NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL

May 3, 2019

Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Re: Recommendation to regulate Ethylene Oxide to protect public health and to use the findings and conclusions of the EPA Integrated Risk Information System chemical assessments in regulatory determinations

Dear Administrator Wheeler:

The National Environmental Justice Advisory Council (NEJAC) is very concerned about the impacts of Ethylene Oxide on environmental justice communities. We urge the Environmental Protection Agency to regulate Ethylene Oxide to protect public health, particularly for the workers in these facilities and the communities living adjacent to them, who are most vulnerable to health threats from both acute chemical releases and long-term exposures.

On April 30, 2019, the NEJAC received public comment about Ethylene Oxide from many concerned residents in several states, as well as from public health and environmental protection advocacy groups. We heard from residents of New Castle, Delaware, who were exposed to Ethylene Oxide by a November 25, 2018 release from the Croda Atlas Point plant. Commenters included Linda Whitehead, from New Castle, who shared her story of battling lymphocytic leukemia. We also heard from Celeste Flores, from Lake County, Illinois, who shared her concerns about Ethylene Oxide being released from Vantage Specialty Chemicals in Gurnee, Illinois and 88,000 people in Waukeegan, Illinois exposed to Ethylene Oxide from Medline Industries. A representative from Breast Cancer Prevention Partners shared with the NEJAC the link between chemical exposures and breast cancer and gave an overview of EPA's Integrated Risk Information System (IRIS) Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide, completed in December 2016.

We also have significant concerns for members of environmental justice communities exposed to Ethylene Oxide who were not able to provide public comment to the NEJAC at our meeting in Maryland. An investigative journalism

piece by Sharon Lerner, "A Tale of Two Cities: EPA's bungled response to an Air Pollution Crisis Exposes a Toxic Racial Divide," published in the Intercept on February 24, 2019, explores the plight of residents in St. John the Baptist, Louisiana, who face risk from Ethylene Oxide from the Evonik Materials Corporation facility. These exposures, combined with chloroprene exposures from Denka's neoprene manufacturing facility, expose residents to the highest cancer risk in the country, at a rate of 1,505-in-1 million.

NEJAC members are also concerned about Ethylene Oxide exposures related to the manufacturing and consumption of spices. Ethylene Oxide is banned in all food production except in raw spice, spice blends, and dehydrated vegetables where Ethylene Oxide is used as a fumigant in 40-85% of spices sold in the US per the American Spice Trade Association. Ethylene Oxide and other toxic derivatives are found in many major spice brands and processed food containing spice on the grocery shelves (20% of 15 spices in one study).

Due to our concerns about public health for environmental justice communities, we make the following recommendations concerning Ethylene Oxide:

1. EPA should use the sound science in the IRIS Assessment of Ethylene Oxide for regulatory purposes.

The EPA completed an Integrated Risk Information System (IRIS) Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide in December 2016.[1] The EPA IRIS Assessment applied its Guidelines for Carcinogen Risk Assessment (EPA, 2005) to classify Ethylene Oxide as "carcinogenic to humans" by inhalation. Comments submitted to EPA on April 26, 2019 by thirty scientists, medical professionals, and environmental health experts detail the scientific rigor of the IRIS assessment.[2] EPA should use the most current and best available science for cancer risk calculations, as well as for acute and chronic non-cancer risk estimates. EPA's proposed action and public comment docket on "National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production Residual Risk and Technology Review" requests comments on the separate, independently determined scientific evaluation of and cancer risk factor for Ethylene Oxide.

The NEJAC strongly objects to EPA using the regulatory process for a source of Ethylene Oxide to attempt to change the independently determined and scientifically robust health risk factor for Ethylene Oxide.

[1] https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/1025_summary.pdf.
[2] https://www.nrdc.org/sites/default/files/eto-neshap-letter-20190426.pdf.

2. EPA must meaningfully involve impacted communities in addressing Ethylene Oxide exposure as an environmental justice issue.

