

## HOW COMPOSTING REGULATIONS AFFECT FUTURE OF ORGANICS RECYCLING IN WEST COAST STATES

Do you know what regulations apply in your state if you want to compost food residuals from supermarkets? Would your permit allow you to compost sawdust from a lumber mill with cattle manure or add yard trimmings to the mix? Regulations vary greatly among states as well as within a state, depending upon which materials are being handled. *BioCycle* West Coast Conference 2000 — in San Diego, March 6-8, 2000 — will feature a session bringing together specialists from regulatory agencies with compost plant operators in California, Oregon and Washington. Regulators include Lauren Ettlin, Oregon Department of Environmental Quality; Les Gould, Nevada Division of Environmental Protection; Travis Saladino, Arizona Department of Environmental Quality; Jack Watson, California Integrated Waste Manage-

ment Board; and Holly Westcott, Washington Department of Ecology.

Regulations will also be on the agenda at the Conference session on "Overcoming Barriers to Food Recycling," Tuesday, March 7. The target is institutional/commercial/industrial feedstock. West Coast generators, collectors and processors of food residuals — as well as municipal officials overseeing programs — will speak frankly about successes, opportunities, frustrations, failures, challenges and solutions to developing a reliable and economical system for keeping food residuals out of the waste stream. Session participants include Jack Macy, San Francisco Recycling Program; Chris Choate, B&J Landfill/Composting Facility; John Bernardo, Albertsons, Inc.; Judy Crockett, Portland, Oregon; Hilary Gans, BFI; Joe LaMarianna, Sunset Scavenger; Curt Smith, Vons; and Roger van der Wende, Community Recycling.

For complete Conference program and registration information, see pages 15-17 of this issue.

## WOW! WHAT A GREAT IDEA — WHEY INSTEAD OF SALT ON ICY ROADS

The 10 to 15 million tons of salt used most winters to melt ice on roads in North America helps prevent accidents, but the salt causes a lot of corrosion as well. Now transportation researchers believe they've found a practical replacement deicer that may actually inhibit rust. "It is made from ordinary limestone and from whey," writes Matthew Wald in *The New York Times*. "the stuff that Miss Muffet ate while sitting on her tuffet."

Ohio State University researchers have demonstrated a process for making acetic acid using whey, which is the watery part of milk that separates from the curds in the cheese making process. Continues Wald: "In the process of making acetic acid, natural bacteria act on lactose in the whey, turning it into lactate. A second step, developed by the researchers, uses another kind of bacteria to turn the lactate into acetate." It's a

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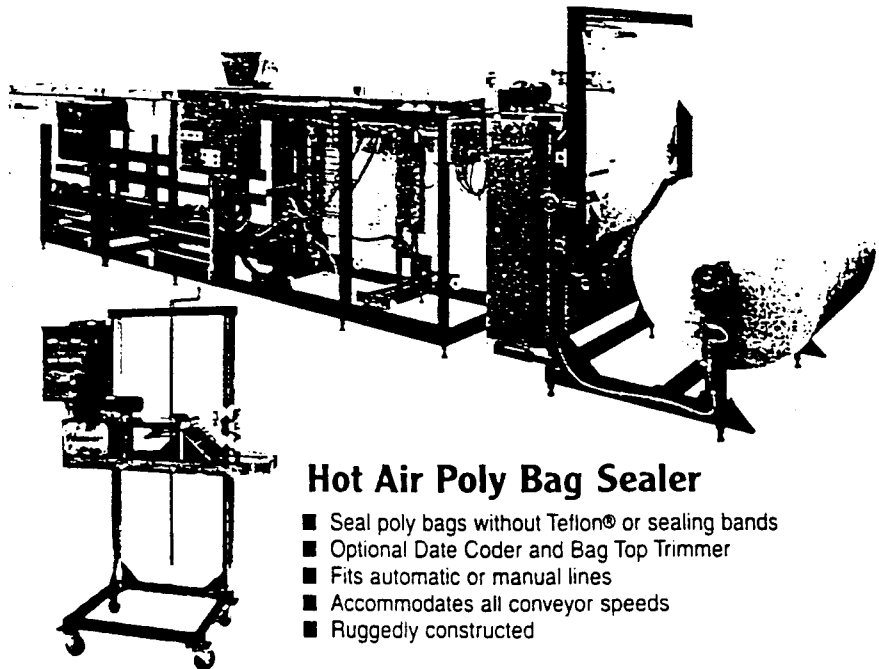
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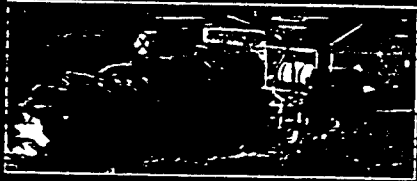


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great example of organics recycling — instead of winding up as a water pollutant when not used as animal feed, the many thousands of tons of cheese by-product find an innovative application. Notes the head of the Federal Highway Administration, Kenneth Wykle: "Some of the largest strides in research come from a willingness to find significance in the seemingly insignificant."

Research chemist Clayton Ormsby — a consultant to the Transportation Department — points out that the other ingredient of the substitute materials (C.M.A. which stands for calcium magnesium acetate) is limestone and also inexpensive. The scientists estimate the C.M.A. could be produced for \$200 to \$300 per ton. Since last year's highway bill allows for 80 percent subsidies to state departments that use salt substitutes, the cost for C.M.A. could be competitive with rock salt. Meanwhile researchers are also reported to be developing methods to produce acetate from municipal sewage and other residuals in the waste stream.

**FEDERAL BUDGET PROPOSAL  
WOULD DOUBLE FUNDS FOR BIOFUELS**

In the fiscal 2001 budget to be sent to Congress next month, President Clinton will propose increasing research funds and grants for bioenergy and bioproducts from \$196 million to \$439 million. The goal is to rely less on petroleum for fuels and plastics and more on utilizing feedstocks like corn husks, chicken litter and specialty crops. According to reports out of Washington, the Clinton Administration seeks to improve the commercial viability of alternative (renewable) fuels such as ethanol to meet the president's goal of tripling biobased energy use by 2010. Four major benefits cited from more supply of biobased products are: Reducing dirty emissions that contribute to global warming; Turning waste into marketable products; Lowering the nation's dependence on foreign oil; and Boosting the farm economy. (See section on "Conversion Technologies" in this issue.)

**MANAGING BIOSOLIDS  
IN THE UNITED KINGDOM**

In the current newsletter from the Northwest Biosolids Management Association, Craig Cogger of Washington State University summarized the biosolids management scene in the United Kingdom. Applications to agricultural land is the primary use for biosolids, with lesser amounts used in land reclamation, disposed in landfills, or incinerated. "Ocean disposal is now banned, but as recently as 1996-1997, nearly 25 percent of sludges were disposed at sea," Cogger writes. "Biosolids quality is similar to that produced in the U.S. Northwest. Levels of trace elements are generally lower in the U.K. (with the exception of lead), but pathogen treatment has lagged behind us. Until recently untreated sludges were routinely applied to agricultural land. Treatment plants are now upgrading pathogen treatment, with a goal of attaining 'advanced treatment' (similar to Class A) at all plants. Application rates are based on agronomic requirement, and the mean application rate to farmland is about three dry tons/acre."