

# Westchester County Airport Installs AbTech's Catch Basin Inserts to Protect Surrounding Waterways and Minimize Environmental Impacts

## Case Study

### Westchester County's Airport Environmental Management System

Westchester County Airport is the third in the nation to be certified by the ISO 14001 Standard. The airport's ISO certified Airport Environmental Management System (AEMS) includes all activities at the airport, a 703-acre facility owned by Westchester County, providing corporate aviation, light general aviation, and commercial airline services with related aviation support facilities.

A significant part of the AEMS is the plan to protect waterways surrounding the airport from polluted runoff caused by chemicals such as fuel, oil, grease, and de-icing fluid. To minimize these potential environmental impacts, the county

installed AbTech Industries' catch basin inserts in the critical storm drains. The program started in 2002 with 18 Ultra-Urban® Filters, produced by AbTech Industries. Because of the success of this pilot program, there are 54 Ultra-Urban Filters in place today.



### Project Challenge

Ten years ago, Westchester County was one of over 80 governmental agencies and environmental groups to sign an historic Memorandum of Agreement to protect New York City's drinking water supply for 9 million New Yorkers without compromising the economic vitality of the watershed communities.

New York City's drinking water supply watershed provides water to one of the most important cities in the world and to many Westchester communities. Because water quality issues go beyond the political or geographical boundaries of any one municipality or agency, many governmental agencies must work together to protect water quality throughout the watershed.

The New York City watershed covers an area of over 1,900 square miles in the Catskill Mountains and the Hudson River Valley. The watershed is divided into two reservoir systems: the Catskill/Delaware watershed located west of the Hudson River and the Croton watershed, located east of the Hudson River.

The Kensico Reservoir, is located in Westchester County and is the final stop for 90% of New York City's drinking water supply before it enters the water tunnels that carry it to household faucets.

The two reservoir systems deliver approximately 1.4 billion gallons of water each day to the people in New York City, areas of Orange, Putnam, and Ulster Counties, and much of Westchester County. The Westchester County Airport Environmental Department coordinates with the New York City Department of Environmental Protection (DEP), which is charged with protecting the water quality of the Kensico Reservoir along with the rest of the New York City water supply system.


About one third of the northern portion of the airport is located within the Kensico watershed; therefore, the airport's water quality protection program is critical.

### Project Description

The 54 AbTech catch basin inserts that have been installed in critical storm drains surrounding the airport use a filtration material, called the Smart Sponge®, which comprises a blend of polymers that effectively absorbs contaminants from water.

Smart Sponge technology has a unique molecular structure based on polymer technologies that are chemically selective to hydrocarbons. Polymers are composed of molecules that chemically react to form large molecules. The non-leaching Smart Sponge





permanently bonds with oil, gasoline, and grease, transforming these liquid petroleum hydrocarbons into a manageable solid waste that forms a gel-like structure. The filtration material is recyclable and provides a complete, closed-loop solution for removing pollutants from water. The filter comes in two standard designs; one a modular unit geared toward curb inlet openings, and the other, a single unit designed for typical drop-in catch basin drains.

### AbTech Industries' Solution Ideal for Airports

AbTech's Smart Sponge® technology comprises a blend of polymers that effectively absorbs contaminants from water. The county targeted critical storm drains – curbside, roadside, along taxiway areas, and on the open tarmac. When spills occur within these areas, the filters are used as a first line of defense. Each AbTech filter can handle 5 to 8 gallon spills, which suits the airport's needs because most spills at the facility are less than five gallons.

Michael Parletta, Westchester County Airport's Environmental Officer said that another advantage of the filters is that they are easy to replace and easy to monitor. "We can physically see the filters and can determine the remaining capacity by lifting them out, cleaning out the sediment, and weighing them."

### What Others are Saying about the Project

*"AbTech catch basin filters are perfect for capturing hydrocarbons, oil, and grease in stormwater runoff. . . We know that despite our aggressive spill prevention and response program, if we don't get to a spill before it reaches the storm drain, the filters can handle them."*

Michael Parletta, Westchester County Airport's Environmental Officer

For more information about the Smart Sponge® technology,  
visit or call **1-800-545-8999**.

