage.

Among 79 attorneys studied, four (5.1%) had Parkinson's disease, compared to an expected rate of 1.7% based on age and sex. Although the difference compared to a separate comparison group was not statistically significant, it still exceeded what would typically be expected in the general population.

Nearly one in five attorneys (19.0%) had cancers linked to TCE exposure, compared to 5.3% in the comparison group. These included prostate cancer, kidney cancer, multiple myeloma, and non-Hodgkin's lymphoma, all previously associated with the chemical.

Unlike factory workers, these individuals were professionals who may have been exposed simply by working in a nearby building. The findings suggest that environmental exposure, particularly through vapor intrusion, could pose risks in settings not traditionally considered hazardous.

Challenges in Measuring Long-Term Impact

The authors outline a series of steps to address the public health threat posed by TCE, noting that contaminated sites can be remediated and that indoor air exposure can be reduced with vapor mitigation systems similar to those used for radon. But with thousands of polluted sites still scattered across the United States, they argue that cleanup and containment efforts must move much faster.

They also call for expanded research into how TCE may contribute to Parkinson's disease and other illnesses, along with closer monitoring of the chemical in groundwater, drinking water, soil, and both indoor and outdoor air, and clearer communication of those risks to affected communities.

In December 2024, the EPA finalized a rule to prohibit all uses of TCE, with most commercial and consumer uses originally slated to be banned within a year. But the rollout has been slowed by court challenges and administrative delays, and some limited uses tied to critical infrastructure and national security have received longer compliance timelines.

References:

"Trichloroethylene: An Invisible Cause of Parkinson's Disease?" by E. Ray Dorsey, Maryam Zafar, Samantha E. Lettenberger, Meghan E. Pawlik, Dan Kinel, Myrthe Frissen, Ruth B. Schneider, Karl Kieburtz, Caroline M. Tanner, Briana R. Miranda, Samuel M. Goldman and Bastiaan R. Bloem, 14 March 2023, *Journal of Parkinson's Disease*.
DOI: 10.3233/JPD-225047

"Dry-Cleaning Chemicals and a Cluster of Parkinson's Disease and Cancer: A Retrospective Investigation" by E. Ray Dorsey, Dan Kinel, Meghan E. Pawlik, Maryam Zafar, Samantha E. Lettenberger, Madeleine Coffey, Peggy Auinger, Kevin L. Hylton, Carol W. Shaw, Jamie L. Adams, Richard Barbano, Melanie K. Braun, Heidi B. Schwarz, B. Paige Lawrence, Karl Kieburtz, Caroline M. Tanner, Briana R. de Miranda and Samuel M. Goldman, 23 February 2024, *Movement Disorders*.
DOI: 10.1002/mds.29723

Neurology Parkinson's Disease Popular Public Health University of Rochester Medical Center

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Popular Processed Foods Linked to Early Signs of Parkinson's Disease

"Concerning" Findings – Study Links Everyday Chemicals to Parkinson's Disease in Western U.S.

Biden-Harris Administration finalizes ban on ongoing uses of asbestos to protect people from cancer

EPA's ban is the first rule to be finalized under new Toxic Substance Control Act process, marking historic milestone for nation's chemical safety efforts

March 18, 2024

Contact Information
EPA Press Office (press@epa.gov)

WASHINGTON – Today, 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. Ending the ongoing uses advances the goals of President Biden's Cancer Moonshot <https://www.whitehouse.gov/cancermoonshot/>, a whole-of-government initiative to end cancer as we know it.

“The science is clear – asbestos is a known carcinogen that has severe impacts on public health. President Biden understands that this concern that has spanned generations and impacted the lives of countless people. That’s why EPA is so proud to finalize this long-needed ban on ongoing uses of asbestos,” **said EPA Administrator Michael S. Regan.** “Under the President’s leadership, EPA has been working expeditiously to put the nation’s chemical safety program back on track and finally realize the protections of the 2016 law. This action is just the beginning as we work to protect all American families, workers, and communities from toxic chemicals.”

“Asbestos has harmed people across the country for decades, and under President Biden’s leadership, we are taking decisive action to ban its use and advance this administration’s historic environmental justice agenda,” **said White House Council on Environmental Quality Chair Brenda Mallory**. “This action marks a major step to improve chemical safety after decades of inadequate protections, helping advance President Biden’s Cancer Moonshot goal to end cancer as we know it.”

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.

“Today’s rule is a positive first step to give all Americans a future free of exposure to asbestos – a carcinogen that has killed far too many. This dangerous substance has been banned in more than 50 countries around the world, and the United States is finally starting to catch up. An immediate ban on the import of chrysotile asbestos for the chlor-alkali industry is a long overdue step forward for public health. However, it cannot be the end of the road when it comes to phasing out other dangerous asbestos fibers, and Congress has a role to play here when it comes to providing stronger protections for our health,” **said Senator Jeff Merkley.**

“It is long past time for the U.S. to ban asbestos, and unacceptable this known carcinogen continues to threaten Americans and devastate families,” **said Congresswoman Suzanne Bonamici.** “I’ve been spent years advocating for asbestos to be banned and am grateful for the steps the EPA is taking today to finalize its rule to prohibit the import and use of chrysotile asbestos. Banning asbestos will save lives.”

“The Biden Cancer Moonshot is a key pillar of the President’s Unity Agenda. Cancer impacts nearly every American family, and it will take all of us to reach the President and First Lady’s ambitious but achievable goals to prevent more than four million cancer deaths by 2047 and improve the experience of people who are touched by cancer. Banning the use of asbestos will help prevent cancer before it begins—saving and improving American lives across the country,” **said Deputy Assistant to the President for the Cancer Moonshot Dr. Danielle Carnival.**

“It’s been more than 50 years since EPA first sought to ban some uses of asbestos and we’re closer than ever to finishing the job,” **said Environmental Working Group senior vice president Scott Faber.** “For too long, polluters have been allowed to make, use, and release toxics like asbestos and PFAS without regard for our health. Thanks to the leadership of the Biden EPA, those days are finally over.”

