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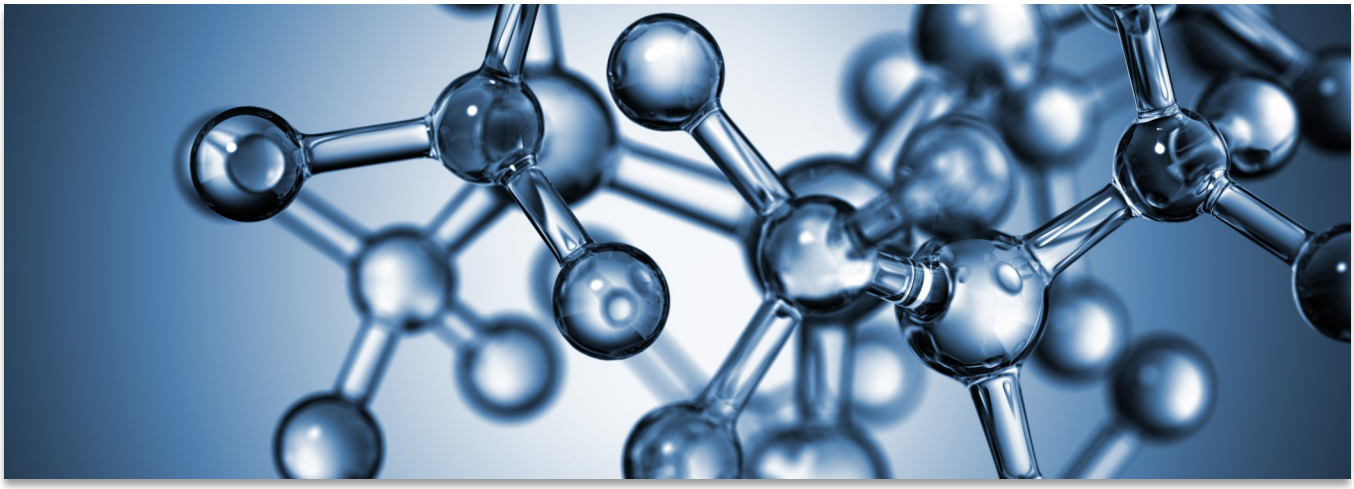
CHEMICAL HAZARDS PROGRAM NEWSLETTER

The latest news from the Chemical Hazards Program



Welcome Readers!

The *Chemical Hazards Program (CHP) Newsletter* highlights important topics and events from the last year and is published for district and county Environmental Health Specialists, and others working in Georgia Public Health.

Under a cooperative agreement with the Agency for Toxic Substances and Disease Registry, CHP is a non-regulatory program that provides information to the public and other professionals about toxic chemical exposures and their potential health effects, as well as information on how to reduce, eliminate, and prevent exposures to hazardous chemicals in the environment.

Our program provides public health assessments, health consultations, technical assistance, community education, staff training, and referrals for district and local health departments, residents, educators, healthcare professionals, and state and federal agencies.

We Offer Training

CHP offers a variety of professional training for environmental and public health staff, academia, and other state and federal agencies. Training topics include:

- Chemical Hazards Program Services
- Impacts of Environmental Hazards on Public Health
- Risk Communication for Chemical Exposure-related Issues

Meet Our Team

Frank Sanchez — Director
Faith Flack-Walker — Health Educator
Anita Saha — Health Assessor

In This Issue:

GEORGIA DEPARTMENT OF PUBLIC HEALTH

Hot Topic: Georgia Safe Siting Program

Learn about ATSDR's Choose Safe Places for Early Care and Education Initiative.

The Georgia Safe Siting Program (GSSP) is part of a national initiative – Choose Safe Places for Early Care and Education – led by the Agency for Toxic Substances and Disease Registry (ATSDR). The Georgia Safe Siting Program was developed to screen new early care and education (ECE) programs to identify potential environmental hazards at or around a child care location, and protect children from harmful exposures. Because children are still growing and developing, they are uniquely susceptible to health threats from chemical exposures. Addressing these concerns, especially before a child care program is established or licensed, can prevent and reduce exposures to environmental contamination.

Our screenings include careful consideration of 4 key elements:

1. **Former use of the site.** Were toxic chemicals previously produced, used, stored, or disposed of at the proposed child care center location?
2. **Nearby sites and activities.** Are known hazardous waste sites located in close proximity to a proposed child care center?
3. **The presence of naturally-occurring hazards.** Do potentially harmful, naturally occurring substances exist on the property? Like radon or arsenic?
4. **Access to safe drinking water.** Does the site have a well that will be used for providing drinking water? Has this well been tested for drinking water quality standards? Is the water safe to drink?

Did You Know?

Children are more at risk from exposures to harmful substances than adults?

