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Cancer-causing chemical endangering Memphis due to EPA's inaction, lawsuit alleges

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In August, the EPA put Sterilization Services of Tennessee on a list of high-risk facilities for emitting EtO or ethylene oxide. The facility is at 2396 Florida St. in Southwest Memphis. (Mark Weber/The Daily Memphian)

What: Lifetime cancer risk from EtO community meeting

When: 10:30 a.m.-noon, Saturday, Jan. 14

Where: South Branch Library, 1929 S. Third St.

When Jacquelyn Scott checked her mailbox in August, she found a letter from an unexpected sender: the Environmental Protection Agency. Its message was even more surprising. A facility less than half a mile away — one that Scott didn't know existed — emits ethylene oxide, or EtO.

In its letter, the EPA told Scott and other residents that EtO is more dangerous than it previously thought but assured them that the facility at 2396 Florida St. was following current regulations. Scott said she scanned the letter and put it aside.

Health Department launches first specific cancer-cluster study.

Soon after, she got an email from Memphis Community Against Pollution about a meeting at the South Branch Library to discuss EtO's cancer risk. That message got Scott's full attention.

Sterilization Services of Tennessee appeared on the EPA's list of high-risk facilities in August, but the company has refused to comment until after there are new regulations on the books.

The EPA is moving to enact tighter restrictions on the chemical's emissions, but a pending lawsuit claims the agency has already missed two deadlines for new EtO standards.

At the same time, the Memphis City Council has its eyes on the facility.

The dangers of EtO

Sterilization Services uses EtO to disinfect medical and dental equipment. Some of the chemical properties that make EtO an effective sterilizing agent are also the same reasons it's carcinogenic to humans.

If someone near the facility is exposed to EtO all day, every day, from birth until age 70, their cancer risk is 2,000 in a million.

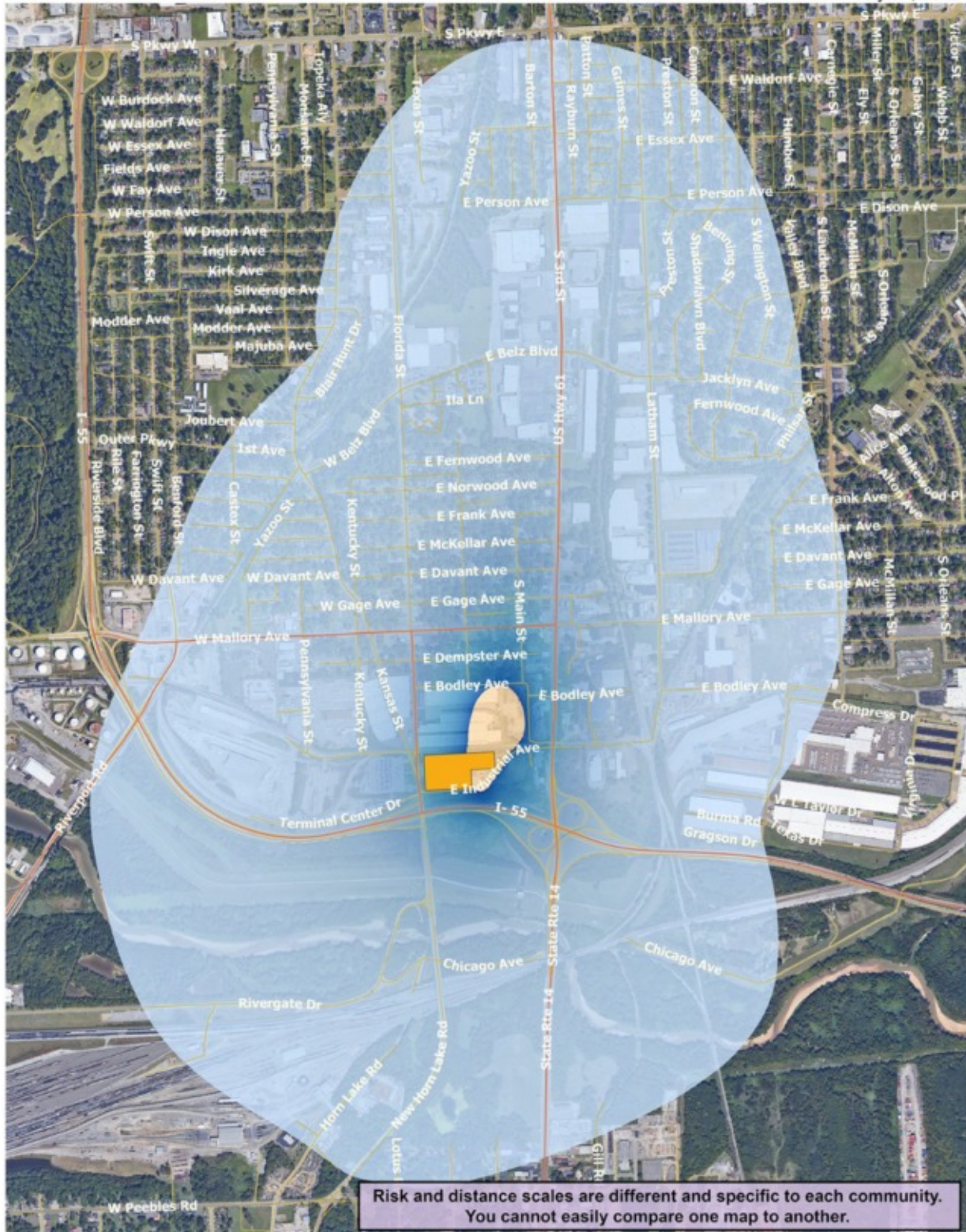
The risk in the outermost parts of Memphis' area impacted by Sterilization Services is about 100 in a million, which meets EPA's benchmark for unacceptable risk.