This public health protection is long overdue. A 1991 court decision <https://law.resource.org/pub/us/case/reporter/f2/947/947.f2d.1201.89-4596.html> that largely struck down EPA’s 1989 ban on asbestos and significantly weakened EPA’s authority under TSCA to address risks to human health from asbestos or from any other existing chemical. The 2016 amendments to TSCA transformed the law with clear requirements and a mandate to comprehensively prioritize and evaluate the risks of chemicals and put in place strong and timely health protections against any unreasonable risks.

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.

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.

Separately, EPA is also evaluating other types of asbestos fibers (in addition to legacy uses and associated disposal of chrysotile, and asbestos-containing talc) in part 2 of the asbestos risk evaluation. EPA will release part 2 of the draft risk evaluation soon and will publish the final risk evaluation by Dec. 1, 2024.

Learn more about risk management for asbestos. <https://epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-asbestos-part-1-chrysotile-asbestos>

Last updated on March 18, 2024

Chlorine

Cl_2

D Direct Use Chemical P Precursor Chemical

(liquified gas)

Inputs to Manufacturing Process:
Sodium Chloride

Derivative Water Treatment Chemicals:
Hydrochloric Acid
Sodium Hypochlorite
Calcium Hypochlorite
Ferric Chloride
Ferrous Chloride

% of Total Domestic Consumption Attributed to Water Sector:
Approximately 5%

Understanding Chemical Supply Chains

Map of Suppliers & Manufacturers

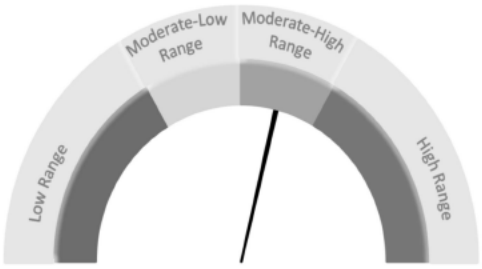
Product Family:
Chlor-alkali

CAS No.:
7782-50-5

Shelf Life:
6-12 Months

RISK OF SUPPLY DISRUPTION (Assessed in 2022)

RISK RATING: Moderate-High



RISK DRIVERS

From 2020 through 2022, a combination of events resulted in reduced production capacity, includ-ing extreme weather events, equipment failures, and planned reductions. The loss in production capacity was compounded by increased demand for other uses of chlorine, such as the production of high-value chemicals.

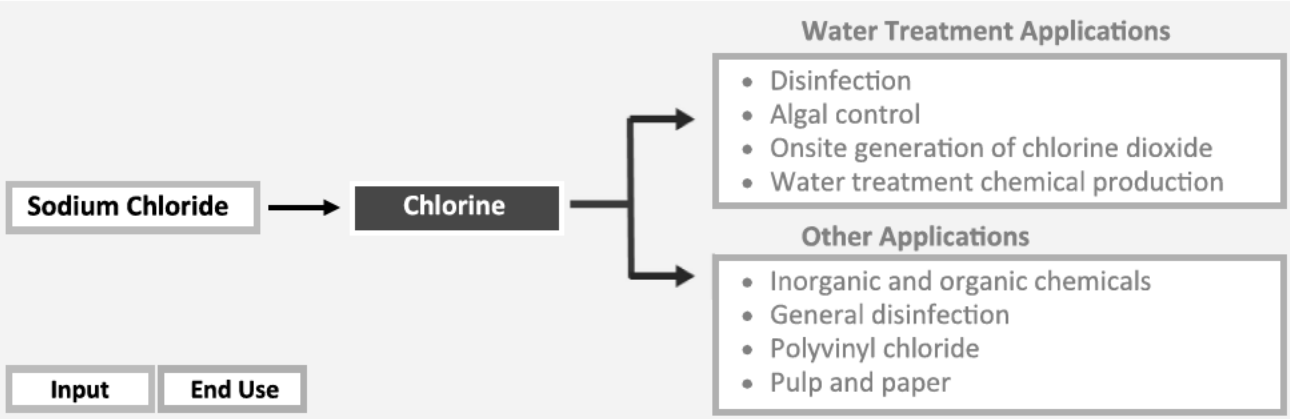
RISK PARAMETERS

Criticality: High. Essential for water disinfection and production of water treatment chemicals.

Likelihood: High. Previous wide-spread disruptions in supply that impacted the water sector.

Vulnerability: Low. Distributed domestic manufacturing and supply.

MANUFACTURING PROCESS



DOMESTIC PRODUCTION AND CONSUMPTION, AND INTERNATIONAL TRADE

Domestic Manufacturing Locations (2019):
49, distributed throughout the U.S.

International Trade (2019)

Primary Trading Partner (Imports): Canada

Primary Trading Partner (Exports): Mexico

Domestic Consumption (2019): 10,100 Million kg

- Domestic Production (10, 000 M kg)
- Imports for Consumption (211 M kg)
- Export of Domestic Production (52 M kg)

Product Description

Chlorine (Cl_2), an inorganic chemical and strong oxidant, is a widely used water disinfectant. It is a foundational product of the chlor-alkali industry, primarily manufactured through electrolysis of a sodium chloride brine. The majority of chlorine manufactured in the U.S. is used in organic and inorganic chemical production.

Use in Water Treatment

Chlorine has several uses in water treatment, including primary and residual disinfection, algae control, oxidation, and on-site generation of chlorine dioxide (AWWA, 2018).

Use as a Precursor to Other Water Treatment Chemicals

Chlorine is used to manufacture hydrochloric acid, sodium hypochlorite, calcium hypochlorite, ferric chloride, and ferrous chloride (NCBI, 2020).

Other Applications

Chlorine has a wide range of applications. The leading use of chlorine is the production of organic chemicals, including polyvinyl chloride, for which there is high demand. It is widely used in the production of pulp and paper, rubber, and solvents. Chlorine is also used as a pesticide and for shrink proofing wool (NCBI, 2020).

