

WPA TODAY

THE NEWSLETTER OF THE WESTERN PLASTICS ASSOCIATION

WWW.WESTERNPLASTICS.ORG

SEPTEMBER 2015



Keith Fanta, Procter & Gamble

WPA SoCal Meeting: HEAR PROCTER & GAMBLE STRATEGIES AND GOALS ON SUSTAINABILITY

Join the WPA for an exciting evening of discussion featuring Keith Fanta, Section Head for Packaging Sustainability at Procter and Gamble. Keith advises all business units at P&G on packaging and sustainability decisions.

Keith has worked at Procter & Gamble for 15 years in R&D covering product development, business franchise and packaging development and design. He has been focused on packaging sustainability for the last 4 years and is currently a Section Head in the global packaging sustainability organization. He leads a global network of packaging engineers

that provides support to all P&G businesses to create strategies and plans to achieve P&G's 2020 sustainability goals. He is the internal consultant on all things related to packaging sustainability.

Keith has also been active outside of P&G where he is on the Board of Directors for Ameripen and Pac Next and is a member of the Sustainable Packaging Coalition. These organizations continue to influence the conversation on the importance of packaging, how to make packaging more sustainable and how to increase the recovery of valuable packaging materials. P&G is constantly looking for joint efforts

and partnerships that can help them achieve their sustainability vision—having zero consumer or manufacturing waste go to landfills, using 100% renewable materials or recycle for all our products and packaging and designing products that delight consumers while maximizing the conservation of resources.

Last year, P&G announced an extraordinary set of goals that is leading the consumer brand companies toward a competitive environment in the worldwide sustainability movement. Last year's press release:

(Continued, see Goals, page 3)

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WPA SoCal Meeting:
September 15, 2015
SPEAKER: KEITH FANTA, PROCTER & GAMBLE
SEE page 2 for complete details — **RSVP now!**

PROCTER & GAMBLE PACKAGING DECISIONS

Sustainability

SEPTEMBER 15, 2015

HOW P&G APPROACHES SUSTAINABILITY FROM A COMPANY PERSPECTIVE:

- How the company is approaching the packaging aspect of their sustainability goals
- What approaches P&G is taking
- What the company goals are
- What packaging attributes are important in their decision making

Guest Speaker: Keith Fanta



Keith has worked at Procter & Gamble for 15 years in R&D covering product development, business franchise and packaging development and design. He has been focused on packaging sustainability for the last four years and is currently a Section Head in the global packaging sustainability organization. He leads a global network of packaging engineers that provide support to all P&G businesses to create strategies and plans to achieve P&G's 2020 sustainability goals. He is the internal consultant on all things related to packaging sustainability. Keith has also been active outside of P&G where he is on the Board of Directors for Ameripen and Pac Next and is a member of the Sustainable Packaging Coalition. These organizations continue to influence the conversation on the importance of packaging, how to make packaging more sustainable and how to increase the recovery of valuable packaging materials. P&G is constantly looking for joint efforts and partnerships that can help them achieve their sustainability vision — having zero consumer or manufacturing waste go to landfills, using 100% renewable materials or recycle for all our products and packaging and designing products that delight consumers while maximizing the conservation of resources.

THANK YOU TO MEETING SPONSOR: HUB INTERNATIONAL



Hub International is a leading global insurance brokerage that provides a broad array of property and casualty, life and health, employee benefits, investment and risk management products and services. Hub is the endorsed broker of the Western Plastics Association. Hub's expertise and volume of business in the plastics industry enables them to provide better risk management tools and insurance solutions while improving your bottom line.

EVENT SPONSORSHIP:

Sponsoring an upcoming WPA program is a great way to increase your firm's visibility to hundreds of decision-makers within our industry.

WPA would like to add your company's name to our prestigious list of supporters! There's a sponsorship option for every need and every budget.

Contact Laurie Hansen for details on how your company can market its services and products to key industry professionals.

916.930.1938 or
info@westernplastics.org

WHEN:

Tuesday, September 15, 2015
5:30 PM Registration & Networking
6:30 PM Program & Dinner

WHERE:

Doubletree Hotel
13111 Sycamore Drive, Norwalk, CA

* To reserve a hotel room, contact Joseline Nucum at Doubletree Hotel: 562.483.2709

COST:

RSVP by September 11, 2015
WPA Member: \$70
First-time Attendee: \$70
Non-WPA Member: \$100

RSVP after September 11, 2015
WPA Member: \$90
First-time Attendee: \$90
Non-WPA Member: \$120

Walk-ins at the event: Add \$10.
Cancellation Policy: Cancellations must be made 48 hours prior to the event. Registration is non-transferable to another event; send a substitute if you are unable to attend. No-shows will be billed.

RSVP today: info@westernplastics.org

P&G SUSTAINABILITY GOALS [CONT'D]

P&G Expands Sustainability Goals to Conserve Resources, Protect Environment

“We are reducing the environmental footprint of our products for shoppers, our communities and the Company while still delivering the quality and performance people expect from P&G products.”

CINCINNATI—The Procter & Gamble Company (NYSE:PG) today expanded its sustainability goals to continue creating value with consumer-preferred brands and products while conserving resources, protecting the environment, and improving social conditions for those who need it most.

“We continue to improve the environmental sustainability of our products across all aspects of their life cycle—from manufacturing, packaging and delivery through consumer use,” said Martin Riant, P&G Executive Sponsor of Sustainability and Group President, Global Baby and Feminine & Family Care. “We are reducing the environmental footprint of our products for

shoppers, our communities and the Company while still delivering the quality and performance people expect from P&G products.”

P&G is guided by 12 established Environmental Sustainability Goals toward its vision of 100% renewable energy use, 100% renewable or recycled materials for all products and packaging, and zero consumer and manufacturing waste going to landfills. Since establishing its goals in 2010, P&G has made considerable progress. There now are 70 zero-waste manufacturing sites; energy consumption, water use, CO₂ emissions, and truck transportation are all down significantly; use of renewable energy and the number of virgin-materials certifications are up substantially. P&G also has expanded its social sustainability work, touching and improving the lives of more than 50 million people each year through disaster relief and programs such as Children’s Safe Drinking Water and the Pampers UNICEF partnership.

Today, P&G added new goals for 2020, with emphasis on water conservation and product packaging.

Water conservation has been a long-standing P&G priority. Between 2002 and 2012, the Company reduced water use at its manufacturing plants by more than 58% per unit of production. It now is expanding its commitments to include:

- Reducing water used in its manufacturing facilities by an added 20% per unit of production, with a specific focus on conservation efforts at facilities located in water-stressed regions,
- Providing one billion people access to water-efficient products.
- Packaging sustainability is another key priority for P&G. The Company is on track to reduce packaging by 20% per unit of production by 2020. Given this progress, P&G is raising the bar, committing to:
- Doubling the use of recycled resin in plastic packaging,

- Ensuring 90% of its product packaging is recyclable or that programs are in place to create the ability to recycle it.

In addition to these expanded goals, P&G is working across its supply chain to develop the capability by 2020 to replace top petroleum-derived raw materials with renewable materials, as cost and scale permit.

“We’re committed to grow P&G’s business responsibly,” Riant said. “We want to create industry-leading value for consumers and shareholders while conserving resources, protecting the environment, and improving quality of life for those who need it most. P&G’s growth objectives and sustainability goals are mutually interdependent.” ●



WPA ANNUAL CONFERENCE: GREAT SUCCESS AND LEARNING EXPERIENCE

The June WPA Annual Conference was an enjoyable three-day event that drew more than 80 attendees who participated in a two-day seminar on topics ranging from technical know-how sessions to environmental stewardship—and just plain fun.

Attendees on the first day learned about many new and cutting edge technologies with Reifenhäuser bringing in experts talking about Cast, Sheet and Coating Technology; the Changing Market – From Monolayer to Multilayer; Co-extrusion Blown

Film Technology; Upgrades and Specialty Systems – Simplifying Flexible Packaging Development; and many more exciting topics. Speakers represented Erema, DOW, Syncro, Nova, Polyrema and many others. *Ulrich Reifenhäuser* was present to help welcome attendees and participated in the two-day conference.

