CASE STUDY

NORIT® GAC Performance in PFAS Treatment

Cottage Grove Pilot Study – Groundwater Remediation

BACKGROUND

PFAS contamination in drinking water is a significant public health challenge, particularly in the Twin Cities' East Metro area. The City of Cottage Grove, in partnership with the Minnesota Pollution Control Agency and the Minnesota Department of Health, conducted a pilot study to evaluate different treatment technologies for removing PFAS from groundwater.

OBJECTIVE

The study aimed to assess the performance of **NORIT GAC 400 Plus** in removing PFAS from groundwater, compare it to ion exchange (IX) treatment, and evaluate its cost-effectiveness for full-scale implementation.

SOLUTION

The study confirmed **NORIT GAC** as an effective and reliable solution for PFAS removal in groundwater, particularly in scenarios where pretreatment options are limited. **NORIT GAC** provides municipalities and industries with a robust, cost-effective solution for ensuring safe drinking water. For more information on how **NORIT GAC** can support your water treatment needs, contact us today.

KEY FINDINGS

PFAS Removal Efficiency

- **NORIT GAC** effectively reduced PFAS concentrations, particularly for long-chain perfluorocarboxylic acids (e.g., PFOA) and perfluorosulfonic acids (e.g., PFOS).
- Short-chain PFAS (e.g., PFBA) exhibited faster breakthrough in GAC compared to IX resins.

Media Longevity

- The pilot results indicated that **NORIT GAC** required replacement approximately every 1.1 years of continuous operation to maintain a health index (HI) value below 0.5, the target for safe drinking water.
- IX resins demonstrated longer media life, but required iron and manganese pretreatment to prevent fouling.

PFOS BREAKTHROUGH FOR NORIT GAC 400 VS. COMPETITOR