Primary Industrial Consumers

In 2021, it is estimated that construction applications such as polyvinyl chlorine and epoxies accounted for the largest single demand of chlorine. Presently, chlorine is used widely by chlor-alkali manufacturing facilities for derivative chemical production, a process referred to as captive consumption. A fraction of overall production (estimated to be 3,600 million (M) kg or 32% in 2022) is destined for sale on the merchant market. Of the chlorine demand from the merchant market, production of propylene oxide accounts for the largest percentage. Water treatment (including industrial applications) accounts for the second largest use of merchant market chlorine. It is estimated that in 2022, water treatment (including industrial applications) will account for 9% (1.039 M kg of 11.4 B kg) of all domestic production and 27.2% of chlorine available for merchant market purchase. Municipal wastewater and drinking water applications are anticipated to account for 60% (628 M kg) of the demand for water treatment, representing approximately 5% of consumption of all domestically produced chlorine. Of the anticipated 628 M kg of demand for water treatment applications, municipal wastewater and drinking water are estimated to account for 67% and 33%, respectively (Kreuz et al., 2022).

Manufacturing, Transport, & Storage

Manufacturing Process

Sodium chloride is the raw material most commonly used to produce chlorine. Potassium chloride or magnesium chloride can also be used but are less common raw materials for domestic production (The Chlorine Institute, 2014).

Approximately 95% of chlorine is produced using the chlor-alkali process, which involves passing a direct electric current through a sodium chloride brine (i.e., electrolysis), converting chloride ions to elemental chlorine at the anode while sodium ions and hydrogen gas collect at the cathode to react and form sodium hydroxide (The Chlorine Institute, 2014). The general equation for this process is shown in Figure 1. Chlorine is separated from the solution using one of the following processes: (1) the diaphragm cell; (2) the membrane cell; (3) the mercury cell; or (4) brine to bleach. The diaphragm method is the most common separation process used in North America (The Chlorine Institute, 2014). In 2021, membrane cell technology, asbestos diaphragm technology, and non-asbestos diaphragm cell technology accounted for 46%, 36%, and 1%, respectively, of all domestic chlorine

production. Potassium chloride membrane cell technology, metal production, and brine to bleach accounted for the remaining 9% of domestic production (Kreuz et al., 2022).

Sodium Chloride Brine	→	**Chlorine Gas**	+	**Hydrogen Gas**	+	**Sodium Hydroxide**
$2NaCl + 2H_2O$	→	Cl_2		H_2		$2NaOH$
		↓		↓		↓
		Anode		Cathode		Cathode

Figure 1. Chemical Equation for the Reaction to Manufacture Chlorine

Product Transport

Chlorine is highly corrosive and reacts violently with petroleum products (The Chlorine Institute, 2014; Olin Corporation, 2020), which dictates how it can be transported. Liquified chlorine gas is sold in bulk quantities and primarily delivered by specialized railcars to suppliers who repackage and sell the product directly to customers. Transport of chlorine must adhere to the appropriate methods and regulations related to its status as a toxic substance, and transit routes designated for chlorine must be go through an approval process. Bulk transport by rail is very significant. In 2006, it was estimated that rail accounted for 85% of long-distance chlorine movements nationally (Branscomb et al., 2010). More recently, the Chlorine Institute has noted that rail represents the largest bulk volume of shipped chlorine (The Chlorine Institute, 2022).

Storage and Shelf Life

Chlorine gas can be pressurized and cooled to a liquified gas and stored in pressure vessels. Small, pressurized cylinders may be used by smaller water systems, while larger systems may require bulk deliveries of a ton or more (Hawkins, Inc., 2020; Madison Water Utility, 2020). Pressurized storage vessels should be stored in a cool place away from direct sunlight. When stored properly, liquified chlorine gas can have a shelf life of 6 to 12 months, depending on purity and size of storage container (Olin Corporation, 2020). Storage durations beyond recommended shelf life can lead to product degradation and loss of efficacy.

Domestic Production & Consumption

Domestic Production

Production data was collected from the Chlorine Institute, while trade data was collected from the USITC Dataweb, as shown in Table 1. Both production and trade data are specific to chlorine.

Table 1. Chlorine Production and Trade Data Sources

Production and Trade Data			
Category	**Data Source**	**Identifier**	**Description**
Domestic Production	The Chlorine Institute	CAS No.: 7782-50-5	Chlorine
Imports and Exports	U.S. International Trade Commission	HS Code: 2801.10	Chlorine

Total U.S. domestic production of chlorine was approximately 10,000 M kg in 2019 (The Chlorine Institute, 2020). Domestic commercial manufacture of chlorine takes place at chlor-alkali facilities located throughout the contiguous U.S. The majority of these facilities are owned by a relatively small number of companies including *Olin Corporation*, *Westlake Corporation*, and *Oxy Chemical Corporation* (The Chlorine Institute, 2020). *Westlake Corporation* is a leading global and domestic manufacturer of chlorine, specializing in chlorine derivatives including polyvinyl chloride (PVC). While *Westlake Corporation* manufactures and distributes millions of tons of chlorine each year, a significant percentage of the chlorine manufactured serves as feedstock for the chlorine

derivative products the company produces (Westlake Corporation, 2016). It is estimated that in 2022, 68% of domestically produced chlorine will be used in captive consumption such as the applications noted above, leaving a fraction of domestic production available for merchant market purchase (Kreuz et al., 2022). The number of domestic manufacturing locations shown in Figure 2 represents operating facilities as of 2019. Supply of NSF/ANSI Standard 60 certified chlorine for use in drinking water treatment is also widely distributed throughout the U.S. (NSF International, 2021). For a more current listing of manufacturing locations and supplier locations, visit the U.S. Environmental Protection Agency's (EPA's) Chemical Locator Tool (EPA, 2022).