TVA's coal ash cleanup site in Memphis on 'most contaminated' list

That's in addition to residents' risk of developing cancer for reasons other than EtO exposure.

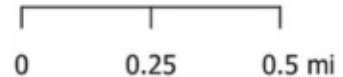
Lifetime Residential Cancer Risks - EtO Sterilization Sterilization Services of Tennessee, Memphis, TN

Risk information current as of July 27, 2022.



- EtO Sterilizer Facility
- Non-Residential Area

Lifetime Residential Cancer Risk
(in a million)



This map shows EPA's estimates of lifetime cancer risks from EtO near Sterilization Services of Tennessee in Memphis. (Courtesy United States Environmental Protection Agency)

Scott has unknowingly lived on the residential street closest to the facility — less than half a mile away — since 1986, so she attended MCAP's meeting about the cancer risks to learn more.

Prior to that meeting, the EPA also hosted two community meetings at Monumental Baptist Church on South Parkway in October, where EPA representatives shared a detailed overview of EtO and assured residents that the agency is working on more protective regulations.

But Scott, and many other residents, said they missed the memo; either they don't remember getting a letter from the EPA in the mail, they didn't see the invitation to the meeting in that letter or they didn't understand the risk.

After learning more, Scott wondered: "Why all of a sudden? What happened that brought this to (EPA's) attention?"

Lawsuit hopes to give EPA a deadline

In 2016, the EPA learned that EtO is 60 times more toxic than it previously estimated.

In 2019, it announced plans to draft new EtO regulations.

In 2021, the EPA's Office of Inspector General urged the agency to draft a new rule. Otherwise, the office said it can't guarantee that its regulations protect public health.

Business leaders support local air pollution monitoring

The EPA set a deadline for spring 2022, but after the agency pushed its own deadline back multiple times, an environmental law group took action in the hopes of getting the EPA on a court-mandated schedule.

In a new lawsuit, Earthjustice claims that the EPA has missed multiple regulatory deadlines. The agency did not respond in time for publication.

The Clean Air Act requires the EPA to review its emission standards at least every eight years. The lawsuit's lead attorney Marvin Brown acknowledged that rulemaking is "a delicate process that requires a lot of information," but said more than 16 years have passed since the EPA reviewed its EtO regulations.

"By failing to timely revise its sterilizer rule, EPA has left communities to fend for themselves against a deadly, cancer-causing chemical," Brown said. "No one should get cancer from the facilities that make sure that medical equipment is safe."

It wasn't until August of 2022 that Memphis residents learned of their exposure, when the EPA published a list of 23 high-risk facilities.

