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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

RICHARD M. RUSSELL, MAJORITY STAFF DIRECTOR
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June 13, 2019

The Honorable Charles J. Sheehan
Acting Inspector General
U.S. Environmental Protection Agency (EPA)
Office of the Inspector General
1200 Pennsylvania Avenue NW (2410T)
Washington, DC 20460

Dear Acting Inspector General Sheehan:

We write to request that your office expand the scope of its ongoing audit of EPA's Toxic Release Inventory (TRI) program. Specifically, we request that the Office of the Inspector General also examine the Agency's use of TRI data to identify and respond to threats to human health and the environment, and whether the Agency has, and is using, a mechanism to identify and enforce failures to comply with TRI reporting requirements. Additionally, we ask that your office broadly assess the overall reporting process including TRI data quality and data utility.

EPA's Toxic Release Inventory was created in 1986 by Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) to track "the management of certain toxic chemicals that may pose a threat to human health and the environment."¹ Each year, U.S. facilities in different industry sectors report how much of each TRI chemical is released into the environment and/or managed through recycling, energy recovery and treatment. That information is then made available to the public.

The Office of the Inspector General (OIG), as part of its ongoing audit of the TRI program², released a Management Alert (Alert) on April 8, 2019.³ The Alert highlighted the OIG's concern that data regarding the hazardous substances release from Publically Owned Treatment Works (POTWs) are inaccurate, and as a result may not adequately inform the public as to "environmental conditions affecting human health."⁴ The identified discrepancies between TRI data and other EPA reporting data for POTWs raises questions as to the efficacy of other TRI data. In light of these findings, we request that your office not only continue its audit of the TRI program, but expand the scope of the audit to include an examination of several additional factors, outlined below.

I. The IG should examine how TRI data is used by EPA to identify potential threats to human health.

We are concerned that EPA may not be utilizing TRI data to inform its efforts to identify and respond to threats to human health. This is especially concerning for low-income areas and communities of color,

¹ <https://www.epa.gov/toxics-release-inventory-tri-program/learn-about-toxics-release-inventory>

² *Audit of the Impact of Toxic Release Inventory (TRI) Late Reporters on the EPA's Annual TRI National Analysis* (Project No. OA&E-FY18-0002)

³ https://www.epa.gov/sites/production/files/2019-04/documents/_epaig_20190408-19-n-0115.pdf

⁴ Id.

who are often disproportionately exposed to pollution.⁵ A way to illustrate these concerns is by looking at ethylene oxide (EtO), a chemical that is the cause of recent concern in Willowbrook, Illinois.

According to the Occupational Safety and Health Administration, EtO is primarily used as an intermediate in the production of several industrial chemicals, as well as a sterilant for medical equipment and supplies.⁶ EPA's most recent Integrated Risk Information System (IRIS) health assessment for EtO⁷ added a 30-fold increase to its assessment of its cancer-causing potential, and re-classified the chemical from a 'probable carcinogen' to a 'carcinogen'. The new IRIS health assessment for EtO was then used by EPA in 2018 when preparing the latest National Air Toxics Assessment (NATA),⁸ which is a screening tool compiled by EPA to determine which "air toxics, emission sources, and places may need further study to better understand risks."⁹ The most recent NATA report was prepared using 2014 data and released in August of 2018.

From a review of the most recent NATA and TRI data, the Willowbrook, Illinois community learned that it was facing significantly increased health risks due to EtO emissions from a nearby sterilization facility owned by the company Sterigenics US LLC. The available TRI and NATA data alerted citizens that cancer risks in their area were "greater than the upper limit of acceptability," of 100 per 1 million people,^{10,11} with the most affected census tract in the county showing a cancer risk of 232 per 1 million people.¹² The community responded by organizing a call for the closure of the facility, which was eventually ordered by the Acting Director of the Illinois Environmental Protection Agency.¹³ The community also independently procured air monitoring equipment and engaged state and federal government representatives, including our offices.

Willowbrook, IL is by no means the only community impacted by EtO in the country, or even the community that is the most impacted. The most recent NATA data also reveals that in St. Charles Parish, Louisiana, the cancer risk from EtO is 709.8 per 1 million people, with the next two highest rates being 562.8 and 498.1 per million in Lehigh, Pennsylvania and Jefferson, Colorado respectively. These cancer rates are alarming, especially when considering that 85% of census tracts in the U.S. have a cancer risk from EtO of less than 1 per 1 million.¹⁴

NATA data also revealed that:¹⁵

- The 45 facilities with the highest reported EtO emissions account for more than 95% of total EtO emissions nationwide.
- Of these top 45 emitters, 21 of those facilities are located in communities where more than half of the population living within a 3-mile radius is minority.

⁵ Paul Mohai and Robin Saha 2015 Environ. Res. Lett. 10 115008

⁶ Office of Safety and Health Administration. <https://www.osha.gov/SLTC/ethyleneoxide/index.html>

⁷ https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=329730

⁸ <https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results#nationwide>

⁹ <https://www.epa.gov/national-air-toxics-assessment/nata-frequent-questions>

¹⁰ Id.

¹¹ <https://www.epa.gov/national-air-toxics-assessment/nata-frequent-questions#risk1>

¹² <https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results#nationwide>

¹³ <https://www2.illinois.gov/epa/topics/community-re>

[relations/sites/sterigenics/Documents/Sterigenics_02152019164622.pdf#search=sterigenics](https://www2.illinois.gov/epa/topics/community-re)

¹⁴ <https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results#nationwide>

¹⁵ Id.

