COMPOSTING TRIAL IN KASSEL, GERMANY

A PILOT PROJECT underway in Kassel, Germany is expected to influence how the world looks at composting. The city of close to 200,000 is using — and then composting — as many compostable products as possible. The project, which began in May 2001, is a combined effort of Germany's Federal Ministry of Agriculture and more than 20 biopolymers producers, converters, end-users and retail chains. Participating residents can buy a range of different compostable packaged products in retail stores. The packaging then can be put in bins already designated for organic residuals. The city has had a source separated collection program for organics since 1994. Approved compostable materials are easily identified to consumers by a logo — showing the product meets DIN standards, or fully biodegrades in a large scale composting facility. Participating companies include BASF, Biotech, Cargill Dow, Eastman and Navamon. They are supplying everything from retail shopping bags to yogurt cups. Throughout the project, the buying habits of consumers as well as issues with contamination will be recorded. The resulting compost also will undergo extensive analysis. For more information about the project or companies involved, log on to www.modellprojekt-kassel.de.

Currently, DCP does not meet ASTM's D6400-99 standards, because it degrades through chemical oxidation before the onset of biodegradation and mineralizes at a slower rate than is acceptable. The ASTM has accepted EPI's proposal for alternative test methods to submit to the ASTM. Plastics Solutions supplied Ecosafe bin liners to the 2002 Winter Olympic Games in Salt Lake City. Indaco Manufacturing Ltd. in Toronto makes a recycled polyethylene-based bag known as Bio-Solo. The bags, which have been around since the early 1990s, use a nonstarch formula and have an adjustable degradation time activated by heat and oxygen. The bag is marketed as compostable and degradable. Brad Price of Earthbound Systems Inc. in Moses Lake, Washington, has been distributing the Bio-Solo bags in the Pacific Northwest. He says two of the reasons clients choose the bags are because they are less expensive than others on the market and are readily available. “Tests have shown that the bags have degraded in most systems from windrows to static piles and in most of the modern rapidly degrading composting systems of today,” Price says.

“Whatever we put into compost we must know will completely assimilate if it is to be considered biodegradable,” Narayan says. Price explains that, chemically, the dust should continue to mineralize until it is completely gone, and says that in the meantime the small amount of dust would present no more of a problem than other materials permitted in final compost.

WHAT USERS WANT

When a program hinges on getting bags on time, users need to order from companies that can undoubtedly deliver. “We had a real problem getting bags on time from our old supplier,” says Griswold of Hutchinson, Minnesota. “They came from overseas.” The city is buying Ecosafe bags from Plastics Solutions that are manufactured by Envision of Wichita, Kansas. “We're trying them out because they are more economical and they will be here when we need them,” she says. The bags will be put through the facility's Green Mountain in-vessel composting containers and Griswold anticipates complete degradation. The city operates a full-scale, source separated organics composting facility that processes residuals from commercial, residential and institutional sectors, all of which are collected in compostable plastic bags.