



Facts About...

Swann Park

Site Location

Swann Park is located at the intersection of McComas Street and Race Street in an area of South Baltimore with residential and industrial land uses. An isolated group of rowhomes is located approximately 100 feet from the park to the east, while a much larger neighborhood of rowhomes is located within 1,000 feet to the northeast.

Site History

The Park opened in the early 1900s and is partially constructed on fill placed along the Middle Branch of the Patapsco River. Historically, the park was used by neighborhood residents for recreation and local schools and sports groups hold athletic practices and games there. The park is located adjacent to the former Allied Chemical Race Street plant, which manufactured and blended arsenic-based pesticides and other agricultural chemicals. The chemical plant was closed and demolished in 1976.

Environmental Investigations

The Department of the Environment became aware of the contamination at Swann Park when, on April 3, 2007, Honeywell provided MDE some historical files. After these documents came to MDE's attention, the Department required additional sampling which took place on April 16, 2007. After the analyses confirmed the presence of arsenic contamination, the Department advised the City to close the park and issued an administrative order to the City of Baltimore and Honeywell to investigate and propose a remedy to clean up the park. Baltimore City Health Department closed the park until further notice. Under the terms of the order, MDE determined the final cleanup necessary to allow the park to safely be reopened for recreational use. Pursuant to the order, Honeywell completed the installation of monitoring wells in the park, soil and groundwater sampling, aquifer testing, assessment of a historic on-site storm drain, completed a human health risk evaluation, and evaluated a number of possible approaches for cleaning up the park.

The investigation included sampling of soil and groundwater for volatile organics, semi-volatile organics, metals and pesticides. The sampling showed that arsenic is the only chemical in site soil that is consistently detected at levels exceeding regulatory standards. The highest level of arsenic found in the soil was 1,330 parts per million ("ppm") in the northwest corner of the park. The recommended arsenic concentration for soil used for recreational purposes is 10 ppm. The drinking water standard is 10 parts per billion ("ppb"). The groundwater in this area is not used for drinking purposes.

After evaluation of the potential remedies, Honeywell and the City proposed: the excavation and removal of soil over the concentration of 454 ppm arsenic; the placement of a marker barrier fabric; covering the entire park surface with a clean soil layer that is two feet deep to ensure the protection of park users by preventing contact with the remaining soil; and constructing utility corridors to protect utility workers.

After a public information meeting and public comment period, MDE approved the proposed remedy in November of 2007 and remediation of the park was completed in October of 2008, following the excavation and off-site disposal of 13,000 tons (7,730 cubic yards) of contaminated soil. The Department issued a closure letter on the administrative order on March 10, 2009. After remedial activities, Baltimore City began constructing new recreational fields and infrastructure at the site.

Current Status

The park is scheduled to re-open on May 22, 2010, and includes 11 acres of new athletic fields, associated green space, and small facility buildings.

Contact

For additional information, please contact the Land Restoration Program at (800) 633-6101, extension 3437.

Last Update:

May 21, 2010



FREQUENTLY ASKED QUESTIONS

MDE's Land Restoration Program ("LRP") provided oversight of the environmental assessment and cleanup activities related to the release of arsenic from the adjacent Allied Chemical Race Street Plant. The following provides answers to a number of questions frequently asked about this project:

What was the problem at the Swann Park site?

Swann Park is located at the intersection of McComas Street and Race Street, in South Baltimore. The Park opened in the early 1900s and is partially constructed on fill placed along the Middle Branch of the Patapsco River. The park is currently closed, but was historically used by neighborhood residents for recreation and local schools and sports groups hold athletic practices and games at the Park. The Park is adjacent to a former Allied Chemical Race Street plant that was closed and demolished in 1976. Historically, the plant manufactured and blended pesticides and other agricultural chemicals. Historical releases from the plant contaminated the soil on the Swann Park property. In 2007, historic documentation was discovered by Honeywell officials. This documentation showed test results from the 1970s that the soil in the park contained extremely high levels of arsenic and other metals. Additional sampling in 2007 confirmed the presence of arsenic contamination.

Why is it safe to use Swann Park now?

After the contamination was confirmed, MDE advised the City of Baltimore to close the park and issued an order to the City and Honeywell to conduct an environmental assessment of the park and develop a remedial plan to address the contamination.

On April 24, 2007, the MDE issued an administrative order to the City of Baltimore and Honeywell to investigate and propose a remedy for Swann Park. Both Baltimore City and Honeywell complied with the order and conducted an environmental assessment needed to develop a cleanup and redevelopment plan for the site. .

Before Honeywell and Baltimore City implemented the remedy at Swann Park, the primary exposure pathway was through direct contact, ingestion or inhalation of contaminated soils. Once the sampling was complete, MDE approved a remedy that required:

- Removing 7,700 cubic yards (13,000 tons) of contaminated soil that exceeds 454 parts per million ("ppm") of arsenic in the soil;
- Covering the entire park surface with a geotextile barrier fabric and a clean soil layer that is two feet deep to ensure the protection of park users by preventing contact with the remaining soil; and
- Constructing utility corridors to protect utility workers who must conduct maintenance operations once the Park reopens.

The cleanup plan, approved by MDE, protects public health by eliminating the exposure pathway from contaminated soils. The administrative order was closed on March 10, 2009.

How is the contaminated groundwater being addressed?

Contaminated groundwater at Swann Park is related to the adjacent Race Street site and is being addressed under MDE's Corrective Action Permit. As part of the remediation of the park, sheet piling was installed between Race Street and Swann Park to prevent further migration of groundwater from Race Street to Swann Park. Additional assessment and remediation of the Race Street site is ongoing.

What are the potential health impacts of arsenic exposure?

Arsenic has been discovered in Maryland in and around industrial sites and in groundwater at levels that are higher than recommended for long-term exposure. For additional information on the potential health impacts of arsenic, visit http://www.mde.maryland.gov/assets/document/SP_4-19-07_health_information_about_arsenic_factsheet.pdf or the federal Agency for Toxic Substances and Disease Registry (ATSDR) at www.atsdr.cdc.gov/tfacts2.pdf. Any personal health-related questions should be discussed with a personal physician.

What is arsenic?

Arsenic is a naturally occurring metalloid (metal-like) element. In nature, it is usually found in combination with other elements. Most inorganic and organic arsenic compounds are white or colorless powders that do not evaporate. They have no smell, and most have no special taste. Thus, you usually cannot tell if arsenic is present in your food, water, or air. The mineral (inorganic) forms of arsenic are generally more toxic than its more complex organic compounds found naturally in plant and animal tissues.

What is the usual concentration of arsenic in Maryland soils?

Naturally occurring arsenic concentrations in soils in the eastern and central regions of the State typically range from non-detectable to a maximum of 10 ppm. Extensive data collection and evaluation has resulted in the Maryland



Department of the Environment estimating the mean arsenic concentrations in the eastern and central regions of the State to be 2.3 and 3.3 ppm, respectively. Localized areas within the eastern and central regions may have lower and higher naturally occurring concentrations of arsenic. Within the Annapolis area geologic outcrops have resulted in concentrations in the 10 to 25 ppm range.

Where can I find more information about the cleanup of Swann Park?

MDE's website contains about information about the cleanup of Swann Park.

http://www.mde.maryland.gov/Programs/LandPrograms/ERRP_Brownfields/ERRP_Superfund/index.asp

<http://www.mde.maryland.gov/citizensinfocenter/health/swannpark.asp>

Figure 1 – Swann Park Before Remediation



Figure 2 – Swann Park During Renovation