Tony Kingsbury again kicked off the second day leading the attendees into a discussion on customer decision making and future packaging choices based

on new and growing trends in sustainability and health: What Your Supply Chain Will Be Asking About Your Products. We heard from Sandi Childs of Association of Postconsumer Plastic Recyclers about APR's new film recycling group which is taking on film and bag recycling across the country. New WPA member Michael Jobs of S. Walter Packaging told participants about what their company is personally experiencing out in the retailer world—how retailers are choosing what bags and other packaging items to purchase.

Rick Weil, Managing Director of Mesirow Financial, gave the audience an inspiring speech about the current state of Mergers & Acquisitions and how WPA members can best position themselves should they be in a position to buy other companies or prepare for the sale of their own manufacturing empire.

In all, the conference attendees applauded the contents of the agenda and enjoyed spectacular weather in Newport Beach, California. Please join us at the next conference opportunity. ●





GRANT RECIPIENTS COULD PARTNER WITH PRIVATE SECTOR GROUPS.

LEGISLATION:

FEDERAL BILL WOULD CREATE ZERO WASTE GRANT PROGRAM

BY EDITORIAL STAFF, RESOURCE RECYCLING

The Zero Waste Development and Expansion Act (H.R. 3237) calls for creating a U.S. EPA grant program, which would fund local government efforts to deploy technology, invest in infrastructure and conduct outreach in support of waste reduction, recycling and reuse.

It was introduced July 28 by Minneapolis-area Democratic Rep. Keith Ellison and referred to the House of Representatives' Energy and Commerce Committee.

"The grants program established in your legislation will provide critical investment in infrastructure and technologies," wrote Mark Lichtenstein, president and CEO of the National Recycling Coalition, in a letter to Ellison. "This will help achieve the goal of a more sustainable America for our future."

The U.S. Composting Council also lauded the legislation.

"The U.S. Composting Council supports this bill and all efforts that help to divert organic residuals away from disposal and into composting," the group said in a statement. "The inclusion of language that offers funding for public/private partnerships should benefit both local business and the environment."

In April, Ellison talked about his intention to introduce the bill after visiting a shopping district in Minneapolis that implemented a commercial composting program with a \$10,000 grant.

Under the legislation, in order to win a grant, a local government would have to establish waste prevention, recycling and composting, reuse or public education goals. Grant recipients could partner with private sector groups.

The bill would authorize an appropriation of up to \$100 million for fiscal years 2016 through 2021 for the grants program. If passed, Congress would still need to actually fund it, however.

Officials from Ellison's office couldn't be reached for comment by Resource Recycling. ●

Reprinted from Resource Recycling, www.resource-recycling.com, August 11, 2015.



MANY LOBBYIST EMPLOYERS ALSO DONATED TO LAWMAKERS.

LEGISLATION:

LOBBYISTS PILE ON GREEN-HOUSE-GAS REDUCTION BILL

BY JIM MILLER, SACRAMENTO BEE

Perhaps no end-of-session fight is as fierce as that over Senate Bill 350, the legislation by Senate President Pro Tem Kevin de León and backed by Gov. Jerry Brown meant to slash motor vehicle fuel consumption, double buildings' energy efficiency and increase the use of renewable electricity.

The climate change measure faces uncertain prospects as lawmakers hurry to finish their work for the legislative year. Yet government filings make one thing clear: the range of interests engaged in the SB 350 debate is broad and deep-pocketed.

From oil producers and solar companies to farm groups, manufacturers and public agencies, more than 200 lobbyist employers reported working on the bill in quarterly filings with the state from January through June, shortly before lawmakers left for their summer recess. They returned Aug. 17.

All told, those interests reported almost \$14 million in direct lobbying expenses on SB 350 or other state matters in the first six months of the year. They also listed \$10.5 million in other payments to influence, an amount that includes other public advocacy efforts by opponents and

supporters of the bill through June. Both sides launched advertising campaigns in recent weeks.

The Western States Petroleum Association, California Chamber of Commerce, Chevron Corp. and NextGen Climate Action, the group led by billionaire environmentalist Tom Steyer, an ardent supporter of the bill, ranked atop the list of lobbyist employers that reported working on SB 350. ●

Reprinted from Sacramento Bee, www.sacbee.com, August 28, 2015.

LEGISLATION :

GOVERNOR BROWN ANNOUNCES SCOTT SMITHLINE AS DIRECTOR OF CALRECYCLE

BY OFFICE OF GOVERNOR EDMUND G. BROWN JR.

Governor Edmund G. Brown Jr. today announced the following appointment.



Scott Smithline, 45, of Davis, has been appointed director at the California Department of Resources Recycling and Recovery, where he has served as assistant director for policy development since 2011.

Smithline was a consultant at the Smithline Group from 2008 to 2011, director of legal and regulatory affairs at Californians Against Waste from 2003 to 2008 and an attorney at Lawyers for Clean Water in 2001. He was a fellow at the Golden Gate University School of Law's Environmental Law and Justice Clinic from 2000 to 2001. Smithline earned a Juris Doctor degree

from the Golden Gate University School of Law.

This position requires Senate confirmation and the compensation is \$153,960. Smithline is a Democrat. ●

Press release reprinted from the Governor's press office, July 16, 2015.



OIL INTERESTS LAUNCHED A BARRAGE OF ADVERTISING OPPOSING SB 350.

LEGISLATION:

JERRY BROWN, SENATE DEMOCRATS FIND UNLIKELY FIGHT ON CLIMATE BILLS

BY DAVID SIDERS, SACRAMENTO BEE

Earlier this summer, it would have appeared unlikely that environmentalists and their Democratic allies would have so much trouble passing new rules to reduce greenhouse gas emissions in California.

After Gov. Jerry Brown announced plans to curtail petroleum use in vehicles and to increase the proportion of electricity derived from renewable sources such as wind and solar, the Senate drafted a package of bills and passed them easily in June.

The legislation enjoyed public support, and it rolled along as the White House and other governments intensified their own efforts to reduce emissions—while praising California for its more ambitious strides.

But following a barrage of advertising from oil companies in recent weeks, the legislation has run into resistance in the state Assembly, where moderate Democrats hold more influence than in the Senate.

This week, about 20 Democrats in the lower house walked into Assembly Speaker Toni Atkins' office to voice a range of concerns. They say the legislation isn't specific enough about how it will affect motorists.

Now, with two weeks before the legislative session ends, senators are floating amendments to their proposals in an effort to mollify Assembly members, while turning up public pressure to pass the legislation. The uncertainty has bewildered activists who once expected a smooth ride in the Democratic-controlled Legislature.

On Tuesday, following a news conference called by Senate President Pro Tem Kevin de León to promote the climate package, business representatives who stood beside him at the Capitol dispersed to lobby individual lawmakers in their offices.

"I was scratching my head," said Rachele Reyes Wenger, director of public policy and community advocacy for the hospital provider Dignity Health. "I didn't even realize that there were all these questions with the Dems on this."

In their closely watched climate package, Senate leaders are seeking to dramatically expand upon Assembly Bill 32, the landmark 2006 law requiring California to reduce greenhouse gas emissions to 1990 levels by 2020.

Senate Bill 350, by de León, would require the state to increase to 50 percent from one-third the amount of energy derived from renewable sources, while reducing petroleum use in motor vehicles by 50 percent by 2030.

In radio and TV ads and mailers targeting moderate Democrats in the Assembly, the California Drivers Alliance, a group funded by the Western States Petroleum Association, has criticized the power of the California Air Resources Board and the legislation's lack of detail about what measures the ARB will take to reduce petroleum use.

The ads have raised fears of gas rationing or surcharges based on motorists' driving habits, neither of which are authorized by SB 350.

The ARB, which would maintain its existing—and often controversial—authority over vehicle emissions and fuel standards, estimates existing policies will reduce petroleum use in cars and trucks by more than 20 percent by 2030. Administration officials say expanding that effort to comply with SB 350 could include
(Continued, see Fight, page 9)

UNLIKELY FIGHT ON CLIMATE BILLS [CONT'D]

building high-speed rail, increasing fuel efficiency of cars and providing more incentives for alternative fuels.

But many lawmakers are leery of ceding authority to the administration to make those decisions.

“There’s absolutely no plan in front of us telling us how they’re going to reduce petroleum by 50 percent by 2030,” said Assemblyman Henry Perea, a Fresno Democrat who is among the leaders of the moderate Democrats. “So without knowing that, I think it’s important for the Legislature to retain authority.”

