

Addressing Cumulative Impacts in GA's Hazardous Waste Site Process

Science Facts and Analysis from Science for Georgia

The Georgia Environmental Protection Division (EPD) is responsible for overseeing the designation and clean-up of hazardous waste sites. Currently, this process does not consider historical and cumulative impacts when ranking the severity of hazardous waste sites and allocating money for cleanups. These impacts can [combine and multiply the negative effects](#) of an environmental issue. This omission makes the EPD less effective at reducing harm, especially for historically underserved communities. For the EPD to fulfill [their mission](#) of reducing harm to the environment and supporting healthy communities, we propose that they must factor in socio-economic and cumulative impacts.

Herein, we outline the current hazardous waste designation and ranking process, gaps in the current system, suggestions to change this process, and actions individuals can take.

Current Process

A regulated substance is a material that presents a health or environmental hazard to persons and property, including groundwater or soil. [These materials must be stored, used, handled, and processed in a specific way to reduce risk.](#)

When a suspected release of a regulated substance occurs, it must be reported to the EPD. It is then assessed to understand if it is above the US EPA's [reportable \(safe\) quantity](#). If the EPD determines the release is a risk, and it cannot be immediately cleaned up, it will add the release site to the [Hazardous Site Inventory](#) (HSI). This is a list of locations in Georgia that are known to have, or are suspected to have, regulated substances present on the site which have been misused, spilled, or improperly stored. Thus, these are sites that pose a threat to human health and the environment.

Sites on the HIS are required to meet the state's clean-up standards. They must be properly cleaned, and the steps must be documented for them to be removed from the HSI. When the polluter cannot be held responsible for the cleanup, the EPD pays with the [Hazardous Waste Trust Fund](#) (HWTF), a collection of fees from business and government groups who create, manage, and dispose of solid and hazardous waste, or break waste laws.

There are a lot of sites on the HSI, and the HWTF budget is limited; therefore, the EPD ranks them to figure out which sites to clean up first, starting with the [Reportable Quantities Screening Method](#) (RQSM). The RQSM accounts for:

1. [Type, quantity and toxicity of substance released;](#)
2. [Whether or not a site is abandoned or uncontrolled;](#)
3. [Characteristics of the routes of exposure;](#)
4. [Likelihood of human or environmental exposure.](#)

After this evaluation, [the EPD places sites into one of five categories](#), I) Highest Priority, II) Further Investigation Needed, III) Monitoring (Non-residential), IV) Ongoing Corrective Action, and V) Planned Corrective Action. Initially, it's typical for sites to be placed into category II.

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Gaps in the ranking system

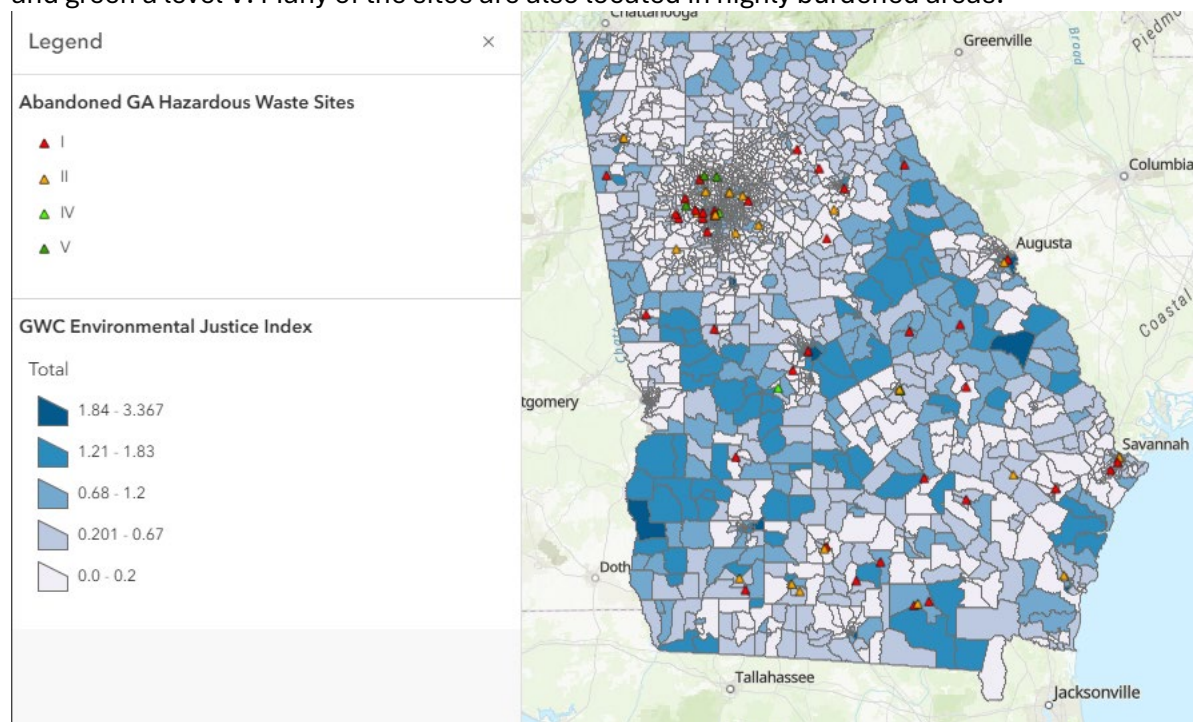
The EPD writes in their [RQSM manual](#) that “**RQSM is not intended to provide a quantitative risk assessment for sites... nor is it intended to be used to rank or prioritize sites where releases have occurred for the purpose of determining which sites pose the greatest risks**”. Yet, after RQSM evaluation is conducted, the only existing processes to prioritize HWTF spending on cleanup activities is EPD discretion.