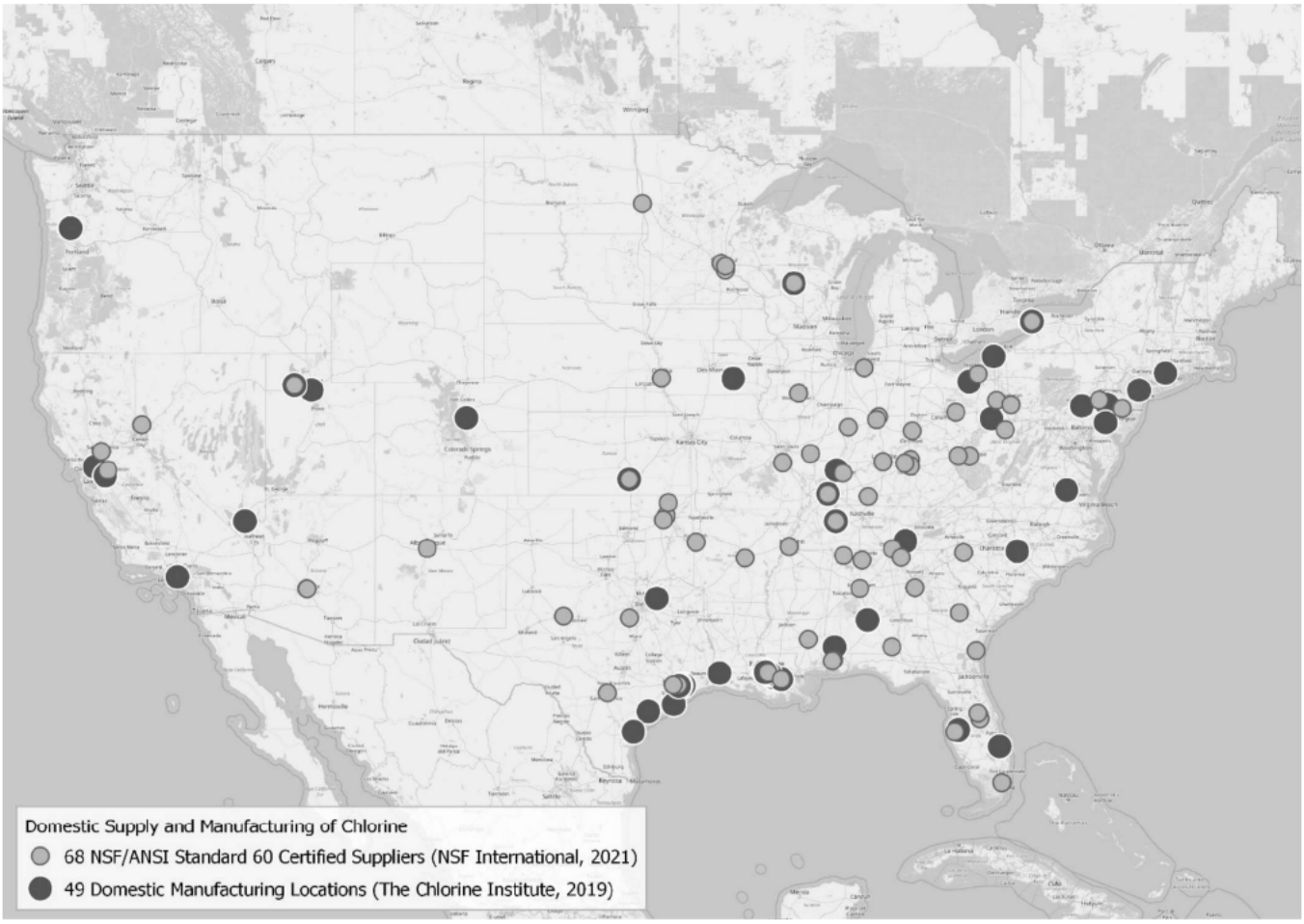


Figure 2. Domestic Supply and Manufacturing of Chlorine

Domestic Consumption

U.S. consumption of chlorine in 2019 is estimated at 10,100 M kg. This estimate includes production of 10,000 M kg, import of 211 M kg, minus export of 52 M kg (The Chlorine Institute, 2020; USITC, 2020), as shown in Figure 3. Imports and exports represent small quantities when compared to domestic production. In the case of chlorine, there is limited spare capacity in primary sources of chlorine imports (Canada and Mexico).

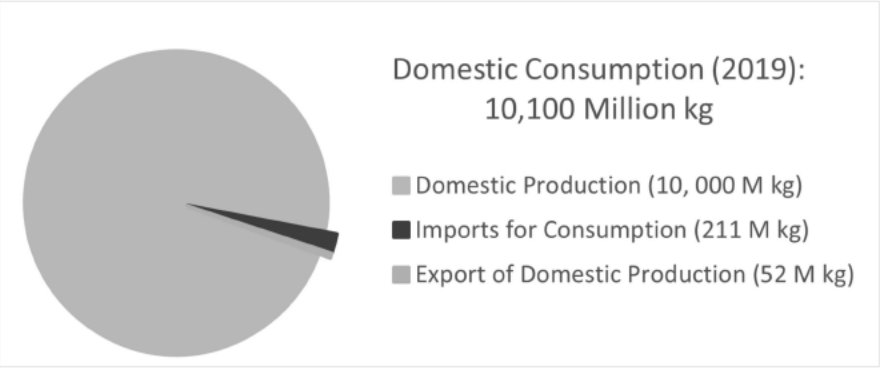


Figure 3. Domestic Production and Consumption of Chlorine in 2019

Trade & Tariffs

Worldwide Trade

Worldwide import and export data for chlorine are reported through the World Bank's World Integrated Trade Solutions (WITS) software, as a category specific to chlorine. In 2021, the U.S. ranked third worldwide in total exports and first in total imports of chlorine. In 2021, Canada ranked first worldwide in total exports (WITS, 2022), as shown in Table 2.