De León said this week that he is drafting amendments to his bill to address concerns about oversight of the ARB. Among other measures, he is expected to include language barring the ARB from taking measures such as gas rationing, while adding legislative appointees to the board.

Sen. Fran Pavley, the author of a companion bill that would increase California’s emission reduction target to 80 percent below 1990 levels by 2050, is proposing similar amendments to her bill, Senate Bill 32, including requiring the ARB to submit a draft plan to the Legislature one year before adopting new, post-2020 regulations.

The bill’s supporters have said amendments are unnecessary. But Kathryn Phillips, director of Sierra Club California, said that

if they “will help push back on some of the ridiculous comments that some of the oil industry is making, then fine. If it gives (Assembly members) comfort, fine.”

It is unclear whether the amendments will be enough for skeptical lawmakers. Pavley’s proposal would allow the Legislature to modify or reject the ARB’s plans before they take effect, but if the Legislature failed to act, the ARB could go forward without another vote.

Catherine Reheis-Boyd, president of the Western States Petroleum Association, said proposed amendments under discussion at the Capitol do not go far enough.

“We remain opposed to proposals to reduce petroleum transportation in California,” she said in one prepared statement this week. In another, she objected to “blank check authority” for the ARB.

Pavley said allowing the Legislature to hold votes on individual ARB policies as they arise would diminish the regulatory process, subjecting it to an “up-and-down vote heavily influenced by whatever the special interest group is that wants to oppose it.”

She said, “I don’t think that’s the way you do business.”

OIL INTERESTS DONATED AT LEAST \$2 MILLION TO LAWMAKERS

California’s oil companies are a major force at the Capitol. Altogether, oil interests donated at least \$2 million to lawmakers from January 2013 through June. Of that amount, about \$1.5 million went to Assembly members.

The Western States Petroleum Association declined to say how much it is spending on its ads.

Proponents of the bill are countering aggressively. Tom Steyer, the billionaire environmentalist, is sending mailers supporting SB 350 into Democratic districts. The state’s Democratic U.S. senators, Dianne Feinstein and Barbara Boxer, urged Assembly members in a letter this week to pass the legislation. And Brown, who has made climate change a priority of his administration, is sharpening his rhetoric.

“The oil industry is in deep trouble,” he told reporters Monday. “They have a product that is highly destructive, while highly valuable at the same time. And we’re trying to work out the right policies.”

While the oil industry fights the legislation on one front, the state’s utilities are pressing for revisions to part of the bill that would require California to increase to 50 percent from one-third the proportion of electricity the state derives from renewable sources. One utility, Sempra

Energy, the parent of San Diego Gas & Electric Co. and Southern California Gas Co., said in a letter to de León last week that it will support the bill after the Senate leader agreed to a short list of modifications.

Perea, who participated in the meeting with Atkins this week, said his concern about the climate legislation is not a response to oil companies’ objections, but to regulations and costs he fears could burden his constituents.

“Let’s be clear: The oil companies want both of these bills to die,” Perea said.

But Perea said he and many other Democrats, though hesitant on the legislation, do not.

“I think there are a lot of members who want to say ‘yes’ to the climate package because we believe in the goal, and we believe that climate change is happening, and we think that the California Legislature can and should be the leader in the fight against global warming,” Perea said. “Having said that, we can’t take a one-size-fits-all approach in dealing with the issue.”

He added, “I’m very optimistic that we’re going to get there. It’s just going to take some time.” ●

Reprinted from Sacramento Bee, www.sacbee.com, August 28, 2015.



A PREVIOUS BUDGET DEAL DEDICATED MUCH OF THE MONEY TO AFFORDABLE HOUSING, TRANSIT AND THE HIGH-SPEED RAIL PROJECT.

LEGISLATION:

CALIFORNIA CAP-AND-TRADE BILLS SEEK BILLIONS MORE THAN AVAILABLE

BY JEREMY B. WHITE, SACRAMENTO BEE

California lawmakers have proposed spending billions more in cap-and-trade money than is likely to be available, according to a report compiled by an advocacy organization critical of the climate program.

Under the state's system for curbing greenhouse gases, businesses must buy emissions credits. Revenue from those auctions flow into a state fund that can be used for projects that further reduce carbon emissions. A previous budget deal dedicated much of the money to affordable housing, transit and the high-speed rail project.

Gov. Jerry Brown and legislators have not yet agreed on how to spend what Senate budget officials estimate to be over \$2.7 billion available this year, having agreed during budget talks to divide up the cap-and-trade fund later.

Legislators weighed in early and often this year with bills dictating where the growing fund could be spent. According to an analysis by the California Taxpayers Association, legislators have floated 23 bills that would allocate a whopping total of \$4.8 billion.

It's not just an academic exercise for the California Taxpayers Association, which opposes some of the bills—including measures to spend money on river cleanup projects or on renewable energy for low-income homes—as improper uses of the cap-and-trade money. The group filed an amicus brief in support of a lawsuit challenging cap-and-trade's constitutionality.

In a world of finite revenue, Sacramento policymakers regularly have to pare back spending proposals. In deciding this May

which bills would advance from and which were too costly to move on, the Assembly Appropriations Committee considered \$17.4 billion worth of proposals and let out a package costing a total of \$435 million ●

Reprinted from Sacramento Bee, www.sacbee.com, August 18, 2015.



IT NARROWLY PASSED THE UPPER HOUSE.

LEGISLATION:

BILLS WOULD BAN CA EMPLOYERS FROM ASKING CERTAIN QUESTIONS

BY CHRIS NICHOLS, CAPITAL PUBLIC RADIO

Employers in California would lose the ability to ask job applicants their salary history and job status under separate bills passed by the California Senate Tuesday.

The measure on salary history, AB 1017 by Assemblywoman Nora Campos, D-San Jose, aims to increase pay equity. Supporters say attaching a woman's historically lower salary to a job application can perpetuate lower pay.

It narrowly passed the Upper House, with opponents such as Sen. Jeff Stone, R-Riverside County, calling it unnecessary.

"This bill is just another one of many attempts to inappropriately and unnecessarily interfere with the relationship between employers and job applicants," Stone said on the Senate floor.

Senators easily passed the measure that would ban employers from asking whether a job seeker is employed.

Both bills head back to the Assembly for final consideration.

Also in the Legislature, the Assembly approved a bill that would limit the carrying of concealed firearms on school and college campuses. That bill, SB 707, is authored by Sen. Lois Wolk, D-Davis.

Current law allows individuals with a concealed weapons permit to bring their firearm on campus without permission from school officials.

Assemblyman Bill Dodd, D-Napa, told his colleagues that police chiefs and school districts could create their own policies under the measure.

"This bill puts control of firearms on campus grounds squarely where it belongs, with those public safety officials responsible for the safety of our students and staff on school or college campuses," Dodd said at the Capitol.

Several Republican Assembly members said the restriction could make schools less safe. They say it could prevent individuals deemed responsible from being able to respond to a school shooter with their own firearm.

That bill heads back to the Senate for a final vote.

The Legislature is making final votes on hundreds of bills before wrapping up its session next week. ●

Reprinted from Capital Public Radio, www.capradio.org, September 1, 2015.



THE MEASURE
WOULD STILL
BAN THE SALE
OF PRODUCTS
CONTAINING
PLASTIC
MICROBEADS
AFTER 2020.

LEGISLATION:
**SCALED-BACK PLASTIC
MICROBEAD BAN SURVIVES
CALIFORNIA SENATE**

BY ALEXEI KOSEFF, SACRAMENTO BEE

One day after rejecting a ban on the plastic microbeads used in exfoliating creams and scrubs, the California Senate on Friday approved a scaled-back version of the bill.

Advocates for Assembly Bill 888 agreed to remove language that required the use of natural products as exfoliants in any alternative developed by the cosmetics industry. Also gone is a provision creating state oversight to review the alternatives. The measure would still ban the sale of products containing plastic microbeads after 2020.

AB 888 passed 24-14, garnering support from most of the Democrats and one Republican who abstained or opposed the measure the previous day.

The changes were made to accommodate concerns from senators that the bill would stifle industry innovation in coming up with suitable replacements for the microbeads, plastic particles small enough to pass through water filtration systems that have

gained attention as a significant source of pollution as they have appeared in the bodies of fish and other wildlife. AB 888 was heavily opposed by manufacturers and cosmetics companies such as Johnson & Johnson and Procter & Gamble.