- Children are not small adults. Their developing brains and bodies are more vulnerable to harmful chemicals.
- Children drink more water and breathe more air relative to their body size than adults do.
- Crawling and hand-to-mouth behavior can increase children's exposure to toxic chemicals in the environment, which can have long-term impacts.

To screen proposed sites, CHP worked with partners to develop a mapping tool using Geographic Information Systems (GIS). This allows us to visualize and analyze spatial data to determine the proximity of ECE programs to areas that may contain environmental hazards. The mapping tool currently includes EPD hazardous sites inventory, active NPL sites, other hazardous waste corrective action sites, and brownfield sites in Georgia. Proposed sites that fall within a specified buffer of these operational layers warrant further investigation.

Child care applicants can review our Safe Siting Guidelines and complete a Property History Questionnaire online at *www.dph.georgia.gov/georgia-safe-siting-program*. Our staff reviews submitted responses, along with additional information about the proposed site, and provides the applicant with a personalized report and recommendations.

Visit the CHP Website

Find us online at:

dph.ga.gov/chemical-hazards

We hope the CHP website will become your source for chemical hazards information!

By accessing this site, you will be able to quickly retrieve chemical-specific health information, find out about chemical exposure investigations conducted in your community, locate consultation and referral sources, and much more!

- CHP services and contact information
- Public health assessments and health consultations in your community
- Brownfields and land reuse
- CHP publications
- Chemical fact sheets
- Hazardous waste sites in Georgia
- Community involvement
- Georgia Safe Siting Program
- Fish consumption guidance
- Links to websites of interest
- Helpful Resources

What's NEW?

Health Education Materials

Check out our new "What Not Mix" and "Cleaning, Sanitizing, and Disinfecting with Bleach'" infographics online!

Need printed materials?

Have an event coming up? Or, is your county in need of printed materials to share? You can submit print requests for our facts sheets and infographics to faith.flack@dph.ga.gov. You can view our materials at www.dph.georgia.gov/chemical-hazards-publications.

Westside Atlanta Lead Site

The U.S. Environmental Protection Agency (EPA) is conducting sampling and cleanup activities in Atlanta's Westside to address lead contamination in residential soil. Residents in the study area have been encouraged to have their children tested for lead and to allow EPA permission to sample their properties.

Tenants/property owners in the study area can contact EPA to have their soil tested by calling (678) 662-8603 or by completing an access authorization form at www.epa.gov/superfund/westside-lead. Sampling and cleanup is done at no cost.

Georgia Fish Guidelines

Fish are excellent sources of protein, minerals, and vitamins, and play a role in maintaining a healthy, well-balanced diet. However, some fish contain contaminants that can be harmful if eaten too often. This is a special concern for women who are pregnant, planning to become pregnant, or nursing a baby. Through continued outreach efforts, CHP provides education to the public to reduce human health risks associated with the consumption of contaminated fish and seafood.

Every year, the Chemical Hazards Program receives printed fish guidelines from the Georgia Department of Natural Resources and distributes them to the districts to share with the counties. For more information and to view the guidelines online, visit www.epd.georgia.gov/fish-consumption-guidelines.

Martin Fireproofing Georgia, Inc.

