

CASE STUDY

BayFilter[®] Stormwater Filtration

Kearny, NJ

OWNER

Hartz Mountain Industries, Secaucus, NJ

INSTALLATION DATE

2018

ENGINEERS

Paulus, Sotolowski & Sartor, LLC, Warren, NJ

PRODUCTS

109 BayFilter 545 cartridges

CONTRACTORS

DS Meyers Enterprises, LLC, Waldwick, NJ

DESCRIPTION

A new industrial/commercial office complex with numerous parking lots and two warehouse-size buildings was built on the site of a former landfill. Prior to the project, hazardous organic and inorganic compounds were detected in shallow groundwater. Leachate was free to drain out of the waste materials that had been deposited in the landfill directly into groundwater.

As part of the remediation effort, the engineer designed two filtration systems utilizing 109 BayFilter 545 - 55 in one system and 54 in the other. BayFilter removes fine sediments, heavy metals and phosphorous with its proprietary media filter cartridge.

After stormwater flows through the BayFilter filter media, it drains into a vertical pipe connected to the under-drain system. The under drain conveys the clean, filtered water to the outfall. The system's storage capacity is 28,558 pounds (12,953 kilograms) of sediment and would have a maintenance timetable of eight years based on the site generating 3,606 pounds (1,635 kilograms) of a sediment each year.