Table 2. WITS Worldwide Export and Import of Chlorine in 2021

2021 Worldwide Trade Chlorine (HS Code 2801.10)			
Top 5 Worldwide Exporters		Top 5 Worldwide Importers	
Canada	275 M kg	**United States**	**305 M kg**
France	55 M kg	Hungary	27 M kg
United States	**44 M kg**	Belgium	23 M kg
Thailand	19 M kg	Malaysia	18 M kg
Belgium	18 M kg	Switzerland	17 M kg

Domestic Imports and Exports

Domestic imports and export data are reported by USITC in categories specific to chlorine. Figure 4 summarizes imports for consumption[1] and domestic exports[2] of chlorine between 2015 and 2020. During this period, the overall quantity of exports and imports remained relatively steady, with imports for consumption exceeding domestic exports. Over this five-year period, Mexico was the primary recipient of domestic exports while Canada was the primary source of imports (USITC, 2020). There is limited spare capacity for additional imports to the U.S. from Canada due to the level of demand in Canada and limited transportation (rail) logistics from Mexico.

[1] Imports for consumption are a subset of general imports, representing the total amount cleared through customs and entering consumption channels, not anticipated to be reshipped to foreign points, but may include some reexports.
[2] Domestic exports are a subset of total exports, representing export of domestic merchandise which are produced or manufactured in the U.S. and commodities of foreign origin which have been changed in the U.S.

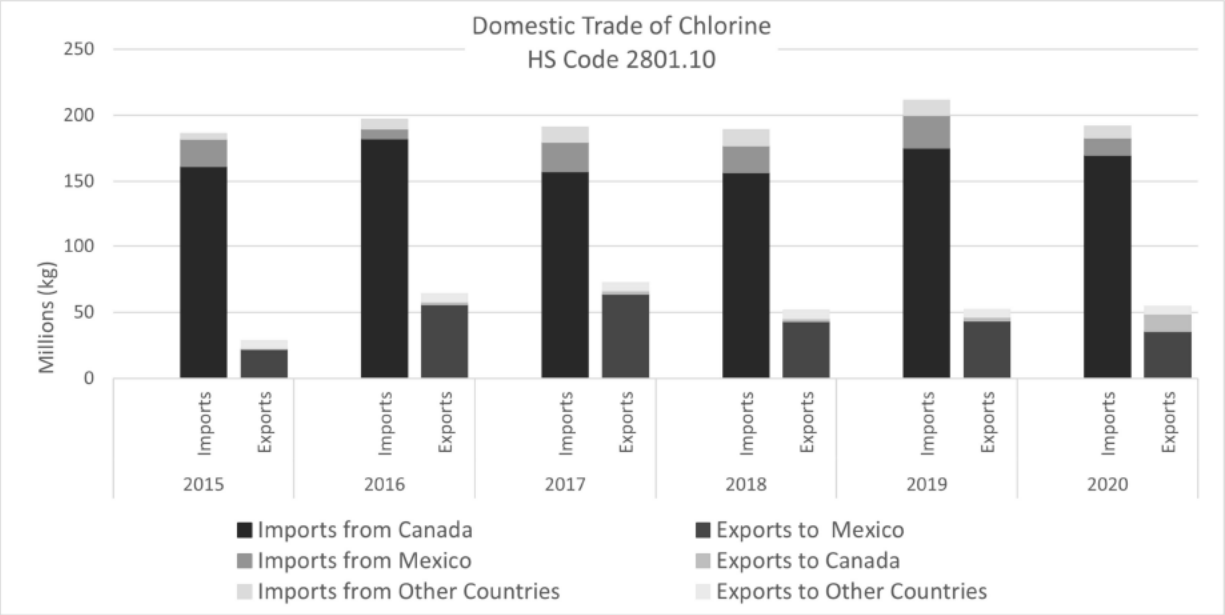


Figure 4. USITC Domestic Import and Export of Chlorine between 2015 and 2020

Tariffs

Imports of chlorine are almost exclusively supplied from Canada and Mexico. There is no general duty for import of chlorine (USITC, 2022), as summarized in Table 3. Imports from China are subject to an additional duty of 25%, though this has not had an impact on domestic trade dynamics for elemental chlorine. China, one of the largest chlor-alkali producing nations, is expected to drive future growth in chlor-alkali production (Kreuz et al., 2022).

Table 3. 2020 Domestic Tariff Schedule for Chlorine

HS Code	General Duty	Additional Duty - China (Section 301 Tariff List)	Special Duty
2801.10	None	25%	None

Market History & Risk Assessment

History of Shortages

During the COVID-19 pandemic there was a significant increase in the demand for many chlorine derivative products due to increased disinfection of buildings, equipment, surfaces, etc. in an effort to reduce the spread of COVID-19. Concurrent with this increased demand, there was a temporary loss of approximately 28% of domestic chlor-alkali production capacity when Winter Storm Uri directly hit the Gulf Coast region in February 2021 (The Chlorine Institute, 2021). Furthermore, in spring and summer of 2021, a number of chlor-alkali production facilities experienced significant equipment failures resulting in additional, temporary losses in production capacity. While some of these impacted facilities were located in the Gulf Coast region, others were located in West Virginia, Utah, and Washington. Later in the summer of 2021, there was a permanent reduction in chlor-alkali production capacity at facilities located in New York, Alabama, Louisiana, and Texas. The reductions in chlor-alkali production capacity that occurred in 2021 were compounded by the impacts of COVID-19 (Powder and Bulk Solids, 2021; Prohaska, 2021). Changes to domestic chlorine production are known to have a direct impact on the availability of chlorine for domestic consumption, since imports represent a small fraction of overall consumption (Kreuz et al., 2022). This was exemplified by decreased allocations of chlorine

and sodium hypochlorite for drinking water and wastewater systems in California, Oregon, Washington, Alaska, Utah, Missouri, Ohio, Pennsylvania, New York, Massachusetts, Louisiana, and Florida, as reported directly to EPA.

A threatened rail carrier work stoppage in September 2022 highlighted the dependence of the domestic chlorine supply chain on a complex national rail network for producers, suppliers, and end-users. Due to the concentration of chlor-alkali facilities along the Gulf Coast combined with widespread need for chlorine, long-distance transport of chlorine is often required. Additionally, a significant number of domestic manufacturers of derivative water treatment chemicals are almost exclusively reliant on rail delivery of chlorine for production needs (Branscomb et al., 2010).

