

## DUFRESNE GROUP COMPLETES PROJECT TO PROTECT BURLINGTON DRINKING WATER



The City of Burlington and Dufresne Group teamed up to provide an additional level of protection at the Burlington Water Treatment Plant.

Dufresne Group was retained to study and recommend methods of removing possible synthetic organic contaminants (SOC's) from the raw water. Options that were investigated included filtration of water through granular activated carbon (GAC) and the addition of powdered activated carbon (PAC) to the water supply.

PAC was ultimately selected because of several factors including the individual characteristics of the water treatment facility. PAC offered the best option for removing the SOC's with limited impact to plant operations. An added benefit was that this method also removes organic carbon from the water prior to chlorination, which minimizes the formation of chlorination byproducts known to be cancer causing agents.

The system automatically adds PAC into the raw water supply, proportional to the plant flow. The PAC particles have a huge surface area and SOC's and other soluble contaminants are adsorbed onto the surface of the PAC. The PAC is then removed along with the attached contaminants.

DG specified the PAC storage and metering equipment, and designed the mechanical and electrical support systems. DG also directed contractor efforts with equipment installation and assisted with startup of the equipment.

The system automatically adds PAC into the raw water supply, proportional to the plant flow. The PAC particles have a huge surface area and SOC's and other soluble contaminants are adsorbed onto the surface of the PAC. The PAC is then removed along with the attached contaminants.

DG specified the PAC storage and metering equipment, and designed the mechanical and electrical support systems. DG also directed contractor efforts with equipment installation and assisted with startup of the equipment.