WaterPro Conference

Certificate of Completion

This is to certify that

Derek Chambers

Completed the Following Training Course

Effectiveness of Granular Activated Carbon for the Removal of PFAS Precursor Compounds

On 09/15/2020

Registration Code: 1002234204001

NRWA

Continuing Education Justification

WaterPro Conference

Derek Chambers

09/15/2020

Hours of Training Provided: **1 Hour**

Registration Code: **1002234204001**

Effectiveness of Granular Activated Carbon for the Removal of PFAS Precursor Compounds

The applicability of different types of granular activated carbon (GAC) for the removal of legacy perfluoroalkyl substances (PFAS) of varying chain lengths from water has by now been well explored. However, as the public's awareness of the presence of so-called precursor compounds grows (i.e. poly- and perfluorinated compounds of varying length and structure that can decompose into legacy PFAS), and available analytical techniques improve, there is an increasing interest in the applicability of GAC to remove these precursor compounds. With the goal of identifying the characteristics that control the selectivity of GACs toward precursor compounds, five types of GAC were examined via rapid small-scale column tests (RSSCTs) for the removal of a suite of several of the most commonly reported PFAS precursor compounds, as well as PFOA and PFOS from ground water. Pertinent characteristics of these GACs, such as activity level and pore volume distribution, were measured and then compared statistically to their performance in the RSSCTs. For utilities and industries facing the need to treat for PFAS precursor compounds, knowledge of the relative importance of these GAC characteristics can be used to guide GAC selection and maximize treatment performance.

Presenters

Casey Theys Technical Development Engineer Calgon Carbon Corporation

The WaterPro Conference is an annual event held by the National Rural Water Association

NRWA