

BAM Booms Treating PFAS

Former Hide and Leather Tannery Site
Northeast Michigan

Surface Water Run-off Containment

Project Summary: ORIN conducted a pilot test to treat PFAS impacted surface water flowing through collection vaults using BAM filled booms (8" diameter) and pillows (6" thick). The booms were customized to fit the dimensions of the vault for maximum BAM / surface water contact. BAM booms were placed into the vault and passive flow surface water was in contact with the Booms and Pillow for 27 days before initial inlet / discharge samples were collected for laboratory analysis.

Exceeds 73% Reduction

Site Conditions:

Surface Water Contaminants –

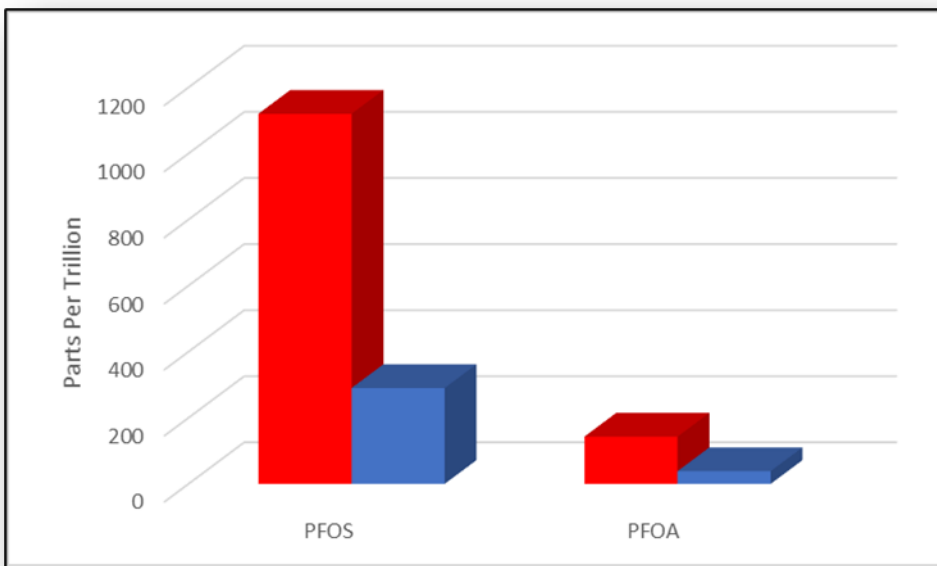
Perfluorooctanoic Acid (PFOA)
143 ng/L
Perfluorooctyl Sulfonate (PFOS)
1120 ng/L

Impacted Matrix –

Water Runoff

Treatment Chemistry –

Custom fit BAM filled
Booms and Pillows



Project Results: Baseline samples were taken prior to treatment to characterize the contaminant level and compare treatment reductions. Pre-treatment analysis showed PFOS at 1,120 ng/L and PFOA at 143 ng/L. Total combined PFAS measured 4,530 ng/L. Following the 27 day time period water samples were collected and analyzed. PFOS measured 290 ng/L and PFOA at 38.5 ng/L showing a 74% and 73% reduction, respectively. Total combined PFAS was reduced to 1,231 ng/L translating to a 73% reduction.