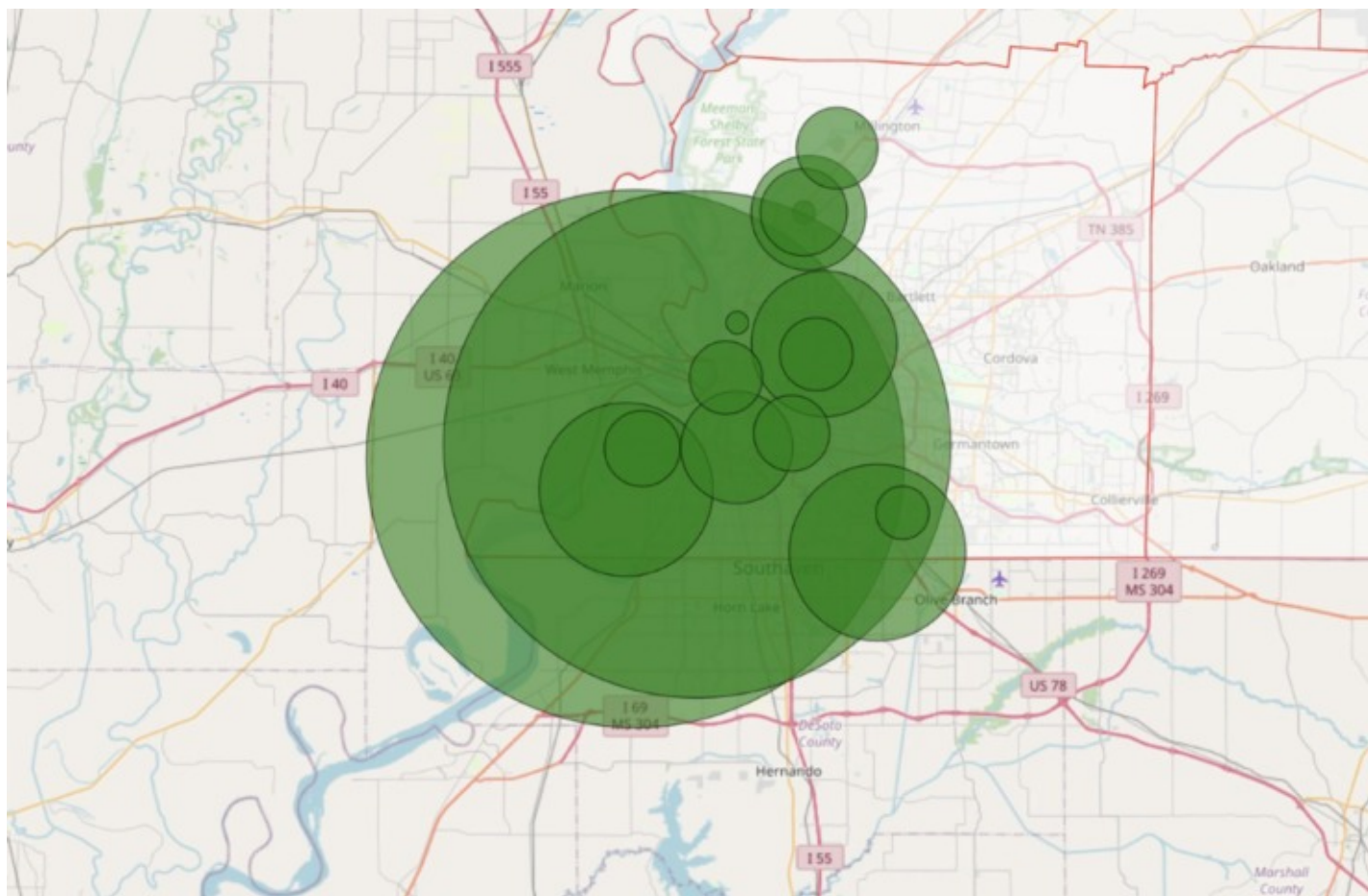
"Our regulations are not protective enough. The rules are not good enough," Madeline Beal, EPA's senior risk communications adviser, told Memphians in October.

Too close to home

The EtO-emitting facilities are most often located in low-income neighborhoods and communities of color, which are already grappling with health risks from heavy industrial activity, Brown said.

From Scott's front yard, she can see plumes of smoke from Valero over her neighbor's houses to the right. Sterilization Services of Tennessee is to the left, just around the corner.

"Everybody under the Clean Air Act is entitled to clean air, and right now, we're creating sacrifice zones," Brown said.



