

Spotlight on Solvay: A Troubling Track Record and Future Risks in Augusta, GA

Solvay Specialty Polymers USA has been at the center of numerous controversies surrounding the production and release of [harmful PFAS chemicals](#), often referred to as 'forever chemicals'. They create specialized plastics for use in other industries but have historically done so at a terrible cost to community health and the surrounding environment. Solvay's past actions raise serious concerns about their [proposed expansion](#) in Augusta, GA, to create a production line for PVDF, a plastic used in lithium-ion batteries. Not only is Augusta already more economically, environmentally, and racially [disadvantaged](#) than most of the country, Solvay's expansion and increase in pollution would occur in the 30906 zip code, one of the most vulnerable areas in the city.

For example, figure 1 below shows pounds of toxic air emissions (red circles) in Augusta. Solvay is one of the largest emitters of pollution in the city, and one of many near a population where many live below the poverty line (the darker the blue, the higher the percentage of people living in poverty). Herein, we detail Solvay's history of environmental violations, their reserved approach to transparency, and the potential danger they pose to an already heavily burdened area in Augusta.

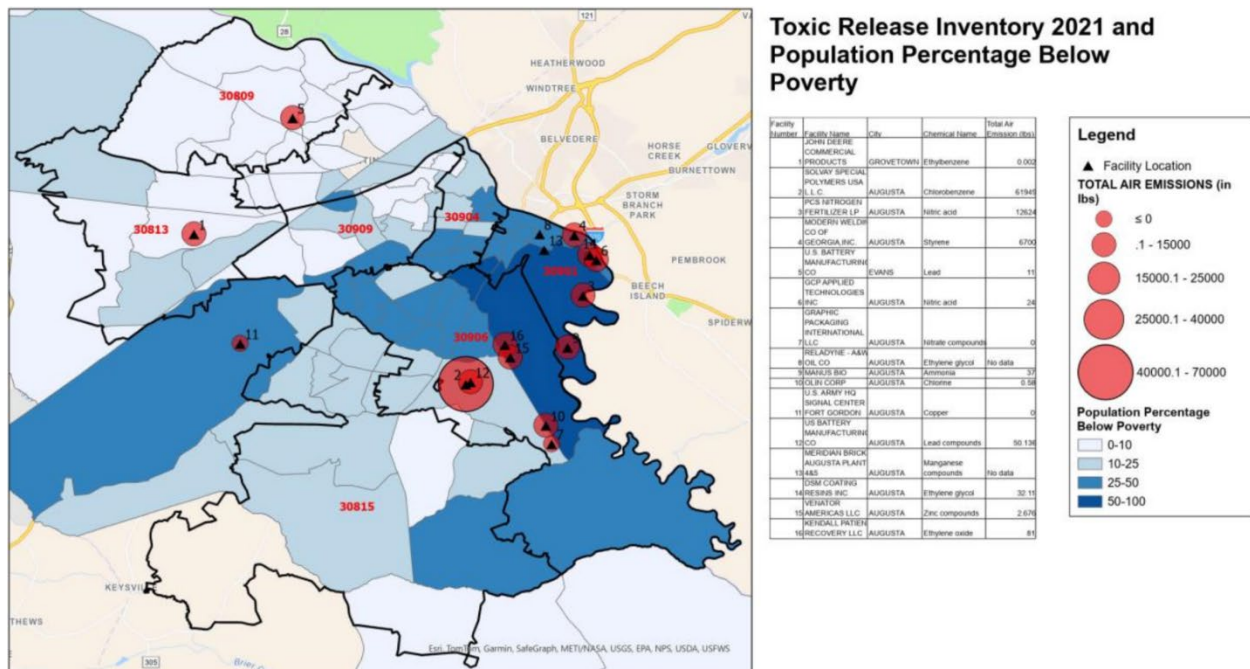


Figure 1. Environmental burden of census tracts in Augusta, GA, and their proximity to hazardous and toxic release sites. Source: E2I2.

Legacy of Environmental Harm

In June 2023, Solvay Specialty Polymers agreed to pay [\\$393 million](#) to the state of New Jersey for its role in contaminating water sources, particularly the Delaware River, with PFAS chemicals. The settlement followed accusations from the State of New Jersey in 2020 of the company downplaying risks, withholding critical information about the chemicals they used, and failing to disclose the potential harm of their operations to public health. This agreement came after years of litigation and regulatory challenges, including Solvay's initial denial of any wrongdoing and [reluctance to cooperate](#) with clean-up efforts.

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Solvay's track record reveals a pattern of negligence:

- **PFAS Pollution in New Jersey:** Solvay discharged over 100,000 pounds of PFAS (PFNA) into New Jersey's air and waterways until 2010 before switching to an equally toxic replacement – there are thousands of PFAS-like chemicals, most do not have names and aren't yet regulated. In 2013, it was found that the Delaware River had a higher concentration of PFNA (one of 6 known notorious PFAS chemicals) than anywhere else in the world. When New Jersey attempted to set emergency regulations on this chemical, which research had found to be toxic, Solvay attempted to sue the state.
- **Lack of Transparency:** Solvay has consistently withheld information about the chemicals it produces, often citing that the information is a trade secret or proprietary. This has left regulators and the public in the dark about the true extent of the environmental and health risks posed by Solvay's operations. When Solvay found that any level of the PFOA chemical they were using was toxic in animal studies in 2006, the EPA didn't get results until 2012, and the public didn't hear until 2022. In 2019 when new PFAS chemicals were found in the Delaware River, Solvay provided details to the NJ environmental agency only under the condition that they be kept from the public.
- The company failed to report toxicity data for years, even as their new PFAS chemicals were found to be toxic. In 2011, Solvay found these chemicals accumulated in their workers' blood, but this wasn't reported until 2019.
- In 2021, the Environmental Working Group (EWG) petitioned the EPA, alleging that Solvay withheld crucial health hazard information—a violation of federal law (the Toxic Substances Control Act).