But during a chaotic floor debate, Republicans continued to raise objections to the proposal, frustrating Sen. Ben Hueso, D-San Diego, who was jockeying the bill for Assemblyman Richard Bloom, D-Santa Monica.

“I’m just hoping that we don’t play a game here of moving the target where you set a goal and we achieve your goal, and then you move what the goal is,” Hueso said. “I think the bill in essence has done exactly what you requested yesterday.”

Acknowledging that they had not yet had a chance to review the amendments, the Republican senators took a half-hour, closed-door caucus. Upon their return, most remained opposed over the lack of an exception for

biodegradable plastic, which supporters of the bill said does not deteriorate in water.

“Obviously, when it’s not our bill, we think that a one-word change is very, very simple. But sometimes it isn’t,” Senate Republican Leader Jean Fuller said. “Unfortunately, we had hoped that the one word could be improved, and we understand why it can’t.”

Only Sen. Jeff Stone, R-Temecula, joined Democrats in support. Sen. Richard Roth, D-Riverside, also voted against the measure, while Sen. Richard Pan, D-Sacramento, once again abstained.

AB 888 heads back to the Assembly next for a concurrence vote. ●

Reprinted from Sacramento Bee, www.sacbee.com, September 4, 2015.



Laurie Hansen, Executive and Legislative Director for Western Plastics Association

SO FAR THIS YEAR, BILLS AFFECTING THE PLASTICS INDUSTRY HAVE MOSTLY DIED.

LEGISLATIVE UPDATE:

CA BILL STATUS UPDATE: WPA TRACKED BILLS

BY LAURIE HANSEN, WPA LEGISLATIVE DIRECTOR

The California Legislature is scheduled to adjourn for the 2015 Legislative Session on September 15. They will not go back into session until January, 2016. So far this year bills affecting the plastics industry have mostly died and not moved through the

legislative process. Several bills that would have repealed the plastic carry-out bag restriction legislation that passed last year all died in the first committees.

Following is a list of bills that WPA has been tracking and watching.

If you have any questions, please do not hesitate to contact WPA or Laurie Hansen at info@western-plastics.org. ●

WPA BILL WATCH LIST

AB 19 (Chang–R) Governor’s Office of Business and Economic Development: small business: regulations. Status: Dead for 2015, can be carried over to 2016.

Would require the Governor’s Office of Business and Economic Development, in consultation with the Office of Small Business Advocate, to establish a process for the ongoing review of existing regulations. The bill would require the review to be primarily focused on regulations affecting small businesses adopted prior to January 1, 2016, to determine whether the regulations could be less administratively burdensome or costly to affected sectors.

AB 48 (Stone, Mark–D) Cigarettes: single-use filters. Status: Dead for 2015, can be carried over to 2016.

Would state findings and declarations of the Legislature regarding the health and safety hazards to residents of the state related to cigarettes utilizing single-use filters. The bill would prohibit a person or entity from selling, giving, or in any way furnishing to another person of any age in this state a cigarette utilizing a single-use filter made of any material, including cellulose acetate, or other fibrous plastic material, and any organic or biodegradable material.

AB 190 (Harper–R) Solid waste: single-use carryout bags. Status: Dead for 2015, can be carried over to 2016.

Current law, inoperative due to a pending referendum election, would otherwise, as of July 1, 2015, prohibit stores that have a specified amount of sales in dollars or retail floor space from providing a single-use carryout bag to a customer, with specified exceptions. This bill would repeal the above provisions and related provisions. This bill contains other related provisions and other existing laws.

AB 191 (Harper–R) Solid waste: single-use carryout bags. Status: Dead for 2015, can be carried over to 2016.

Current law, inoperative due to a pending referendum election, would, as of July 1, 2015, prohibit stores that have a specified amount of sales in dollars or retail floor space from providing a single-use carryout bag to a customer and prohibit those stores from selling or distributing a recycled paper bag at the point of sale unless the store makes that bag available for purchase for not less than \$0.10. This bill would repeal the requirement that a store that distributes recycled paper bags make those bags available for purchase for not less than \$0.10. This bill contains other related provisions.

(Continued, see Watch List, page 14)

WPA BILL WATCH LIST [CONT'D]

AB 199 (Eggman–D) Alternative energy: recycled feedstock. *Introduced: 1/29/2015. Last Amended: 8/18/2015. Status: 8/18/2015–Read second time and amended. Location: 8/18/2015-A. APPR.*

Current law establishes the California Alternative Energy and Advanced Transportation Financing Authority to provide financial assistance for projects that promote the use of alternative energies and authorizes the authority to approve a project for financial assistance in the form of a sales and use tax exclusion. This bill would expand projects eligible for the sales and use tax exclusion to include projects that process or utilize recycled feedstock, but would not include a project that processes or utilizes recycled feedstock in a manner that constitutes disposal.

AB 435 (Chang–R) California Environmental Protection Agency: Natural Resources Agency: Web casts of public meetings and workshops. *Last Amended: 8/18/2015. Status: 8/18/2015–Read second time and amended. Re-referred to Com. on APPR. Location: 8/18/2015-S. APPR.*

Would require that each department, board, and commission of the Natural Resources Agency, except as specified, and each department, board, and office of the California Environmental Protection Agency Web cast all onsite public meetings, in a manner that enables listeners and viewers to ask questions and provide public comment by telephone or electronic communication commensurate with those attending the meeting. The bill would require the agencies to make the recording of a Web cast available online for no less than 3 years for subsequent viewing by interested members of the public.

AB 708 (Jones-Sawyer–D) Consumer products: content information. *Status: Dead for 2015, can be carried over to 2016.*

Current law regulates the labeling and use of various consumer products, including toys and toxic household products. This bill would, commencing January 1, 2017, require the manufacturer of designated consumer products for retail sale in this state to disclose the ingredients contained in the product on the product label, as specified, post the product ingredient information and certain additional information about any potential health impacts on the manufacturer's Internet Web site, and provide the Internet Web site and page address on the product label, along with a prescribed statement.

AB 866 (Garcia, Eduardo–D) Economic development: small business. *Status: Dead for 2015, can be carried over to 2016.*

Would authorize GO-Biz to support small businesses by providing information about technical assistance. The bill would expand the duties of the advocate to include sharing with a rulemaking agency the contact information for small business organizations, to the extent that information is available and requested. The bill would also make various findings and declarations regarding small businesses.

AB 876 (McCarty D) Compostable organics. *Last Amended: 6/1/2015. Status: 7/14/2015-Read second time. Ordered to third reading. Location: 7/14/2015-S. THIRD READING.*

Would require, commencing August 1, 2017, a county or regional agency to include in its annual report to the Department of Resources Recycling and Recovery an estimate of the amount of organic waste in cubic yards that will be generated in the county or region over a 15-year period, an estimate of the additional organic waste recycling facility capacity in cubic yards that will be needed to process that amount of waste, and areas identified by the county or regional agency as locations for new or expanded organic waste recycling facilities capable of safely meeting that additional need, thereby imposing a state-mandated local program.

AB 888 (Bloom D) Waste management: plastic microbeads. *Status: 7/14/2015-Read second time. Ordered to third reading. Location: 7/14/2015-S. THIRD READING.*

Would prohibit, on and after January 1, 2020, a person, as defined, from selling or offering for promotional purposes in this state a personal care product containing plastic microbeads that are used to exfoliate or cleanse in a rinse-off product, as specified. The bill would exempt from those prohibitions the sale or promotional offer of a product containing less than 1 part per million (ppm) by weight of plastic microbeads, as provided. This bill contains other related provisions.

AB 901 (Gordon D) Solid waste: reporting requirements: enforcement. *Status: Dead for 2015, can be carried over to 2016.*

The California Integrated Waste Management Act of 1989, administered by the Department of Resources Recycling and Recovery, generally regulates the disposal, management, and recycling of solid waste. This bill would revise specified provisions by, among other things, (1) requiring recycling and composting operations and facilities to submit specified information directly to the department, rather than to counties, (2) requiring disposal facility operators to submit tonnage information to the department, and to counties only on request, and (3) deleting the requirement for counties to submit that information to cities, regional agencies, and the department.

