

WASTE**CTs: Why, Where, What, and When (Number 1)**

John Trotti • August 3, 2016



Last week's 2016 Southern California Conversion Technology Conference (SCCTC) put on by the Los Angeles County Department of Public Works (LACDPW) focused on the need for the California Department of Resources Recycling and Recovery (CalRecycle) to rescind its exclusion from full diversion credit of thermochemical CTs for treating MSW feedstocks. The agenda proceeded through a series of presentations and panel discussions detailing the situation and refuting the State's position that CTs do not meet its pollution limits criteria. It's a situation sufficiently near and dear to my heart that I intend to address it in some detail in this column over the next several weeks. (See the agenda below.)

My personal interest goes back nearly two decades when in 1997, MSW Management's companion publication, Remediation Management, blew the whistle on the use of Methyl Tertiary Butyl Ether (MTBE), then in general use as a gasoline additive, effective as an oxygenate. While MTBE's effects in human health were at that moment inconclusive, its chemical properties and affinity for water created concerns borne out in continued testing. At that point, I suggested in an editorial that converting certain wastes to ethanol as an oxygenate in gasoline might prove beneficial, both in air quality and for waste diversion efforts. USDA had similar thoughts and launched its ag-based ethanol program...but that's a discussion for another time.

In 1999, MSW Management, in conjunction with Santa Barbara's Community Environmental Council, hosted a CT colloquy attended by the nation's principal CT companies to discuss how to move efforts into the limelight. Participating in discussions were members of the California Integrated Waste Board—CalRecycle's predecessor—who volunteered to take the helm for future CT group discussion activities. After two years in this role, the Waste Board dropped the program, passing its fate into the hands of the State's legislature where it has remained until today.

There's more to the history and the magazine's further efforts on behalf of CT initiatives, but until recently when LACDWP and others in southern California took up the cudgel, things have remained pretty much at a standstill. The SCCTC marks the beginning of change, which we'll detail in future blogs. For the moment, however, I'd like to discuss what I believe is at stake here...the future of integrated waste management in California, and to some extent the rest of the nation.

This is high-sounding stuff from an observer whose tenure is limited to the period in which we've seen the inculcation and subsequent evolution of the waste management hierarchy into the way we do business. While I admit to referring to our arrival at "crossroads" on several occasions in the past, I'm going back to the well one more time in the belief that we've reached a boundary beyond which lie serious consequences, and for which we will be judged by future generations.

During a period in the past, our waste management practices were the model for the rest of the world, but after we had codified much of what we had learned in the Clean Water and Clean Air Acts, we seemed more content to focus on peripheral issues rather than long-term goals and objectives.

Not so others in Europe and Asia—particularly the Scandinavian countries and Japan—who saw waste management as part of an overall process for achieving what might be called sustainable stewardship over earth resources. While not all of their programs have met with success, their concentration on goals rather than processes allowed them to move ahead of us in matters of stewardship. This did not take place overnight or without a fair amount of backing and filling on the way; nor are they anywhere near the finish line in their efforts.

The Japanese Experience

In Japan, the term used to explain the process is kaizen—continual improvement—a legacy of industrial management practices introduced following WWII by American, W. Edwards Deming, to improve management skills. Interestingly, kaizen was, to some extent, responsible for the spectacular increase in waste generation the country experienced since its introduction in the 1960s, a situation that led to such severe health and safety concerns that by the '80s, it became apparent that rather than more regulations, what was needed was an entirely different approach to waste management, a vision giving rise to the nation's Basic Act on Establishing a Sound Material Cycle Society, based on a hierarchy of methods for managing industrial waste.

Without going into specific activities and programs Japan has employed to move forward toward its goals, what's significant is that it's taken 20+ years to move the bar from where it was when 53% of Japan's waste went to landfills, to today's 4%. WTE in a variety of forms, including a goodly roster of CTs, is responsible for much of the change. Just as important for us is the tremendous amount of experience the nation has in making these processes more efficient.

Within the European and Japanese experiences lie several messages that we will be presenting over the next several weeks that we hope you will find useful in your own CT deliberations.

2016 Southern California Conversion Technology Conference Agenda

Welcome and Opening Remarks

Shari Afshari, Los Angeles County Dept. of Public Works (LACDPW)

Panel: Conversion Technologies and Best Practices Throughout the World

Moderator: Eugene Tseng, UCLA

David Schneider, Anaergia

Tim Cesarek, Enerkem Inc

Frank Campbell, Interstate Waste Technologies

Rob White, Sierra Energy

Panel: Environmental Findings from CT Studies and Projects

Moderator: Coby Skye, LACDPW

Christine Arbogast, Tetra Tech

Jacques Franco, UC-Davis

Bob Shaw, Medical Waste Services

Afternoon Keynote

Ethan Elkind, UC Berkeley

Panel: Conversion Technologies and Sustainability

Moderator: Bonny Bentzin, UCLA Office of Sustainability
Mark McDannel, Sanitation Districts of Los Angeles County
Evan Williams, Renewable Natural Gas Coalition
Craig Cookson, American Chemistry Council
Kenny Miyagi, JFE Engineering America Inc.

Panel: CA Projects, Permitting, and Legislation

Moderator: Gary Petersen, Environmental Problem Solving Enterprises
Karen Bertram, Integrated Energy
Paul Relis, CR&R Waste Services
Greg Wolfe, Yorke Engineering LLC
Assemblymember Mike Gatto

Closing

Coby Skye, LACDPW



WASTECON 2016 is at the turn. Get into the fast lane for the future of solid waste. Join us in Indianapolis from August 22-25. Exchange new ideas. Learn the latest in new products, services and safety practices. Make new connections. PLUS! Advance your career. **Don't stall out! REGISTER NOW**
