

ATLANTIC COUNTY UTILITIES AUTHORITY (ACUA) MICROPLASTIC REMOVAL PROJECT

NEAA26 RESEARCH AND TECHNOLOGY



National Environmental
Achievement
AWARDS



**World's first microplastic
removal system at a
wastewater treatment plant
located in Atlantic City, NJ**



**Artificial root filters
capture microplastics
from treated effluent**



**580 million
microplastic particles
captured per year**

ACUA

POLYgone



Atlantic County Utilities Authority

Microplastics are extremely small pieces of plastic debris that result from the breakdown of larger plastic products. Wastewater treatment plants, as currently designed, do not treat this emerging contaminant.

The Atlantic County Utilities Authority (ACUA) in Atlantic City, NJ, partnered with PolyGone to install the world's first microplastic removal system at a wastewater treatment plant.

PolyGone developed a filtration system, known as the "Artificial Root Filter," to capture microplastic particles from treated wastewater before it is released into the ocean. The design was installed at ACUA's wastewater treatment plant in September 2024. Since its inception, the pilot has captured more than 670,000 microplastic particles per wash.