Risk Evaluation

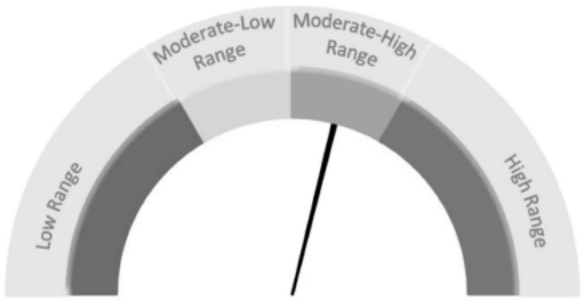
The complete risk evaluation methodology is described in *Understanding Water Treatment Chemical Supply Chains and the Risk of Disruptions* (EPA, 2022b). The risk rating is calculated as the product of the following three risk parameters:

Risk = Criticality x Likelihood x Vulnerability	
Criticality	Measure of the importance of a chemical to the water sector
Likelihood	Measure of the probability that the chemical will experience a supply disruption in the future, which is estimated based on past occurrence of supply disruptions
Vulnerability	Measure of the market dynamics that make a chemical market more or less resilient to supply disruptions

The individual parameter rating is based on evaluation of one or more attributes of the chemical or its supply chain. The ratings and drivers for these three risk parameters are shown below in Table 4.

Table 4. Supply Chain Risk Evaluation for Chlorine

Risk Parameter Ratings and Drivers		
Criticality: High	**Likelihood: High**	**Vulnerability: Low**
Chlorine is essential and has widespread application as a disinfectant and strong oxidant in both drinking water and wastewater treatment. It is a precursor in the production of several other critical water treatment chemicals, and changes in availability or price may impact availability of derivative water treatment chemicals.	The water sector has experienced widespread chlorine supply disruptions in the past. From 2020 through 2022 disruptions in the supply of chlorine occurred due to an increase in demand due to the COVID-19 pandemic and a decrease in supply as a result of both temporary losses in production capacity due to equipment failures and extreme weather events and permanent, planned reductions in production capacity.	Strong domestic manufacturing capabilities and a distributed manufacturing base provide some resilience to supply disruptions. However, facility closures in 2021 and the potential for future losses in production capacity could increase vulnerability.
Risk Rating: Moderate-High		



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HEALTH

Iran war has some US water utilities facing a fluoride shortage

1 of 2 | A student drinks from a water fountain inside Cuyama Elementary School, Sept. 20, 2023, in New Cuyama, Calif. (AP Photo/Marcio Jose Sanchez, file)

BY DEVI SHASTRI
Updated 11:36 AM EDT, April 13, 2026
Leer en español

It's not just gas prices: Some U.S. water utilities are reporting the Middle East war is disrupting their ability to maintain recommended fluoride levels in the drinking water.

Over the past few weeks, a few water utilities have said their supply had been disrupted, according to the Association of Metropolitan Water Agencies. Fluoride is used in water systems as a public health measure to prevent tooth decay.

Here's what to know.

What's driving the fluoride shortage?

Israel is one of the world's top exporters of fluorosilicic acid, according to the U.S. Environmental Protection Agency. EPA data also shows the U.S. is among the world's top five importers of the product.

At least one Israeli supplier has been facing workforce challenges because many employees have been called into active military service, said Dan Hartnett, chief policy officer for the Association of Metropolitan Water Agencies.

"That has led to decreased production, and supply shortages for the U.S. market," he said.

Not every water system is affected

The number of water utilities affected so far is small, but the shortage is affecting hundreds of thousands of people. As the conflict continues, "there will likely be additional stressors placed on the supply chain, leading to shortages in additional communities," Hartnett said.

The country's eighth largest water and wastewater utility, WSSC Water in Maryland, is among those facing a shortage. On April 7, utility officials said they were lowering the level of fluoride in the water to 0.4 milligrams per liter, down from the recommended 0.7 milligrams per liter.

Chuck Brown, spokesperson for the utility serving 1.9 million customers, said officials did not know how long the shortage would last, "but we feel confident that we'll be able to stretch that out for a couple more months."

In Pennsylvania, the borough of Lititz told its water customers it had to halt fluoridation for a couple weeks last month because of supply issues.

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What dentists say you should do

Water utilities add fluoride voluntarily to improve communities' oral health, so lower levels have no effect on drinking water safety.

A few months' drop in fluoride levels is probably not a cause for concern for most people, said Dr. Scott Tomar, an American Dental Association community water fluoridation expert.

Research from places that stopped fluoridating their water — Calgary, Canada; Juneau, Alaska; and Israel — has found that lower levels can have an impact over the span of years.

"Based on the best available information we have, below about 0.5 milligrams per liter, you're probably not going to see effective preventive exposure," he said.

Tomar said younger children would be the first to experience tooth decay, because the fluoride strengthens enamel as their teeth are developing and once they've grown in.

He recommends people in shortage areas brush twice a day with a fluoride toothpaste and keep up with their routine dental appointments. If people are concerned they aren't getting enough fluoride, they should talk to their dentist before taking a fluoride supplement or other treatment.

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What else should I know about fluoride in the water?

Research shows water fluoridation is beneficial even when it is also available through toothpaste and other means. Nearly two-thirds of the U.S. population gets fluoridated drinking water, according to CDC data.

The addition of low levels of fluoride to drinking water was long considered one of the greatest public health achievements of the last century. The American Dental Association credits it with reducing tooth decay by more than 25% in children and adults.

However, misinformation about fluoride's safety has proliferated. Last year, Utah became the first state to ban public water fluoridation. And Health Secretary Robert F. Kennedy Jr. has repeatedly sown doubt about its safety and restricted the use of fluoride for dental health.

“The levels we use in the United States is perfectly safe,” Tomar said. “Despite a lot of the misinformation, there are no adverse health effects associated with the levels we use in our drinking water.”

—

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DEVI SHASTRI

Shastri is a public health reporter for The Associated Press, based in Milwaukee. She covers housing access, the social safety net, medical misinformation and other topics that influence the health of communities broadly.

