H_2O'C Engineering News - August 2003

Japanese convert Sewage Sludge to Brick
While not quite as dramatic as converting lead into gold, the array of Japanese products made from sewage sludge is pretty impressive as well as useful. In Osaka, Japanese sanitary engineers produce bricks and paving stones that you might be proud to have leading from your driveway to your front door. Tom O'Connor will show and tell how they make some of these beauties at the MWWC Annual Conference in Columbia, September 23-25, 2003.

Radionuclides Rule
Implementation of the radionuclides rule limiting gross alpha, radium and uranium have some potentially glowing water utilities scrambling to find affordable means for controlling alpha emitters. Recently, H_2O'C Engineering has worked with two water systems in Missouri to alleviate their radionuclide problems. For one water system, installation of costly treatment and concentrated waste disposal facilities was avoided. For the other system, a low-cost alternative treatment process is being evaluated.

Mini-Quiz for Scientific Water Bugs
How many bacterial cells might you expect to find in one milliliter of:
River or lake water? Treated surface water? Well water?
How many virus particles are found in natural waters?
To compare your answers, see our discussion at www.h2oc.com in 'eNews'.

Are U.S. Waterworks Secure? -- or Vulnerable to Natural Disasters, Power Outages, Sabotage, ...?
To determine the security of the nation's water supplies, each U.S. water utility is now being called upon to conduct and submit a *Vulnerability Assessment* report. These assessments may prove to be important, not only for the national security, but to many water utilities whose infrastructure has barely been able to keep pace with community growth and regulatory demands.
You may not be completely surprised to learn that, in recent months, H_2O'C Engineering has been offering water system operator training related to vulnerability assessment and new federal requirements. This assessment is intended to form the basis for a new or revised action (emergency response) plan that will be sensible, effective and reasonable in cost.
Call us at 877-22-WATER to discuss having us work with you and your water utility staff to promptly complete your vulnerability assessment and update your emergency response plan.

Turbidiosis? Stuff It!
What water quality parameter is measured more frequently than turbidity? What is the stuff that makes up turbidity? Is your stuff the same as my stuff and their stuff? Does your plant create more stuff during treatment than was in your source water to start with? Is the stuff in your finished water the same as the stuff in your influent water?

How did we get to the point where we are measuring this assortment of stuff so intensively? What is it telling us? Was turbidity once really one of only two regulated *microbiological* parameters along with coliform? Do you know anyone who has gotten sick or died due to turbidiosis? If 0.3 ntu turbidity indicates relatively safe water, how much safer will 0.03 ntu water (when we can measure it accurately) be?

To get our take on turbidiosis and related diseases, read or download our newly posted article on *Acidification* at what we hope is one of your favorite water information web sites.