

## FACT SHEET

### Understanding the Impact of EPA's Proposed Rules for Chemical Plants: EPA's Community Risk Assessment and Risk-Based Demographic Assessment

#### EPA's Proposal Would Reduce Disproportionate Harm

- On April 6, 2023, the U.S. Environmental Protection Agency (EPA) announced a proposal that would provide critical health protections to hundreds of thousands of people living near chemical plants, along with plants that make a variety of polymers and resins.
- EPA's proposal would update several regulations. The regulations apply to air toxics emissions from a variety of types of equipment and processes used to make synthetic organic chemicals and a variety of processes used in polymers and resins production, including neoprene production. Air toxics refers to a type of air pollution known or suspected to cause cancer or other serious health effects in humans. Air toxics are also called hazardous air pollutants.
- To understand how the proposal would affect communities, EPA conducted two innovative assessments: a risk-based demographic assessment of communities near the chemical manufacturing facilities covered by the proposed rule, and a first-of-its-kind community risk assessment of the proposed requirements for synthetic organic chemical manufacturing.
- These assessments found that EPA's proposal would dramatically reduce air toxics-related cancer risks for people who live near approximately 200 plants across the country that make synthetic organic chemicals. They also found that the proposed rule is likely to reduce the number of people with disproportionate harm.

#### EPA's first-of-its kind community risk assessment examined risk from all large sources in communities near synthetic organic chemical plants

- In the past, EPA has examined changes in risk that its rules would yield for the "source category," which refers to the collection of equipment and process that a rule covers. EPA conducted this kind of assessment for the rule, and it helped inform the proposed regulatory decisions. Many plants are covered by more than one air toxics rule. So, the Agency also has previously conducted analyses of whole-facility risk, to examine cancer and other risks from all air toxics emitted from entire facility, not just the air toxics emitted from the source category. EPA also conducted this kind of assessment for the proposed rule, and it also helped inform the proposed regulatory decisions.
- In addition, to provide the public with the best-possible information about how the proposal affects cancer risk from air toxics exposure, EPA conducted a first-of-its kind community risk assessment. Although this assessment did not inform the proposed regulatory decisions, it provides valuable information to the public about the consequences of the proposed rule. This assessment examined the impacts of the proposed requirements

for synthetic organic chemical manufacturers on air toxics-related cancer risks from *all* large facilities in communities within about 6 miles of the plants (10 kilometers). That includes risks from facilities that would not be covered by the rule.

- The community assessment showed approximately 104,000 people within about 6 miles of the facilities currently have cancer risks greater than 1 in 10,000 (this is equivalent to 100 in 1 million) from all large industrial facilities (called “point sources”) within about 6 miles of the plants. EPA generally considers this risk level to be elevated.
- The community assessment showed that the proposal would dramatically reduce that number -- by 96 percent in those communities overall, with the biggest reductions occurring in the areas where risks are highest.
- The community risk assessment also examined the risks that would remain after the proposal is fully implemented. It showed that 4,200 people would potentially have elevated risks from sources not covered by the proposed rule. It also showed that the remaining risks would be driven by EtO emissions.
- EPA intends to announce a proposed rule soon that will reduce emissions of EtO from commercial sterilization facilities. In addition, the Agency is working to develop proposed rules for other industries that emit EtO, including polyether polyols production, which can be located at chemical plants; hospital sterilizers; and chemical manufacturing area sources.

EPA’s demographic analysis examined the proposal’s impact on areas with environmental justice concerns

- EPA conducted a demographic analysis of the communities near the plants that would be covered by the proposal. Like the community risk assessment, demographic assessments are not used to inform regulatory decisions but provide valuable information to the public about the consequences of EPA’s rules. In a demographic analysis, the Agency looks at the characteristics of a community, such as race, income, and education level. This information helps EPA understand whether there are environmental justice concerns in specific areas that would be affected by a rule. It also helps the Agency understand whether its rule would address those concerns.
- As part of the demographic analysis, EPA compared community demographics and “whole facility” risk in those communities – the first time the Agency has done so. The analysis examined how the whole facility risk and demographics would change after EPA’s proposal is fully implemented.
- EPA examined demographics and risk in communities near 195 synthetic organic chemical plants across the country. The analysis found that of the 9.3 million people live within about 6 miles (10 kilometers) of the plants, 95,000 have a potentially elevated risk of developing cancer from breathing air containing air toxics. “Elevated risk” means that more than in 1 in 10,000 people who breathe air containing toxics 24 hours a day for 70 years may develop cancer as a result (1 in 10,000 is equal to 100 in 1 million).
- The analysis found that people who are African American, and people living in poverty, have a disproportionate share of current elevated air toxics related cancer risks.

- Once the rule is in place, air toxics-related cancer risk would dramatically drop – from 95,000 people with elevated risk to 2,500. The number of people with risks below 100 in 1 million would drop as well. For example, the analysis found that 462,000 people living within about 6 miles (10 kilometers) currently have air toxics-related cancer risk of 50 in 1 million or higher. After the final rule is fully implemented, that number would drop to 78,000.
- However, like the community assessment, the demographics assessment shows there is more work to do. In the communities where risk would remain elevated, African Americans and people in poverty have a disproportionate share of the elevated risk, compared to other segments of the population. EPA is committed to continuing its work to reduce risk to historically underserved and overburdened communities.
- Read more about the community risk assessment and the demographics assessment [in the proposal](#).