(Continued, see Watch List, page 15)

WPA BILL WATCH LIST [CONT'D]

AB 997 (Allen, Travis–R) Recycling: plastic material. *Status: Dead for 2015, can be carried over to 2016.*

Current law requires the Department of Resources Recycling and Recovery to administer state programs to recycle solid waste, plastic trash bags, plastic packaging containers, waste tires, newsprint, and other specified materials. This bill would restate the policy goal of the state to provide that the goal is for not less than 75% of solid waste generated to be source reduced, recycled, used for power generation in dedicated anaerobic digesters as well as in modern landfills capturing methane gas, or composted by the year 2020, and annually thereafter.

AB 1019 (Garcia, Eduardo–D) Metal theft and related recycling crimes. *Status: Dead for 2015, can be carried over to 2016.*

Would, until January 1, 2020, require the Department of Justice to establish a Metal Theft Task Force Program designed to enhance the capacity of the department to serve as the lead law enforcement agency in the investigation and prosecution of illegal recycling operations, and metal theft and related recycling crimes, and would authorize the department to enter into partnerships, as defined, with local law enforcement agencies, regional task forces, and district attorneys for the purpose of achieving the goals of the program.

AB 1045 (Irwin–D) Organic waste: composting. *Status: Dead for 2015, can be carried over to 2016.*

Would require the California Environmental Protection Agency, in coordination with the Department of Resources Recycling and Recovery, the State Water Resources Control Board, the State Air Resources Board, and the Department of Food and Agriculture, to develop and implement policies to aid in diverting organic waste from landfills by promoting the composting of specified organic waste and by promoting the appropriate use of that compost throughout the state.

AB 1063 (Williams–D) Solid waste: charges. *Last Amended: 8/17/2015. Status: 8/17/2015-From committee chair, with author's amendments: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on E.Q. Location: 8/17/2015-S. E.Q.*

Would raise the fee imposed on an operator of a disposal facility to \$4 per ton commencing January 1, 2017. The bill would require a minimum of \$1.50 per ton of the fee collected from each operator, until January 1, 2022, and would authorize some or all of the fee collected thereafter, to be allocated to activities that promote recycling and the highest and best use of materials, as specified. This bill contains other related provisions and other existing laws.

AB 1090 (O'Donnell–D) Sales and use taxes: exemption: reshoring jobs. *Status: Dead for 2015, can be carried over to 2016.*

Would, for sales and use tax laws, increase the \$200,000,000 threshold to \$500,000,000 for any calendar year on and after January 1, 2016, provided that \$300,000,000 is for purchases of qualified tangible personal property that is used primarily for the purpose of reshoring or insourcing, defined to mean the relocation of a whole process, a piece of a process, a function, or a discrete piece of work from currently outside the boundaries of the United States to inside the boundaries of the state, either within or outside the boundaries of a company. This bill contains other related provisions and other existing laws.

AB 1136 (Steinorth–R) Reusable grocery bag and recycled paper bag: fee: exemptions. *Status: Dead for 2015, can be carried over to 2016.*

Current law, inoperative due to a pending referendum petition, would, as of July 1, 2015, prohibit stores that have a specified amount of sales in dollars or retail floor space from providing a single-use carryout bag to a customer and would prohibit those stores from selling or distributing a reusable grocery bag or a recycled paper bag at the point of sale unless the store makes that bag available for purchase for not less than \$0.10. Subject to the referendum petition, this bill would expand the group of customers who would be provided a reusable grocery bag or a recycled paper bag at no cost at the point of sale to include a customer who is 65 years of age or older and a customer who provides proof of current attendance at a California college or university.

AB 1256 (Williams–D) Solid waste: administration. *Status: Dead for 2015, can be carried over to 2016*

The California Integrated Waste Management Act of 1989 is administered by the Department of Resources Recycling and Recovery in the California Environmental Protection Agency. This would make nonsubstantive changes to the provision establishing the department.

AB 1323 (Frazier–D) Marine debris: removal and disposal. *Status: 8/18/2015-Read second time. Ordered to third reading. Location: 8/18/2015-S. THIRD READING.*

Would authorize a public agency to remove and dispose of after 10 days marine debris, defined as a vessel, as defined, or part of a vessel that is unseaworthy and not reasonably fit or capable of being made fit to be used as a means of transportation by water, if that marine debris is floating, sunk, partially sunk, or beached in or on a public waterway, public beach, or on state tidelands or submerged lands, and if the marine debris has no or little value, as provided, and the public agency provides notice, as specified.

(Continued, see Watch List, page 16)

WPA BILL WATCH LIST [CONT'D]

AB 1333 (Quirk–D) Energy efficiency programs. *Status: Dead for 2015, can be carried over to 2016.*

Would require electric and gas corporations and local publicly owned electric and gas utilities to require recipients of rebates or incentives from their residential or commercial energy efficiency or weatherization programs to install demand response infrastructure on the property for which the rebates or incentives are provided.

AB 1419 (Eggman–D) Recycling centers. *Status: Dead for 2015, can be carried over to 2016.*

Would authorize the Department of Resources Recycling and Recovery to revoke a certification of a certified recycling center found to be abandoned, as specified. The bill would provide an opportunity for a hearing on that revocation to be conducted in the same manner as a hearing for an applicant whose original application for certification is denied.

AB 1435 (Alejo–D) Hazardous waste: toxics: packaging. *Last Amended: 8/18/2015. Status: 8/18/2015-Read second time and amended. Re-referred to Com. on APPR. Location: 8/18/2015-S. APPR.*

The Toxics in Packaging Prevention Act generally prohibits a manufacturer or supplier from offering for sale or for promotional purposes in this state a package or packaging component that includes intentionally introduced lead, mercury, cadmium, or hexavalent chromium in the package or in a packaging component. The act exempted from this prohibition, until January 1, 2010, a package or a packaging component if the manufacturer or supplier complied with specific documentation requirements and the package or packaging component did not contain any intentionally introduced lead, mercury, cadmium, or hexavalent chromium, but exceeded a specific maximum concentration level because of the addition of a recycled material. This bill would provide a similar exemption, until January 1, 2019, for a glass beverage, food, or drink container.

AB 1447 (Alejo–D) Solid waste: food and beverage packaging. *Status: Dead for 2015, can be carried over to 2016.*

Would require, commencing July 1, 2016, PET plastic packaging manufactured in the state to be manufactured with, and empty PET plastic packaging imported into the state to be filled with food or drink in the state for sale in the state to contain, a minimum of 10% of postfilled PET plastic, as measured by weight. The bill would require, commencing January 1, 2017, and annually thereafter, every such manufacturer or importer of PET plastic packaging to demonstrate compliance with that requirement by certifying to the Department of Resources Recycling and Recovery certain information.

SB 509 (Hueso–D) Plastic products: labeling. *Status: Dead for 2015, can be carried over to 2016.*

Would authorize the labeling of commercial agricultural mulch film, as defined, sold in the state as "soil biodegradable" if it meets a specified standard for biodegradability of plastics adopted by ASTM International and that standard is also adopted by the Director of Resources Recycling and Recovery. The bill also would make nonsubstantive changes relating to the definition of ASTM International.

SB 625 (Galgiani–D) Waste management: synthetic plastic microbeads. *Status: Dead for 2015, can be carried over to 2016.*

prohibit, on and after January 1, 2020, a person, as defined, from selling or offering for promotional purposes in this state a personal care product containing synthetic plastic microbeads, as specified. The bill would exempt from those prohibitions the sale or promotional offer of a product containing less than 1 part per million (ppm) by weight of synthetic plastic microbeads, as provided. This bill contains other related provisions.

SB 662 (Committee on Environmental Quality) Recycling. *Status: Dead for 2015, can be carried over to 2016.*

This bill would authorize the Department of Resources Recycling and Recovery to expend money in the Recycling Market Development Revolving Loan Subaccount to make payments to local governing bodies within recycling market development zones for services related to the promotion of the zone.

SB 732 (Pan D) Beverage container recycling. *Status: Dead for 2015, can be carried over to 2016.*

Would, on and after January 1, 2017, require every manufacturer of a beverage sold in a plastic beverage container to demonstrate to the Department of Resources Recycling and Recovery that each type of plastic beverage container sold in this state contains, on average, not less than 10 percent postfilled material. This bill contains other related provisions and other existing laws.

(Continued, see Watch List, page 17)

WPA BILL WATCH LIST [CONT'D]

SB 742 (Hertzberg D) Solid waste: diversion. Status: Dead for 2015, can be carried over to 2016.