The EPD is not required to actively reach out to communities and collect their thoughts or concerns on HSI sites; they are only required to post a public notice in a local newspaper if a new HSI site is listed. This puts the burden on communities to stay informed and advocate for their health.

Solely analyzing the release without factoring in the context of the people that live around it, including existing disadvantages or environmental burdens, means the EPD is highly likely to miscalculate the actual risk to communities.

To visualize this, Science for Georgia and other partners created a Georgia specific [Environmental Index](#) to more accurately identify environmental and socio-economic impacts to Georgians, and to add in additional layers including the HSI.

The below image shows the EJ Index and the Abandoned Hazardous Waste Sites (those that are eligible for HWTF monies). The darker the blue, the higher the burden. Red indicates a level I site, and green a level V.



If the EPD seeks to reduce harm and support communities, it is logical to consider which communities are most vulnerable when prioritizing their cleanup efforts. Fortunately, there are existing resources that can help them do exactly this.



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Suggested method to prioritize HWTF monies

The EPD can address cumulative impacts of HSI sites by (1) more actively seeking public input and (2) utilizing several existing tools to understand overall socio-economic and environmental status of the surrounding communities near a HSI site.

The above-mentioned tool can provide insight. Federal agencies use the [Climate and Economic Justice Screening Tool](#) (CEJST) to help identify disadvantaged communities that could benefit from the White House's [Justice40 initiative](#). It assesses eight different categories of disadvantage (e.g., housing, health, legacy pollution), and it labels census tracts as either advantaged (0) or disadvantaged (1) based on indicators within these categories (e.g., housing cost, number of individuals with diabetes, history of pollution). If a population is at or above the 90th percentile for any indicator in a category, while also being at or above the 65th percentile for low income, it gets a one.

Actions citizens can take

After using the [map tool](#) to identify nearby hazardous waste sites, there are a few actions citizens can take to have their voices heard and advocate for cleanups. The two main avenues for action are the EPD and local government. The EPD is available via their [main phone number](#) to provide updates on any hazardous site, connect citizens to an HSI site's project officer, or receive community concerns and requests about the importance of site clean-up. County commissions or city councils can also advocate on behalf of their citizens to the EPD for cleanups, or for reimbursement for their own cleanup activities in the case of [landfill cleanups](#). These organizations may need convincing to take hazardous waste cleanup seriously though. In this case, it's up to citizens to unite, research, educate one another, and demand action from their representatives when it comes to cleanups or changes to the EPD's risk and spending prioritization methods. The more people who rally behind a request to these groups, the more likely it is to be successful.

Learn More

The [Environmental Justice Index](#) map tool (Instant App) can help people identify communities near them that are overburdened, hazardous waste sites near them that are eligible for clean-up under current EPD prioritization, and areas where these two things do not align. The [Environmental Justice in Hazardous Waste Clean-ups](#) story map also explains more about environmental justice as well as why and how the EJ Index map tool was developed.

About Science for Georgia

Science for Georgia is a 501c3 dedicated to bridging the gap between scientists and the public through training, outreach opportunities, and direct contact with the public, policymakers, and the press. Science for Georgia highlights how science can impact people's lives and advocates for the responsible use of science in public policy.

Please reach out with any questions or comments info@sci4ga.org



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