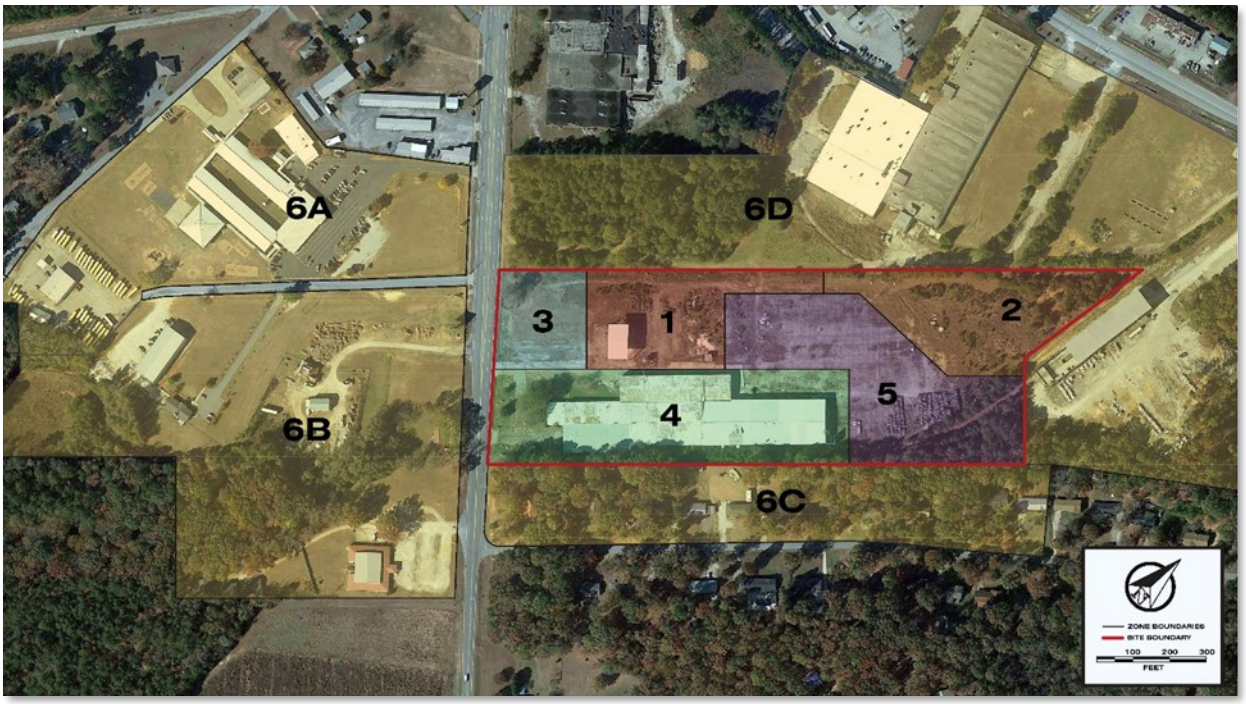
Elberton, Elbert County, Georgia

Full health consultation available online at www.dph.ga.gov/chemical-hazards.

In July 2020, DPH published a health consultation for the former Martin Fireproofing Georgia (Martin Fireproofing) site located in Elberton, Elbert County, Georgia. DPH evaluated the health impacts of potential onsite and offsite exposures to dioxins generated from airborne deposition of contaminants from past on-site incineration of wood treatment wastes. Cancer data was reviewed to determine if there was an association between contaminants generated at the site and reported cancer cases in the community.

Martin Fireproofing manufactured fireproof wood roofing panels from 1968 to approximately 2005. Processes at the site included treating the wood panels with a preservative known as sodium pentachlorophenate. Sodium pentachlorophenate was used as a fungicide in the wood treatment process and stored in dip vats prior to spent product (sludge) being transferred to 55-gallon drums as waste to be burned in shallow trenches dug for this purpose on the Martin Fireproofing property. The incineration of sodium pentachlorophenate sludge that resulted in the dioxin and furan byproducts, took place at the site from 1968 to 1983. The site was placed on the EPD Hazardous Site Inventory list in 1994, though site characterization and remediation activities did not begin until 2015. The site has been unoccupied and nonoperational since 2006.

For this site, we evaluated potential exposure to dioxins and furans from contaminated soil at the Elbert County Primary School, adjacent residential yards, and to youth trespassers on the abandoned property. Following review of onsite and offsite soil sampling results and cancer incidence data from Elbert County, DPH concluded that past exposures to dioxins in soil at the Elbert County Primary School were not likely to harm school children who played in the contaminated area in the past and children were not at any appreciable risk of developing cancer in the future from this exposure. Approximately 92 tons of dioxin contaminated soil was excavated from the Elbert County Primary School playground, backfilled with clean soil and sodded. In addition, past exposure to dioxin in soil at the Martin Fireproofing site are not likely to harm youth who may have trespassed the area in the past. Excavation of contaminated soil at the Martin Fireproofing site was and is currently being conducted.



Zones 1-5 outlined in red comprise the Martin Fireproofing property. Zone 6A in the Elbert County Primary School. Zones 6B-6D comprise offsite sampling locations where dioxins and furans were found.

Household Hazardous Waste

Many common household products can be classified as hazardous waste if such products are spent or no longer useable. Products such as paints, cleaners, oils, batteries, and pesticides can contain hazardous ingredients and require special care when you dispose of them. Improper disposal of household hazardous waste include pouring them down the drain, on the ground, into storm sewers, or in some cases putting them in the regular trash. The dangers of such disposal methods pose a potential risk to the environment and human health. You can help protect human health and the environment by learning how to manage, reduce and dispose of hazardous products safely.

Always dispose of household hazardous waste properly and safely. To safely dispose of household waste:

- Follow the disposal instructions on the product label.
- Share leftover product(s) with someone who can use it.
- Check with local businesses, or where the product was purchased, and ask if they accept recycled waste.
- Contact your local city/county recycling or hazardous waste facility to ask about waste collection dates and accepted products.

For more information: *dph.ga.gov/chemical-hazards*

Visit www.earth911.com or dial 1(800)CLEANUP to search for nearby recycling facilities by zip code.