A map shows greenhouse gas emissions from facilities in Shelby County, scaled relative to emissions. (Courtesy United States Environmental Protection Agency)

Vera Holmes is the director of the Mallory Heights CDC. It's one of a few neighborhoods in the facility's vicinity. She's been walking door-to-door, telling people about their risk from EtO, along with the other industrial facilities in the area.

"It's so bad within this community that people are truly walking dead," Holmes said. "So many people are so sick."

Other communities in different parts of the country learned about their cancer risk from EtO years ago.

Urszula Tanouye lives in Willowbrook, Illinois, about 20 miles southwest of Chicago — and at the time, about a mile away from Sterigenics, a facility that emitted EtO.

Biden promised billions for environmental justice. Will it get into the right hands?

In mid-2018, Tanouye learned about neighborhood's risk after EPA employees requested an emissions study. Bill Wehrum, assistant administrator of EPA's air and radiation division at the time, directed local EPA officials to not release the data yet. They published the report regardless, but later took it down.

It was too late, though. The mayor had a copy of the report and posted it to Willowbrook's website. The results revealed a higher-than-expected cancer risk from Sterigenics' EtO emissions.

Within days, the community packed a town hall with wide-ranging attendees: the mayor, state politicians, EPA officials, the county health department and representatives from Sterigenics.

A federal report a few months later confirmed the risk. Air monitoring continued for about six months, and in early 2019, Illinois strengthened its state EtO regulations. The Illinois EPA issued a seal order, effectively shutting Sterigenics down until it complied with new state regulations.

Letter to the Editor: Air pollution too often goes unchecked

By September of 2019, Sterigenics closed its doors. Once a facility closes, the risk ends, since EtO doesn't linger in the air for long.

Brown said Willowbrook is an outlier in many ways: It's wealthy (the second-wealthiest county in Illinois), majority-white (about 80%) and it's the only place he knows of a commercial sterilizer closing its plant.

The community also benefited from the presence of a local EPA warehouse, which Tanouye said kickstarted their case with air monitoring data — something that other communities have to fight for.

“We worked hard for it, but we also got lucky,” Tanouye said.

By now, the conversation about EtO is over for most of Willowbrook. Some residents are already settling lawsuits, including one individual who received \$363 million in damages. But some advocates such as Tanouye have kept reaching out to communities that are just learning about their risk, like Memphis.

Local government looks to what it can do

“This is pretty much history in Black America,” said Angela Johnson, a volunteer with Memphis Community Against Pollution.

At Memphis City Councilman Edmund Ford’s request, EPA’s Caroline Freeman delivered delivered a virtual presentation to the body on Tuesday, Jan. 10. She’s the director of the air and radiation division.

“EPA is concerned about this risk,” Freeman told the council.

Some of the other high-risk facilities that the EPA identified have voluntarily reduced emissions until the agency’s new rules are in place; Sterilization Services of Tennessee has not.

[Invasive black carp now thriving in the Mississippi River basin](#)

If the local facility doesn’t voluntarily take action, Ford said he’d like to see it closed. Councilman Jeff Warren also proposed putting more pressure on the facility.

“It seems like we’re moving ahead, but it almost seems like it’s at a snail’s pace,” Warren said.

The EPA currently expects to release a draft of new EtO regulations early this year. Once that happens, the public will have a chance to provide feedback. Any new facilities will have to comply with the guidelines immediately, but existing facilities will have up to three years to make changes, unless the agency expedites that timeline.

The results from the Shelby County Health Department’s first-ever cancer cluster study are expected soon, which could provide more information about the cancer rates

near the facility.

TOPICS

STERILIZATION SERVICES OF TENNESSEE ENVIRONMENTAL JUSTICE

ENVIRONMENTAL PROTECTION AGENCY SUBSCRIBER ONLY

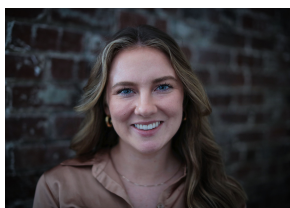
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Keely Brewer is a Report for America corps member covering environmental impacts on communities of color in Memphis. She is working in partnership with the Ag & Water Desk, a sustainable reporting network aimed at telling water and agriculture stories across the Mississippi River Basin.