National Impact: PFAS chemicals break down very slowly over time, hence the nickname 'forever chemicals'. After years of discharge into domestic waterways, EWG reports that PFAS chemicals can be found in the blood of 99% of Americans. PFAS contamination has been linked to severe health issues, including various cancers, fertility and development problems, kidney and liver disease, and immune system damage.

Expansion into Augusta: Promises and Concerns

Solvay plans to shift operations to Augusta, GA, with Synesqo (the new parent company of Solvay Specialty Polymers) receiving a \$178M grant from the U.S. Department of Energy. The facility aims to produce PVDF, a plastic component in lithium-ion batteries, which are currently vital to the world's transition to renewable energy. Transitioning to renewable energy is critical for the long-term health of people and the planet, but doing so in a way that jeopardizes that health is counterproductive. The grant was awarded shortly after the NJ lawsuit, so the greater Augusta community is worried that Solvay's lack of attention to environmental regulations will further worsen the health of the community, especially as Solvay is also already one of the biggest polluters in Augusta.



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- Toxic Emissions:** The [TRI Toxic Tracker](#) indicates that Solvay already discharges about 65,000lb of [Chlorobenzene](#) into the air every year, a chemical on the EPA's substance priority list as it poses a significant potential threat to human health. These discharges typically land Solvay as Augusta's 3rd largest air polluter by weight (lbs.), and among the city's top 5 polluters to air, water, and land by RSEI Hazard score (relative potential hazard to human health) - this can be seen in Figure 2 below.

Facility	Distance (Miles)	Releases (lb)	Air Releases (lb)	Water Releases (lb)	Land Releases (lb)	Off-Site Releases (lb)	Waste Managed (lb)	RSEI Hazard
Totals	-	7,096,702	5,861,287	938,709	168,480	128,226	31,872,747	5,944,477,711
US BATTERY MANUFACTURING...	7.53	121,431	50	0	0	121,381	2,147,971	2,792,924,088
GRAPHIC PACKAGING INTERNA...	9.96	1,962,979	1,487,082	307,417	168,480	0	18,855,380	1,364,108,655
KENDALL PATIENT RECOVERY ...	5.52	103	84	0	0	19	20,800	932,236,800
INNOVATIVE CHEMICAL TECHN...	8.52	30	5	0	0	25	30	270,000,000
SOLVAY SPECIALTY POLYMERS ...	7.69	68,437	62,475	0	0	5,962	379,858	269,361,369
PCS NITROGEN FERTILIZER LP ...	3.63	4,933,990	4,301,917	631,292	0	781	4,977,208	200,601,862
E-Z-GO A TEXTRON CO - 30913...	5.49	112	106	0	0	6	17,508	93,442,828
KEMIRA WATER SOLUTIONS IN...	8.54	906	906	0	0	0	5,396,549	19,688,000
PVS TECHNOLOGIES INC. (AUG...	9.11	71	71	0	0	0	71	1,621,500
GENERAL SHALE BRICK INC. - P...	1.10	1,794	1,794	0	0	0	70,320	448,500
MODERN WELDING CO OF GEO...	1.53	6,700	6,700	0	0	0	6,700	23,450
OLIN CORP - 30913LNGST2402L	9.12	1	1	0	0	0	1	13,340
GCP APPLIED TECHNOLOGIES I...	2.78	24	24	0	0	0	24	6,480
OXERRA AMERICAS LLC - 3090...	5.92	7	3	0	0	5	7	299
COVESTRO LLC - 30903DSMRS...	2.44	32	32	0	0	0	163	283

Figure 2. EPA Toxic Release Inventory – Polluting Companies in Augusta 2021, Sorted by RSEI Hazard Score (potential harm). Source: TRI Toxic Tracer Tool, Richmond Co, GA, 2021

- GHG Emissions:** EPA reports indicate that Solvay have increased carbon emissions at their Augusta site by over 70% in the last decade. The company's expansion may continue this trend with their planned construction of a [giant fossil-fuel powered boiler](#) that could produce enough heat (99.5 MMBty/hr) for about 13,410 homes in a year, or about 50,000 tons of CO2.
- Chemical Secrecy:** Synesqo claims that PFAS production is [not necessary](#) for their chemistry, but experts warn that waste PFAS could still result from their processes. The lack of clear, publicly available data exacerbates these fears.
- Regulatory Difficulty:** The U.S. often relies on chemical companies to self-regulate, leaving communities vulnerable to inadequate oversight and delayed responses to environmental contamination.



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A Call to Action for Augusta

As demand for EV batteries grows, Solvay's role in supplying PVDF is critical. However, the stakes may be too high to allow the company to proceed unchecked. Experts like Martin Scheringer, professor and renowned PFAS expert at ETH Zurich, argue that industries producing PFAS need rigorous oversight due to their bad track record and potential for causing long-term harm.

Before Solvay begins operating in Georgia, the city should consider establishing:

1. **Third-Party Testing:** Independent entities should assess Solvay's outputs, processes, and waste to ensure minimal harm to public health and the environment.
2. **Increased Public Transparency:** All findings from testing must be accessible to the public to rebuild trust and accountability.
3. **Enhanced Regulatory Enforcement:** The burden of proof for health and safety must fall squarely on Solvay, given their past failures.

Economic growth cannot come at the expense of irreversible damage to the environment and public health. Augusta deserves better.

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