- More than half of the top emitting facilities are located in neighborhoods where over one-third of the population living within a 3 mile radius lives below the poverty line.

Despite the TRI and NATA data indicating the potential for an increase in cancer risk due to EtO exposure near Willowbrook, the Sterigenics facility reportedly¹⁶ emitted less than 20% of what the facility was allowed to emit under its Clean Air Act Permit Program permit,¹⁷ which raises questions about whether the permitted emissions levels are sufficiently health-protective. A May 29, 2019 statement by EPA Assistant Administrator William Wehrum would imply that they are not,¹⁸ when he stated at a public meeting that the EPA will propose a new rule for commercial sterilization facilities, citing the “very high levels of risk” associated with EtO emissions. In addition, EPA is expected to release a new report¹⁹ that shows elevated levels of EtO in Willowbrook were “clearly associated with the facility.”^{20,21}

We request that the IG examine why the EPA did not itself initially identify the problem in Willowbrook and other communities. More generally, we request that the IG examine how EPA currently uses and historically has used TRI, NATA, and other information to identify and respond to potential threats to human health (including taking enforcement actions or identifying the need for new health-protective regulatory measures under the Clean Air Act and other environmental laws when warranted).

II. The IG should examine how EPA assesses and seeks to improve the accuracy of TRI data, including how the Agency identifies and responds to violations of or omissions in TRI reporting.

The Willowbrook community’s use of TRI and NATA data to inform those living near the Sterigenics Facility of heightened levels of EtO emissions demonstrates the potential for TRI and NATA data to be used to identify risks to human health and the environment. However, facilities that submit their data late, not at all, or provide inaccurate data may undermine the overall accuracy of TRI data.

Under EPCRA, facilities must file TRI reports with the Agency if the following conditions are met:²²

- The facility is in a specific industry sector required to file, as determined by its North American Industry Classification System (NAICS) code.
- The facility has 10 or more full-time equivalent employees.
- The facility manufactures or processes more than 25,000 pounds or otherwise uses more than 10,000 pounds of a listed chemical.

Facilities that meet all of the criteria must submit a TRI Form R for each TRI-listed chemical it manufactures, processes or otherwise uses in quantities above the reporting threshold to both EPA and the state in which the facility is located. The information gathered by the agency is then used to create an annual “TRI National Analysis,” which interprets “trends in releases, waste management practices and pollution prevention activities.”²³

¹⁶ <https://www2.illinois.gov/epa/topics/community-relations/sites/sterigenics/Documents/043110AAC%20-%20AERs%201995-2017.pdf>

¹⁷ <https://www2.illinois.gov/epa/topics/community-relations/sites/sterigenics/Documents/Sterigenics%20CAAPP%20Permit.pdf>

¹⁸ <https://bna.com/news/epa-air-rules-to-clamp-down-on-medical-sterilizer-plants>

¹⁹ https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics_ATSDR_Public_Statement-508.pdf

²⁰ <https://bna.com/news/epa-air-rules-to-clamp-down-on-medical-sterilizer-plants>

²¹ https://www.epa.gov/sites/production/files/2019-03/documents/copy_of_031519_willowbrook_eto_master_data_table_for_web.pdf

²² <https://www.epa.gov/toxics-release-inventory-tri-program/basics-tri-reporting>

²³ https://www.epa.gov/sites/production/files/2019-04/documents/epa_oi_20190408-19-n-0115.pdf


The NAICS system was developed to create standardized classifications for industries across North America, and companies self-select the business code they feel “best depicts their business activity.”²⁴ In the case of Sterigenics, the facility’s self-selected classification as “product sterilization and packaging services” (NAICS Code 561910) exempted it from mandatory TRI reporting requirements. In previous years, Sterigenics chose to participate in voluntary TRI reporting, but did not do so in 2017 despite continuing to emit EtO at similar levels to years prior.^{25,26}


We request that the IG assess EPA’s process for determining whether companies should be subject to TRI reporting requirements in order to assess whether data is being deliberately or unintentionally withheld from TRI reporting as a result, and recommend any changes to EPA’s reporting requirements that would result in the collection of more complete and accurate data. We also request that the IG evaluate the manner in which EPA attempts to identify and, as applicable, take enforcement action against non-reporters, late reporters and inaccurate reporters of TRI releases. In addition, we ask that the IG compare the quality of and process for collecting TRI data to other similar data sets.

Thank you for your prompt attention to this matter. If you or members of your staff have any questions regarding these requests, please ask your staff to contact Michal Freedhoff of the Environment and Public Works Committee staff at 202-224-8832, Radha Adhar of Senator Duckworth’s staff at 202-224-2854, or Adam Zipkin of Senator Booker’s staff at 202-228-3916.

Sincerely yours,


Tom Carper
Ranking Member


Tammy Duckworth
United States Senator


Cory A. Booker
United States Senator

²⁴ <https://www.naics.com/what-is-a-naics-code-why-do-i-need-one/>

²⁵ <https://www2.illinois.gov/epa/topics/community-relations/sites/sterigenics/Documents/043110AAC%20-%20AERs%201995-2017.pdf>

²⁶ <https://www.epa.gov/il/questions-and-answers-emissions-sterigenics>