Forever Chemicals: Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances are human-made fluorinated compounds that do not occur naturally in the environment. These chemicals are highly stable, heat resistant, and have properties that allow them to repel both water and oil. These chemicals do not breakdown or degrade in the environment; hence, the nickname "Forever Chemicals." In the 1950s, manufacturers began using PFAS on a large scale to create consumer and industrial products that resist heat, oil, stains, grease, and water. PFAS stands for Per- and Polyfluoroalkyl substances, a chemical family that includes thousands of compounds that share a common molecular bond between carbon and fluorine atoms. The carbon-fluorine bond is practically indestructible. Scientists sort PFAS into categories based on slightly different structures such as Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), Perfluorohexane sulfonic acid (PFHxS), Perfluorononanoic acid (PFNA), and GenX.

Research involving humans suggests that high levels of certain PFAS in the body may lead to increased cholesterol levels, changes in liver enzymes, small decreases in infant birth weights, decreased vaccine response in children, increased risk of kidney or testicular cancer, and increased risk of high blood pressure or pre-eclampsia in pregnant women[1]. At this time, scientists are still learning about the health effects of exposures to mixtures of different PFAS.

PFAS is ubiquitous in our homes and our environment. Fluoropolymer (polymer with multiple fluorine and carbon bonds) coatings are used in nonstick cookware, stain-resistant furniture and carpets, water-repellant clothing, shoes, cosmetics, lubricants, paint, pizza boxes, popcorn bags, cleaning products, paints, sealants, varnishes, adhesives, electrical wires, insulation, firefighting foams, and many other everyday products. Young children have a higher risk of exposure to PFAS from carpet and cleaning products, mainly due to time spent lying and crawling on floors in their early years. Workers involved in making or processing PFAS and PFAS-containing materials are more likely to be exposed than the general population.

Because of their widespread use and their persistence in the environment, certain PFAS can accumulate and stay in the human body for long periods of time. Pregnant mothers can transmit PFAS to their babies during pregnancy and through breast milk[2].

Complete prevention of PFAS products is impossible since PFAS is present at low levels in some food products and in the environment (air, water, soil, etc.). However, one can take the following steps to reduce the risk of exposure.

1. If your drinking water is contaminated with PFAS above EPA drinking water advisory levels or your state government, use an alternate water source for drinking, preparing food, cooking, brushing teeth, and any other activity when you might swallow water. If you do not know if your water is contaminated, ask your local health department[2].
2. Avoid eating contaminated fish. Check with your local or state health and environmental quality departments for fish advisories in your area and follow the advisories[3]. Please visit the link to learn about Georgia's fish consumption guidelines www.epd.georgia.gov/fish-consumption-guidelines.
3. Avoid using products that likely contain PFAS. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772.

For more information about PFAS, visit:

Georgia Department of Public Health
www.dph.georgia.gov/chemical-hazards

Agency for Toxic Substances and Disease Registry
www.atsdr.cdc.gov/pfas

Common Sources of PFAS

- Non-stick cookware
- Grease-proof food packaging (e.g., pizza boxes, fast food wrappers, popcorn bags)
- Stain-resistant carpets/ couches
- Cosmetics
- Coated dental floss
- Water-resistant clothing and accessories
- Paints, varnishes, and sealants
- Cleaning products
- Furniture (e.g., mattresses)
- Firefighting foam

References

[1][ATSDR] Agency for Toxic Substances and Disease Registry. 2020. PFAS. Atlanta, Georgia: U.S. Department of Health and Human Services; December 2020. https://www.atsdr.cdc.gov/2019ATSDRAnnualReport/stories/pfas.html

[2][ATSDR] Agency for Toxic Substances and Disease Registry. 2021. Information for Clinicians and Environmental Health Professionals. Atlanta, Georgia: U.S. Department of Health and Human Services; May 2021. https://www.atsdr.cdc.gov/pfas/resources/info-for-health-professionals.html

[3][GA DNR] Georgia Department of Natural Resources. 2020. Fish Consumption Guidelines. Atlanta, Georgia: Environmental Protection Division; 2020. https://epd.georgia.gov/watershed-protection-branch/watershed-planning-and-monitoring-program/fish-consumption-guidelines

Chemical Hazards Program Publications

Fact Sheets

Asbestos and Health
Carbon Monoxide Poisoning
Crematory Operations
Environmental Odors
Healthy Urban Gardening
Household Hazardous Waste
Integrated Pest Management
Lead in Soil
Lead and Arsenic in Soil
Mothballs and Naphthalene
Women's Guide to Eating Fish and Seafood
Fish Consumption Guidance
Georgia Safe Siting Program
Georgia Safe Siting Guidelines
PFAS in Pregnant Women and Nursing Mothers
PFAS and Health
Vapor Intrusion
Pharmaceutical Waste Disposal

Infographics

What Not to Mix
Cleaning, Sanitizing, and Disinfecting with Bleach

To view published health consultations and public health assessments, please visit www.atsdr.cdc.gov.

CHP bringing you the word...

Contact Us

Call or email us for more information!

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