Would require each state agency and each large state facility, on and after January 1, 2018, to divert at least 60% of all solid waste from landfill disposal or transformation facilities through source reduction, recycling, and composting activities. The bill would also delete an obsolete provision.

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THE AUTHORS POINT OUT THE NEED FOR BETTER DATA AND CASE STUDIES.

RECYCLING: MIXED WASTE PROCESSING MAY HAVE POTENTIAL TO INCREASE RECYCLING RATES

BY AMERICAN CHEMISTRY COUNCIL

A new report that looks at processing mixed waste to extract recyclables finds potential to significantly increase recycling rates of certain materials and diversion rates of municipal solid waste (MSW) in general, primarily due to improvements in processing technologies, such as optical sensors that can identify and separate specific plastics.

The report—*The Evolution of Mixed Waste Processing Facilities, 1970-Today* by Gershman, Brickner & Bratton, Inc. (GBB) of Fairfax, VA—notes that mixed waste processing (MWP) facilities use a variety of new and existing technologies to separate recyclable commodities from a stream of mixed trash, or MSW.

In a review of evolving technologies, the study's authors recount how MWP facilities initially were designed to capture high-energy elements of waste for combustion-based energy recovery (also referred to as waste-to-energy). However, today MWP is attracting renewed interest as a means to boost recycling rates. This is important because even after many residents have separated out their recycled commodities, the average MSW stream may contain up to half of the total volume of recyclables, and in some cases, more.

Technological advances make today's mixed waste processing facilities "different and in many respects better" than older versions, the report's authors say, which could enable communities to recycle at much higher rates than under existing collection systems.

The authors conclude: "Based on its roots in single-stream sortation, today's MWP technology appears promising. The results in terms of outputs, net revenue, and reduced collection costs could be attractive for some communities. The combination of recycling with energy recovery for non-recycled materials is an excellent approach to managing post-use materials more sustainably."

The report also identifies outstanding issues that need to be addressed to achieve these improvements. For example, in some cases technologies may deliver more volume of recycled material, but increased contamination could lead to reduced commodity prices. The authors point out the need for better data and case studies to demonstrate realistic recovery numbers for MWP.

The authors also suggest that coupling MWP facilities with existing large materials recovery facilities (MRFs) could help communities increase diversion rates: "GBB finds that combined MRF and MWP systems have the potential to significantly increase both the volume and total revenue from recycling materials. The potential exists to divert 180 percent more high value metals and plastics from landfill than are diverted today."

"The goal of diverting more materials from the waste stream to higher uses compels us to explore all options," said Craig Cookson, director of sustainability and recycling for ACC's Plastics Division. "As the waste stream continues to evolve, we must consider new strategies and innovations that could help us to meet these challenges."

The report was commissioned by the Plastics Division of the American Chemistry Council (ACC), which is examining methods to increase recovery of plastics. ●

Reprinted from the American Chemistry Council, June 24, 2015.



MORE THAN 500,000 HOUSEHOLDS WERE ADDED TO THE COUNT IN JANUARY ALONE.

RECYCLING: STRONG GAINS ACHIEVED IN IMPROVING CARTON RECYCLING INFRASTRUCTURE

BY CARTON COUNCIL OF NORTH AMERICA

The Carton Council of North America has reported that carton recycling access continued to grow significantly in 2014, thanks to collaborative industry efforts and support from communities nationwide. Access expanded to an additional three states, as well as 6.1 million households across the country, and now more than 53% of households across 48 states can recycle their food and beverage cartons through local curbside recycling and drop-off programs. This momentum is continuing through 2015, as more than 500,000 new households were added to the count in January alone.

Over the past six years, carton recycling access has grown 194%, and now more than 62.4 million U.S. households can recycle cartons through their community recycling programs. Since 2009, the Carton Council, a group of carton manufacturers united to deliver long-term collaborative solutions in order to divert valuable cartons from the landfill, has worked with recy-

cling industry stakeholders and communities to build infrastructure and improve access to carton recycling nationwide.

“It is clear by our continued progress that carton recycling is becoming more mainstream across the country,” says Jason Pelz, vice president of recycling projects for the Carton Council of North America and vice president, environment, Tetra Pak North America. “Carton packaging is increasing in popularity across different categories, and consumers expect to be able to recycle them.”

The Carton Council commitment to growing access takes a holistic approach. This includes technical assistance, grants where and when they are needed and con-

sumer education support. These pieces fit together to help prevent cartons from going to landfills.

“More communities and recycling sorting facilities are seeing the value that cartons bring to their programs, including added convenience for residents and access to high-quality fiber with ready end markets,” says Pelz.

Made mainly from paper, a renewable resource, lightweight and compact in design and with a low carbon footprint, cartons have proven to be a sustainable packaging solution that is growing in use for a variety of food and beverage products. Including cartons as an accepted material in every community recycling program offers a better, more cost-efficient option than other proposed recovery solutions. ●

Reprinted from Packaging Strategies, www.packagingstrategies.com, May 15, 2015.





METRO WILL PLAY A LARGER ROLE IN ASSURING THE INTEGRITY OF THE ENTIRE SOLID WASTE SYSTEM IN PORTLAND.

RECYCLING: PLASTICS-TO-OIL PLANTS COULD FACE MORE SCRUTINY IN OREGON

BY JARED PABEN, PLASTICS RECYCLING UPDATE

The Portland, Ore.-area government is proposing to regulate plastics-to-oil facilities because of concerns about impacts to neighboring properties.

Metro, which is tasked with managing the solid waste system in Oregon's largest urban area, proposes to require licensing and inspections of a variety of new facility types, including those converting plastics to fuel or oil. Metro already licenses and inspects construction and demolition debris sorting facilities and waste transfer stations.

Roy Brower, Metro solid waste compliance and cleanup director, told *Plastics Recycling Update* the facilities present various potential issues, including odors and dust. One in the Portland area accepted plastic food wrappings, presenting putrescibility issues, he said.

Regulatory programs should be proactive and work with facilities before issues crop up, Brower said.

The agency also wants to license and inspect materials recovery facilities (MRFs) sorting curbside materials. Brower said a switch to single-stream recycling has contributed to an increase in contamination, and MRFs are now more akin to solid waste processing facilities, raising issues for nearby properties.

“The big change really came when the area initially moved to a roll-cart system (starting around 2005)—that is when the management of recyclables started to have more of the nuisance, health and environmental risks that characterize other parts of the solid waste stream,” Brower wrote in an email. “There was no specific incident that

triggered Metro's interest in licensing or inspections—but generally the recognition for Metro to play a larger role in assuring the integrity of the entire solid waste system.”

If Metro's elected leaders approve the change, it would then work with the affected facilities and the public to develop administrative procedures, Brower said. ●

Reprinted from Resource Recycling, August 26, 2015.



AVAILABILITY OF COMPOSTING FACILITIES IS A CRITICAL ISSUE.

RECYCLING: OUT TO LUNCH?

BY MIKE VERESPEJ, MAV BUSINESS COMMUNICATIONS

Six of the nation's largest public school districts recently announced they are switching their EPS cafeteria trays to fiber-based compostable products. However, plastics and packaging leaders are questioning whether the school administrators' cost and environmental aspirations are truly attainable.

It's a situation that confounds manufacturers of expanded polystyrene food packaging. With demand growing for more recycled EPS to make products such as picture frames, surfboards, interior moldings and nursery products, six of the nation's largest school districts announced in May that they are switching from EPS to molded fiber compostable lunch trays made from pre-consumer recycled newsprint.

The 225 million trays used annually by the affected schools—in Chicago, Dallas, Los Angeles, Orlando, Miami-Dade County and New York—represent between 10 and 20 percent of the entire school tray market, sources said. And industry executives are particularly frustrated by some of the assertions made by the school districts surrounding the switch to compostable fiber products, noting that the educators' arguments about cost and environmental impact don't appear to mesh with the facts.

For example, the school alliance stated that the molded fiber compostable trays will cost schools just under 1 cent more

per tray than the EPS trays, which amounts to an additional cost of \$2.025 million annually for the six school districts. But a representative from Pactiv, the world's largest food-service packaging company, said that based on current EPS tray pricing, the New York City schools alone will be paying \$3.2 million more for trays on an annual basis and the total cost for all the school districts to switch will be closer to \$10 million.

