**U.S. Environmental Protection Agency Review of Vinyl Chloride**

**The U.S. Environmental Protection Agency (EPA)** [**announced**](https://www.epa.gov/newsreleases/epa-begins-process-prioritize-five-chemicals-risk-evaluation-under-toxic-substances) **in December 2023 that it would commence a review of five chemicals used to manufacture various plastics to determine if any of the chemicals should be subject to further regulation under provisions of the federal Toxic Substance Control Act (TSCA).**

* One of the chemicals that is included in this active review is vinyl chloride. Vinyl chloride is most commonly associated with its use in the manufacture of polyvinyl chloride (PVC) pipes, which are in turn used in some drinking water systems in the U.S.
* A “Vinyl Chloride and Health” [factsheet](https://www.epa.gov/system/files/documents/2023-06/Vinyl-Chloride-and-Health-FAQ-Document-5-31-508.pdf) issued by the U.S. EPA on May 31, 2023, in the wake of the East Palestine, OH, train derailment stated that, “Drinking water may contain low levels of vinyl chloride released from contact with PVC pipes.”
* The formal review process will allow the EPA to determine if vinyl chloride poses an “unreasonable risk to human health or the environment” that would require them to further regulate the chemical.

**As of December 18th, 2024, the EPA** [**officially designated**](https://www.epa.gov/newsreleases/epa-begins-five-chemical-risk-evaluations-under-toxic-substances-control-act-starts) **vinyl chloride as a High-Priority Substance under the TSCA. The agency will now begin the risk evaluation process for vinyl chloride to determine whether it presents an unreasonable risk to human health or the environment.**

* The full process could take several years and may result in an outright ban on the chemical; severe restrictions on its production or use; special disclosure and reporting requirements; or other types of regulations.
* EPA received over 2,000 comments and [**publicized 587 comments**](https://www.regulations.gov/docket/EPA-HQ-OPPT-2018-0448/comments)during its initial prioritization comment period this past spring.
* If the agency determines that vinyl chloride poses an "unreasonable risk" to human health or the environment, it will proceed to the risk management phase and decide what additional restrictions should be implemented.

**Vinyl chloride is a colorless gas. It has been classified as a** [**human carcinogen**](https://www.ncbi.nlm.nih.gov/books/NBK304420/#:~:text=The%20Working%20Group%20in%201974,and%20the%20other%20in%20Europe.) **since 1974, and the federal government at that time** [**banned**](https://nepis.epa.gov/Exe/ZyNET.exe/20013GER.TXT?ZyActionD=ZyDocument&Client=EPA&Index=Prior+to+1976&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C70thru75%5CTxt%5C00000004%5C20013GER.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL) **the use of vinyl chloride in consumer products such as hair sprays, refrigerants, cosmetics, and drugs. The EPA has** [**stated**](https://www.epa.gov/system/files/documents/2023-06/Vinyl-Chloride-and-Health-FAQ-Document-5-31-508.pdf) **that vinyl chloride is still used to make PVC and vinyl products such as floor coverings, children’s toys, and car components.**

* According to the [National Cancer Institute](https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/vinyl-chloride#:~:text=Vinyl%20chloride%20exposure%20is%20associated,cancers%2C%20lymphoma%2C%20and%20leukemia.), the inhalation of vinyl chloride has been linked to liver cancer and other health problems.
* Debate over the risks presented by vinyl chloride – and PVC – have been debated by environmental and health activists and industry for decades, but the debate kicked into high gear in February 2023 after a train carrying vinyl chloride derailed in East Palestine, Ohio, leading to a [vent-and-burn](https://www.npr.org/2023/02/06/1154760911/ohio-train-derailment) that ignited more than 1 million pounds of the chemical.

**On** [**Feb. 3, 2023**](https://www.npr.org/2023/02/16/1157333630/east-palestine-ohio-train-derailment)**, a 150-car train derailed in East Palestine, OH – a small town a few miles from the Pennsylvania border. Three days after the derailment, officials decided to burn off the leaking vinyl chloride that they believed was at risk of exploding.**

* The resulting explosion from the intentional burn sent a massive cloud of hazardous black smoke over East Palestine and the surrounding area. Numerous residents of East Palestine and nearby towns have reported continuing poor health, including respiratory issues, rashes, headaches, and other symptoms.

*Two reports from the Center for Environmental Health delve into the risks and use of*

*PVC in drinking water infrastructure. The reports can be found* [*here*](https://ceh.org/wp-content/uploads/2020/03/CEH-Our-Health-PVC-and-Critical-Infrastructure-Report-FINAL.pdf) *and* [*here*](https://ceh.org/wp-content/uploads/2023/05/CEH-Report-2023-May97-copy-2.pdf)*.*