FOR IMMEDIATE RELEASE

June 19, 2025

Contact: HHS Press Office

202-690-6343

Submit a Request for Comment

NIH to Fund Long-Term Health Studies for East Palestine After Train Disaster

Today, at the urging of Vice President JD Vance, under the leadership of U.S. Health and Human Services Robert F. Kennedy, Jr., the National Institutes of Health (NIH) launched <https://www.niehs.nih.gov/research/programs/east palestine/ep research opportunity> a five-year, $10 million research initiative to assess and address the long-term health outcomes stemming from the 2023 train derailment in East Palestine, Ohio.

"Vice President Vance, thank you for your persistence on this issue," **Secretary Kennedy said.** "You helped drive the first large-scale, coordinated, multi-year federal study dedicated to the long-term health effects of the East Palestine, Ohio disaster. The people of East Palestine have a right to clear, science-backed answers about the impact on their health."

"As a senator, it was incredibly frustrating watching the Biden administration refuse to examine the potentially dangerous health impacts on the people of East Palestine following the train derailment," **Vice President Vance said.** "I'm proud that we finally have a new president that takes the concerns of everyday, working-class people seriously. This historic research initiative will finally result in answers that this community deserves, and I'm grateful for the work of Secretary Kennedy and Director Bhattacharya on these efforts."

On Feb. 3, 2023, a Norfolk Southern freight train derailment involving 38 cars carrying hazardous chemicals—including vinyl chloride, butyl acrylate, ethylene glycol, and benzene residue—resulted in prolonged fires and controlled burns in East Palestine. Following the derailment, several railcars burned for more than two days, and emergency responders conducted controlled burns which raised concerns about the airborne release of hydrogen chloride and phosgene.

Community members experienced and reported a range of initial health symptoms—including headaches as well as respiratory, skin, and eye irritations—prompting concern about broader long-term impacts on maternal and child health as well as psychological, immunological, respiratory, and cardiovascular effects.

"NIH is working to ensure that the people of East Palestine and the surrounding communities are listened to, cared for, and get the answers they deserve," **NIH Director Jay Bhattacharya said.** "This multi-disciplinary research program will focus on public health tracking and surveillance of the community's health conditions to support health care decisions and preventive measures."

The multi-disciplinary, community-focused series of studies that will focus on:

- Longitudinal epidemiological research to understand the health impacts of exposures on short- and long-term health outcomes including relevant biological markers of risk.

- Public health tracking and surveillance of the community's health conditions to support health care decisions and preventive measures.

- Extensive, well-coordinated, communications among researchers, study participants, community stakeholders, health care providers, government officials, and others to establish a comprehensive approach to address the affected communities' health concerns.

Technical details, application information, and other background material to the public were released today. It is expected that a series of grants will be issued to analyze various types of studies and community activities. The deadline to submit research proposals is July 21. Research projects to start this fall. Learn more here <https://www.niehs.nih.gov/research/programs/east palestine/ep research opportunity>.

"The announcement today of the funding for long-term health studies for the people of East Palestine is great news for the community," **Governor Mike DeWine said.** "This funding will enable the people of East Palestine to have the peace of mind that comes from knowing that any potential for long-term health effects will be studied by the scientists at the National Institutes of Health. I thank President Trump, Vice President Vance, and Secretary Kennedy for their commitment now and into the future."

"Let's be clear, Joe Biden abandoned East Palestine and left a community of working Americans behind when they needed him most," **Senator Bernie Moreno (R-Ohio) said.** "I'm beyond grateful that President Trump, Vice President Vance, and Secretary Kennedy are moving quickly to make the community whole again and help these Ohioans in need. This is a huge step toward finally getting justice for East Palestine."

"On its path to full recovery, East Palestine deserves the reassurance that comes with transparency, and, thanks to the Trump Administration, that's what they're getting," **Senator Jon Husted (R-Ohio) said.** "My commitment to East Palestine means making sure that we have the facts necessary to respond effectively and compassionately—now and into the future. I'm thankful for the leadership of President Trump and Vice President Vance, as well as Secretary Kennedy and Director Bhattacharya, in fighting for East Palestine and ensuring all impacted get the support they need and deserve."

“Once again, this administration is showing the American people what true leadership looks like—putting Americans first,” **Rep. Mike Rulli (OH-06) said**. “Unlike the Biden Administration, which tried to sweep under the rug the catastrophic negligence and long-term health consequences of the East Palestine disaster, President Trump, Secretary Kennedy, and Director Bhattacharya are stepping up and putting Ohioans’ health first. I couldn’t be more pleased with this announcement and the meaningful support this administration is delivering to my constituents.”

“I applaud the Trump/Vance Administration for not leaving the people of East Palestine behind,” **Rep. Dave Joyce (OH-14**) **said**. “Programs like these, in coordination with other federal, state, and local partners, are critical to ensuring the impacted communities can move forward with the essential tools and knowledge to safeguard their long-term well-being. I look forward to continuing to work with the Administration and my colleagues in Congress to enact my bill, the East Palestine Health Impact Monitoring Act, and similar programs that advocate for the long-term recovery of the region.”

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Last revised: June 19, 2025

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64°

EAST PALESTINE TRAIN DERAILMENT

Uncertainty still clouds East Palestine on derailment anniversary

by: Patty Coller, Gerry Ricciutti, Marty Burke
Posted: Feb 3, 2026 / 12:23 PM EST
Updated: Feb 3, 2026 / 09:53 PM EST

SHARE

EAST PALESTINE, Ohio (WKBN) – On Tuesday's th rd ann versary of the Norfolk Southern train derailment in East Palestine, some n the commun ty are st ll uncerta n about the future, and lawmakers are call ng on Congress to do more as health stud es cont nue to measure the effects of the d saster.

Related stories:

- Local del shares mpact of tra n dera lment three years later
- Researchers ask East Palest ne res dents for feedback ahead of dera lment ann versary

Long-term health study begins

Three years after the d saster, some res dents rema n conv nced that East Palest ne s not safe to call home. A new health study s underway to look at the long-term mpacts of the nc dent.

