

WCTI's Green Tech Conserves Water used in Large-scale Cooling Systems

by Robin Yeager on 10/17/2009

in Water

You gotta admire an entrepreneur who believes so keenly in the environmental benefits of his technology that he isn't interested in selling out and risking the burial of his inventions and innovations by a corporate competitor.

Dan Duke, president of <u>Water Conservation Technology International</u> (WCTI), has patented a technology that eliminates "blowdown" (wastewater discharge) from cooling towers, which reduces the water required to run large-scale air conditioning systems by roughly 30%. This alone is enough to merit a Green Star award to WCTI. Another bonus of Duke's system is that it doesn't require toxic chemicals. Instead, key components are rock salt and recycled water.

If you aren't familiar with cooling towers, you can find an explanation <u>here</u>. Also, <u>a Boeing article</u> explains Boeing's success and savings with the WCTI process. See the "Boeing Frontiers" article near the bottom of the page.

WCTI licenses its patented cooling water scale and corrosion control technology, which typically reduces "20-50% of cooling tower blow down water wastage" resulting in tremendous amounts of water conserved, which benefits of all of us, and it reduces the cost of water and chemicals to the end user. The technology also utilizes "green" chemistry and controls corrosion, scale and biological performance. For more information, check out these papers, starting with the 2009 presentation on "Sustainable Natural Green Chemistry (NGC) for Cooling Towers".

After the City of LA asked Jim Hardick, Craft Head for Steam Fitting & Refrigeration, to look into ways that the city can conserve water, Jim found out about WCTI's technology. My thanks to Jim, whom I met at Southern California Edison's 2009 Water Management Conference (see next post), as he invited me to join a small group who got to see the system up close and personal at a Honda North America building in Torrance. We also had the benefit of Dan Duke's explanation of how his technology works and its benefits.

Honda is using its re-vamped cooling system as one of the elements in its <u>goal of attaining LEED</u> <u>Platinum status</u> for its Torrance facility. Let's hope LA and other cities will consider WCTI's green technology.

10.17.09

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