"They are trying to portray the transition as near cost-neutral, but that's not the case at all," said Eric Wulf, vice president of food packaging for Pactiv. "We feel like the constituents are not being properly informed to make a proper cost-benefit decision."

So what are the realities behind the massive school switch from EPS trays? In short, the situation seems to be driven by public education leaders trying to do the right thing—but in a complex environment where recyclability, compostability and market realities are all evolving fast.

The demand for EPS

The Urban School Food Alliance is the coalition leading the change on behalf of the six school districts, and it has stated

there is limited demand for recycled EPS and that it can't be recycled. However, Lynn Dyer, president of the Foodservice Packaging Institute—which represents companies that manufacture all types of food-service packaging including EPS trays and molded fiber compostable trays—dismissed such assertions.

"The claims are false," Dyer said. "There is an end market for it... and it can and is being recycled."

While molded fiber compostable trays being brought on by the schools can potentially be more environmental friendly, they also require more energy and water to manufacture than EPS trays, according to a 2011 study from Franklin Associates Ltd. The study was prepared for the Plastics Foodservice Packaging Group of the American Chemistry Council.

For their part, the six school districts say they have made the most environmentally friendly decision, one based on the needs of school systems and the surrounding communities.

"These are difficult decisions," said Manish Singh, regional manager for food service for the Los Angeles Unified School District. "We want to be the greenest school district in the nation, and we want to reduce the use of things that impact our environment."

(Continued, see Lunch, page 23)



EPS SCHOOL LUNCH TRAYS [CONT'D]

Three years ago, the L.A. school district switched from EPS trays to cardboard-based trays for a number of reasons: the fact that EPS trays are not biodegradable and had a perceived lower recycling value and because the district wanted to move 20 percent of its trash to recyclables. EPS trays can be recycled, but students need to be educated to scrape food off the trays and stack them. And then the trays need to be densified on site to be cost-effectively transported to a materials recovery facility that accepts them.

“That switch away from EPS trays helped us attain that 20 percent goal almost immediately,” said Singh. “The students became educated and conscious of these things, and it changed how they look at Mother Earth and the environment. The switch is more far reaching than just starting a new purchasing program. It is how we want to be environmentally conscious and to create that awareness in students.”

That’s why the district now plans to switch to the molded fiber compostable trays. There is no timetable for the switch yet. The district has completed just one two-and-a-half week pilot program that had favorable results at one school.

“We are committed to making that happen,” said Singh. “The buying power of the alliance helps us get a decent price. It’s more expensive, but if it’s for the greater good, we try to incorporate it even when it costs more. It’s something we feel we must do.”

Concerns over compost capacity

But others argue that the molded fiber compostable trays are worse for the environment than their EPS counterparts if they are not composted properly. And they say that scenario is likely to unfold because a lack of commercial composting facilities in the U.S. means the school districts will likely only be able to compost a very small percentage of the material generated in cafeterias.

“The compost industry in the U.S. is not being driven by demand for compost products, but by the increased cost of landfill disposal, public support for resource conservation and local mandates on waste diversion,” said Kerry Flickner, national director of waste solutions for Foodservice Sustainability Solutions, Inc., a company that makes products to help schools recycle EPS trays and manage food scraps. “There are no commercial composters that can handle the 10 million pounds of material these six school districts will produce every 180 days.”

The website findacomposter.com, produced by BioCycle magazine and sponsored by the Biodegradable Products Institute, shows no commercial composter that accepts compostable products within a 50-mile radius of either Miami or Los Angeles. It shows one such facility near Dallas, three near Orlando, five around Chicago and nine in proximity of New York City. And none of those composters has anywhere near the capacity to handle the volume of school

trays each of the urban school districts will produce.

“We are proponents of composting food waste, yard waste and compostable food-service ware,” said Mike Levy, senior director of the Plastics Foodservice Packaging Group at the American Chemistry Council. “But right now the idea of composting food-service ware on a full commercial scale in permitted facilities is in the embryonic stage. And only when you compost a compostable product is there any end-of-life-benefit.”

“The school districts have good intentions, but they are making decisions that have a more negative impact on waste because they didn’t look at the entire life cycle of the product and end-of-life issues,” Flickner said. “So while these initiatives appear to be environmentally sustainable, most are actually counterproductive for the environment, and all they do is spend precious school funds.”

Another packaging industry executive concurs: “People think it is going to be better for the environment, but they don’t realize it is being transported at the end of life sometimes 1,000 miles away, creating an enormous amount of greenhouse gases. So any benefit is negated by the transportation costs.”

And that scenario is likely, at least initially, for all six school districts. For example, a three-year-old independent report (“Taxes In, Garbage Out” from the New York-based nonprofit group Citizens Budget Commis-

sion) found that about 75 percent of New York City’s garbage goes to landfills, with 98 percent of that shipped to Ohio, Pennsylvania, South Carolina and Virginia via tractor trailer trucks that travel 40 million miles annually.

In addition, the Wilmington, Del. composting facility that has processed much of New York City’s collected compostable material was shuttered earlier this year.

Dyer agreed that the availability of composting facilities is a critical issue. “Today, the vast majority of commercial compost facilities accept just yard debris and grass clippings,” she said. “Far fewer accept food waste and even fewer accept compostable products. So the onus is on the school districts to make sure those products get composted.”

Dyer added that both EPS and molded fiber compostable trays are environmentally friendly when handled properly. “EPS trays can be recycled, and compostable trays can be recycled or composted. ...There is no one silver bullet because composting and recycling are local issues.”

Building the market?

Eric Goldstein, alliance chairman and CEO of school support services for the New York City Department of Education, acknowledged that if composting is not available immediately, the molded fiber compostable trays will get handled as waste in his district, but he argued it’s important to help develop the necessary infrastructure.

(Continued, see Lunch, page 24)

EPS SCHOOL LUNCH TRAYS [CONT'D]

“It’s hard to build a business case for composting facilities if there is nothing to compost,” said Goldstein. “And without a steady stream of materials, you are not going to attract the private sector investment. So do you need the cart first, or the horse first?”

Representatives from other school districts said they are only now looking at how to deal with the specifics of getting trays into proper compost operations.

“We do not have a composting facility contract in place for waste pick-up, but we are developing compost labs for in-house programs connected to school-site organic edible gardens and learning labs on campus,” said Denise Landman, director of public and media relations for Miami-Dade County Public Schools. “This will provide new opportunities for local and regional composting development and biodegradable waste disposal initiatives.”

Dallas is at a similar stage.

“While we are discussing composting options and partnerships, nothing is concrete at this point district-wide,” said Andre Riley, director of news and information for the Dallas Independent School District, which operates the public school system for much of the Dallas region. “As of now, some schools in the district are composting [food waste, but not trays] in their school gardens. We are working on a larger-scale solution.”

The school districts for Los Angeles and Chicago, meanwhile, are currently running pilot programs for collecting compostable material at a limited number of schools. And Orlando is further behind, still investigating how to set up a pilot program. “We are working with our environmental department to develop a composting pilot in Orange County,” said Jennifer Smith, area manager of marketing for the Orange County (Fla.) Public Schools Food & Nutrition department.

But whether any of those in-house composting efforts at schools will eventually emerge is debatable. “You need the proper balance of carbon and nitrogen in the right ratio and the right balance of organic feedstocks to get good compost,” said Flickner of Foodservice Sustainability Solutions. “NYC schools alone would need to dispose of 35,000 pounds of trays a day. That’s an unrealistic endeavor in terms of schoolyard composting.”

Houston had a problem

It’s also worth noting one major U.S. school district has already tried to transition to compostable trays—and found the move didn’t work out as planned. Houston public schools had switched from EPS to compostable trays, but couldn’t find a composting facility that could process the 5 million trays it was generating each month.

Houston officials then shifted to a biodegradable product, but a variety of problems led them to

embark on a six-school pilot program with Foodservice Sustainability Solutions. School officials determined EPS could be recycled and that switching back would reduce the district’s waste and save it \$1 million annually. The district switched back to EPS in the fall of 2014.

“You can only change people’s minds with data, and you have to be able to show them the measurable benefits that come from using foam compared to alternative materials,” said Flickner.

So is there a single right choice?

Dyer said school districts need to understand what types of facilities are located nearby “as composting and recycling are both local issues.”

