AMERICAN WATER HELPS *COHASSET* AND *WATERBURY WATER TREATMENT PLANTS* WITH UV254

UV254 is the best indicator of NOM. Combine with a Real-Time advantage, treatment plants can react immediately.

THE CHALLENGE:

The City of Cohasset and Waterbury Water Treatment plants have struggled with organics issues from there source water for many years. The Waterbury plant in Connecticut relies on three different holding reservoirs to supply the plant with their source water. This has made optimizing the control processes difficult as each reservoir has its own unique organic matrix. Similarly the Cohasset, Massachusetts plant relies on a shallow, small reservoir (the "Lily Pond") to supply the plant with source water. The challenge faced by both of these plants has been to control their treatment process in response to the variations in organic load both daily and weekly. In the past turbidity has been measured and relied upon by plant operators as an indicator for adjustments in alum dosing. However, measuring turbidity alone doesn't give the entire picture …

LILY POND HOLDING RESERVOIR AT THE COHASSET WATER TREATMENT PLANT

UV254 AT A GLANCE

Like many Treatment Plants, the Cohasset and Waterbury sites deal with fluctuations in natural organic matter (NOM) regularly. UV254 is the best indicator of NOM. Combine with a Real-Time advantage, treatment plants can react immediately to optimize their treatment process and ensure Disinfection By products (DBP) regulations are being met…

> *"Typically have always taken UV254 reading in the laboratory. However when you are seeing drastic changes in organic levels over a day/ week like in the Cohasset Lily Pond or Waterbury reservoirs, the Online (Real UVT Online monitor) is an excellent instrument. Being able to monitor the organics load in real time gives us the ability to adjust and optimize alum dose accordingly and solve issues that previously we had no explanation for."*
>
> MIKE ANDERSON
> *AMERICAN WATER*

THE SOLUTION:

With the help of Mike Anderson from American Water the plants were able to gain control and optimize their process with UV254. Seeing the drastic changes in organics both daily and weekly Mike knew there was a need to track TOC (Total Organic Carbon) on a real-time basis. The Real UVT Online monitor was installed as an afford-able and reliable alternative to TOC. Not only was UV254 valuable for coagulation optimization, it also helped to explain high Disinfection By-Product (DBP) readings, which until now the plant had no explanation for.

THE RESULTS:

By installing the Real UVT Online monitor the plants are now monitoring the organics load from the source water in real-time. Both are able to adjust and optimize alum dosing accordingly instead of relying solely on turbidity. With a standard goal of 0.02 UVA for the treated water, the plant operators can react to spikes in organics, either from a switch between reservoirs in Waterbury or an increase in algal blooms with warmer temperature in the Lily Pond, to ensure this 0.02 UVA goal is being met. In turn the Cohasset and Waterbury plants are able to stay in compliance with DBP regulations and save on costs by dosing accordingly.

REAL UVT ONLINE MONITOR WITH PATENTED ORTHO-BEAM TECHNOLOGY

FOR MORE INFORMATION PLEASE CONTACT:

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