Communities of color and low-income communities suffer disproportionate exposures from Ethylene Oxide co-located with Hydrochloric Acid production facilities and from other sources. For example, the population within three miles of the Croda facility in New Castle, Delaware is 52% people of color, with 31% of residents at or below the poverty level. Residents of Lake Charles, Louisiana exposed to Ethylene Oxide from the Sasol facility includes one census tract with cancer risk from Ethylene Oxide 84 times greater than the level triggering action under the Clean Air Act.

EPA's proposed Hydrochloric Acid regulation incorrectly concludes that "this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous people."[3] While EPA recognizes the risk of Ethylene Oxide exposures from facilities co-located with Hydrochloric Acid production facilities, EPA chose to exclude the "facility-wide" risks.[4]

NEJAC cautions EPA against reviewing the Hydrochloric Acid production risks with such a myopic lens. We urge EPA to include facility-wide emissions, which include Ethylene Oxide emissions, when regulating Hydrochloric Acid production. This approach will ensure Ethylene Oxide risks, which are clearly unacceptable per EPA's own Maximum Individual Risk results (see IV.A.5), are expeditiously addressed now. There is no reason to carve out Ethylene Oxide risk and subsequently kick the can down the road when environmental justice communities are being disproportionately affected today. The public comments we have received and our review of public comment docket on the Hydrochloric Acid rule confirm that this proposal will indeed "have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous people." Likewise, other sources of exposure for Ethylene Oxide disproportionately effect our most vulnerable communities.

Given the risks to communities of color and low-wealth communities from Ethylene Oxide exposures, NEJAC concurs that EPA must meaningfully involve impacted communities in regulation of Ethylene Oxide from sources co-located with Hydrochloric Acid production facilities and other sources in order to protect public health. The impacted communities we have heard from want a seat at the table with EPA during the regulatory process in order to ensure they are protected from Ethylene Oxide exposures. We appreciate your consideration of these concerns and recommendations and look forward to your response.

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[3] 84 Fed. Reg. 1509 (Feb. 4, 2019).
[4] *See* 84 FR 1583, Section 5 (Feb. 4, 2019).

Only by using sound science and by meaningfully involving directly-impacted communities—including tribal communities—can we protect communities from exposures from Ethylene Oxide.

Additionally, we request a response from the EPA on the following points:

- We request confirmation from EPA that it intends to continue using the best available science, including the 2016 IRIS value on Ethylene Oxide, consistent with its responsibility under the Clean Air Act and the agency's longstanding practice.

- We would like to receive additional information on EPA's planned efforts to reduce emissions of this chemical from each of the industrial sources that it has identified, including (1) Miscellaneous Organic Chemical Manufacturing; (2) Polyether Polyols Production; (3) Synthetic Organic Chemical Manufacturing; (4) Commercial sterilizers; (5) Hospital Ethylene Oxide Sterilizers; and (6) Ethylene Oxide production facilities. We ask EPA to provide this information within the next 30 days to us and to local community members in an accessible way, so that they can consider any federal, state or local actions that may be appropriate.

- We recommend that the Administrator take prompt regulatory action under the Clean Air Act that assures the emission reductions needed from all chemical manufacturing and other sources, to protect public health from exposure to Ethylene Oxide, together with other toxic pollutants. We ask that EPA propose and take notice-and-comment on strengthening its regulations for each of the above-listed source categories of hazardous air pollution, and any additional sources it identifies as sources that require review.

Sincerely,

Richard Moore, Chair

cc: NEJAC Members
Henry Darwin, Acting Deputy Administrator
Bill Wehrum, Assistant Administrator for the Office of Air and Radiation
Brittany Bolen, Associate Administrator for the Office of Policy
Matthew Tejada, Director for the Office of Environmental Justice
Karen L. Martin, Designated Federal Officer and NEJAC Program Manager