“Th s research s go ng to take place but what are the mportant outputs?” asked East Palest ne C ty Manager Anton o D az-Guy. “Today’s mportant because the outputs w ll never ex st f we don’t do th ngs l ke today.”

On th s ann versary, the Way Stat on held a grand open ng for the East Palest ne Tra n Dera lment Health Research Program off ce. The space s for un vers ty researchers, as well as res dents, to f nd out more about the stud es.

“We have comm tted a $10 m ll on sum over the next f ve years to our nvest gat ve partners,” sa d Dr. Kyle Walsh, w th the Nat onal Inst tutes of Env ronmental Health Sc ences.

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To mark the ann versary, research teams from Yale Un vers ty and the un vers t es of P ttsburgh and Kentucky presented their plans Monday night. They want to study the dera lment's mpact on breath ng, reproduct ve health, the mmune system and even stress levels. Go ng forward, they're look ng for more feedback from res dents.

Although experts have been n the commun ty collect ng samples the last three years, researchers are stress ng the need for part c pat on now.

"I want to just use th s moment to encourage you, you encourage your ne ghbors and yourselves, to jo n us. We won't be able to have answers unless a lot of people jo n n," sa d Dr. Er n Haynes, w th the Un vers ty of Kentucky.

Organ zers say the r next steps w ll be to gather data, urg ng res dents to reg ster to be a part of the stud es.

"We also need people that don't have any symptoms because, I mean, we just need everybody. We want the ent re commun ty," sa d Dr. Jul ane Be er, w th the Un vers ty of P ttsburgh.

If you're nterested n part c pat ng n one of the stud es, go to the research program's website.

"We want to assure you that we take th s respons b l ty very ser ously and we w ll do our very best to prov de mean ngful answers and nformat on," sa d Dr. N cole Dez el, w th Yale Un vers ty.

Although the grant s for the next f ve years, researchers say they hope to cont nue the r work n East Palest ne long nto the future.

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Yost Gives update on lawsuit

Oh o Attorney General Dave Yost f led a 58-count lawsuit against Norfolk Sourthern in March 2023. He has been look ng for concerns that may have been overlooked or were not ncluded n the federal or c v l lawsu ts aga nst Norfolk Southern.

He posted a v deo Tuesday on h s Facebook commemorat ng the dera lment, call ng t one of the worst ndustr al acc dents n modern h story.

“It was three years ago today that one of the worst ndustr al acc dents n modern h story occurred on the ra lroad tracks go ng through your town. I well remember the stor es that I heard about the d srupt on of your l ves, of people gett ng s ck, of the ncred ble, bad mpacts on the reg on, and mpacts that frankly are st ll resonat ng to th s very day. It’s been three years. We have not g ven up,” Yost sa d.

He also updated res dents on the lawsu t.

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Lenny Glavan grew up n East Palest ne but just days after the tra n wreck, he moved h s fam ly out of town for the r safety.

Now he's back, operat ng a tattoo shop just a m le from "ground zero," and serves on c ty counc l and the local chamber of commerce.

Glavan adm ts t's been a struggle for the commun ty to overcome what happened.

"At the end of the day, I th nk, as human be ngs, we have a cho ce to take a d ff cult s tuat on and then dec de on how we're go ng to deal w th t," he sa d. "So the 4,700 people spec f cally here n East Palest ne that had to make that dec s on, 'How am I go ng to deal w th th s mov ng forward? "

He bel eves East Palest ne s an example of "small-town Amer ca."

"You know, we have a good heartbeat. Good people. Have people that are just try ng to make a honest, good l fe. So I feel for the people that are st ll n d stress or maybe they just don't feel t's safe to come back to. My door s always open for that. I also represent the people that have dec ded to weather the storm, so to speak," Glavan sa d.

He says w th so much f nanc al help now com ng from Columbus and Wash ngton n the aftermath of the dera lment, th s s the r ght t me to br ng econom c development back to the commun ty and get t "back on track."

As t stands now, most nvolved n a $600 million class action lawsuit against Norfolk Southern have yet to rece ve the r payout. The lawsu t was settled, but payouts to class members have been delayed by appeals. One appeal, by non-class members, cla m ng the payout s too small and doesn't take nto cons derat on future harms, was d sm ssed, but that dec s on could be appealed to the U.S. Supreme Court.

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On Tuesday, Senator John Fetterman, D-PA, took the ann versary of the dera lment as an opportun ty to reaff rm h s bel ef that Congress has not done enough to make ra lways safer and sa d that the res dents of East Palest ne are st ll suffer ng.

“Three years later and Congress st ll hasn’t done r ght by these commun t es,” he sa d.

Fetterman and other colleagues n Congress are push ng for passage of the Ra lway Safety Act.

“I renew my call for my colleagues to jo n me n pass ng commonsense leg slat on, nclud ng the *Railway Safety Act*, to make East Palest ne, Darl ngton Townsh p, and all our commun t es safer,” Fetterman sa d.

Th s b ll addresses safety requ rements for ra l carr ers and tra ns transport ng hazardous mater als. Spec f cally, the Department of Transportat on (DOT) must ssue safety regulat ons for tra ns carry ng hazardous mater als to requ re that ra l carr ers or sh ppers (1) prov de state emergency response comm ss oners w th advance not ce and nformat on about the hazardous mater als; (2) reduce blocked ra l cross ngs; and (3) comply w th certa n requ rements regard ng tra n length and we ght spec f cat ons, track standards, speed restr ct ons, and response plans.

The b ll also:

- ncreases the max mum f nes DOT may mpose on ra l carr ers for v olat ng safety regulat ons;
- requ res DOT to update ra lcar nspect on regulat ons and aud t the federal nspect on programs;
- establ shes a statutory requ rement for fre ght tra ns to have at least two crew members, w th except ons;
- phases out certa n ra lroad tank cars by May 1, 2027;
- expands tra n ng for local f rst responders;
- mposes a new fee on certa n ra l carr ers; and
- author zes grants to mprove ra lway safety.