The number of drop-off locations for foam PS in the U.S. is now approaching 100, but more than 70 percent of them are in California and Michigan. In addition, a Dart Container Corp. initiative to recycle EPS food trays has expanded to more than 30 school districts—but it’s concentrated in four states: California, Illinois, Michigan and Mississippi.

San Antonio is currently the only U.S. city outside of California that accepts PS foam at curbside. In California, 65 cities representing 22 percent of the state’s population collect PS material at curbside.

The struggle to fully expand curbside collection of EPS was highlighted in January, when New York City rejected an offer by Dart

to establish an EPS recycling infrastructure and guarantee a buyer for the material. New York City instead banned the use of EPS food-service products in the city. That decision is being challenged in the New York Supreme Court by the Restaurant Action Alliance and Dart.

Food scrap focus

Clearly there’s uncertainty about how EPS trays or the molded fiber compostable trays will be handled at the end-of-life.

But one thing seems certain. Given the nation’s increasing focus on diverting food scraps, which represent roughly 30 percent of all material sent to landfill—and as much as 40 percent of the waste from school systems—it wouldn’t be surprising if school districts and other businesses that use food-service ware continue to look into the economics of switching to compostable trays.

“We are seeing a growth of interest in recovering food scraps,” said Dyer. “So as more and more places look at composting food scrap, it may make sense for organizations in food service to look at compostable packaging. If they are looking to compost all food scrap, then a switch might make sense because compostable trays become a natural add-on.” ●

Reprinted from Plastics Recycling Update, August 2015.



FIVE MRFS WERE SELECTED FOR THE STUDY, REPRESENTING A RANGE OF OPERATIONS.

RECYCLING: NATIONAL TRADE INDUSTRY GROUPS FUND STUDY

BY JENNIFER HAMILTON, HK STRATEGIES

What steps can a resident take to ensure the items they place in a recycling container end up successfully being recycled into new products? And once at a recycling facility, how does one item make it all the way to the correct bale while another ends up in the wrong one, or worse, in the residue and ultimately, the landfill?

Packaging companies want to ensure the packages they put in the marketplace are properly managed at end-of-life, instead of ending up in the landfill. Five national trade associations representing a wide range of packaging types, including the American Chemistry Council (ACC), Association of Postconsumer Plastics Recyclers (APR), Carton Council of North America (CCNA), Foodservice Packaging Institute (FPI) and the National Association for PET Container Resources (NAPCOR), joined together to commission a study to find ways to optimize the recycling of their packaging after it goes into the bin or cart. The study specifically evaluated where packages end up in a sorting facility, why packages flow in certain ways and what potential changes to the sorting processes could improve recovery.

The “MRF Material Flow Study” uniquely looks at how numerous materials flow through several different types of materials recovery facilities (MRFs) with the goal of better understanding how to get more recyclables actually recycled.

“The recycling facility is where the proverbial rubber meets the road when it comes to recycling,” said Derric Brown, vice president of sustainability for the Carton Council of North America and director of sustainability for Evergreen Packaging. “Even in a community with a robust recycling program inclusive of many materials, such as cartons or rigid plastics, if those items do not flow efficiently through a sorting facility and to the right place, all or some of their value may be lost and they may end up as residue, possibly in a landfill. We understand that managing programs and motivating consumers to recycle is challenging enough, so we want to help by finding and communicating the study findings.”

Five U.S. MRFs were selected for the study, representing a range of operations, including those of different sizes and processing different recycling streams (single- and dual-stream). Materials, including paper and plastic cups, clamshells, containers,

domes/trays, bottles, tubs, lids and gable-top and aseptic cartons, were added to the mix of standard recycling items coming in to the facilities. Materials were processed and then sample bales of paper, plastic and residue were tested, with bale contents being sorted into more than 100 categories, to where the materials flowed naturally, without intervention from the MRF operators.

“The study reinforced that everyone plays a role in ensuring recycling is effective and efficient, and that there are actions that can be taken at all steps in the process to help ensure items get their maximum value when they are recycled,” said Jim Frey, CEO of Resource Recycling Systems (RRS), one of the architects of the study. “One such action is asking residents, and other recycling customers, not to flatten items before placing them in recycling containers. The study found that three-dimensional objects (packages in their original form) versus two-dimensional (flattened/crushed objects) have a higher likelihood of making it through the system to the appropriate container lines and bales. This is not only a helpful finding but an actionable one which illustrates that even everyday actions in the home can help (Continued, see Study, page 26)

TRADE INDUSTRY STUDY ON OPTIMIZING RECYCLING [CONT'D]

boost recovery.” The organizations look forward to finding ways to apply this knowledge to increase recovery and working closely with stakeholders, such as communities and facilities. The study was developed and delivered by RRS, Reclay StewardEdge and Moore Recycling Associates. ●

To access the study, learn more from the funders and about how facilities and communities can apply the learnings, click here.

Reprinted from hkstrategies.com, July 9 2015.

KEY FINDINGS FROM THE STUDY

- Size and shape make a difference – Items tend to flow with similarly sized and shaped materials, so containers shouldn't be completely flattened or crushed by residents before being placed in their recycling bin or cart. Additionally, package form and stiffness influences flow. Materials that hold their shape have a higher likelihood of making it to the right bale.
- Good separation is important – Maintaining equipment to ensure efficient sorting is critical.
- Optical sorters can help identify material types – As the recycling stream evolves into being more diverse and lightweight, optical sorters play an increasingly important role.

For more information on these findings, please refer to our infographic and executive summary, which can be found at www.CartonOpportunities.org/MRFStudy.

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CONFUSION
LEADS TO
CONTAMINATED
RECYCLING.

RECYCLING: WHY MOST AMERICANS FIND RECYCLING CONFUSING

BY LINDA TUFANO, WASTE DIVE

The U.S. recycling industry has done a fine job of placing a recycling bin within a plastic-bottle's toss of most consumers.

In 2014, 96% of consumers had access to paper and paperboard recycling, up from 87% in 2010. As for plastics, 94% have access to bottle recycling and 40% to other types of plastics. And glass and aluminum cans are commonly picked up curbside.

So Americans must be savvy about what's recyclable and what's not, right? Wrong.

In a 2014 online poll by the Institute of Scrap Recycling Industries and Earth911, 65% of respondents said they don't understand what plastics are acceptable in curbside collection.

And confusion leads to contaminated recycling.

Susan Robinson, director of public affairs at Waste Management, told USA TODAY the recycling that the industry giant processes is 16% contaminated, double the average of the 8% contamination rate 10 years ago. The Environmental Research & Education Foundation has found that contamination rates on average rose from 7% in 2007 in 437 facilities to 16% in 2013 in the 97 facilities so far counted.

National Waste & Recycling Association President and CEO Sharon Kneiss said, "Part of the reason for contamination is what

I call 'aspirational recycling'—where people with the greatest intent believe you should be able to recycle this, so the logic is, (the processors will) figure it out. It just unfortunately doesn't work that way."

In other words, when people don't know whether an item is recyclable, they just throw it in the bin.

BUT WHY IS THERE SO MUCH CONFUSION?

1. All recycling is local

Every municipal or private recycling service, whether curbside or drop-off, has its own rules about what can be recycled. In the ISRI poll, 28% said the problem was "understanding what types of plastic my municipality accepts in their curbside recycling program." Some take plastic bags, but many don't. A few take Styrofoam, but the majority do not. It's important for residents to know the rules and to stick to them to avoid contaminating the recycling stream. And it's just as important for the service providers to make the rules clear.

2. It's a numbers game

So, let's say a recycler takes plastic. What kind of plastic? Soda bottles? Usually. Plastic foam? Usually not. All plastics have a number stamped inside the recycling symbol, from 1 to 7. But not all the numbers can go in all the recycling bins. "The resin identification codes were never

meant to be the amateur's guide to recycling," Packaging Digest writes.

3. Who's telling the truth?

There is controversy about whether certain items are recyclable. New York City recently made news when it banned Styrofoam food containers. Restaurant owners and manufacturer Dart Container Corp. argued that the product is recyclable, while the city said for all practical purposes, it is not. So consumers get confused.

4. Bans

Some places ban plastic bags or Styrofoam cups, so that must mean they're not recyclable, right? It depends. The purpose of banning or charging for the items is to keep them out of the waste stream, but that doesn't mean they can't be recycled elsewhere.

So where should consumers go for help in sorting out the confusion—and the recycling?

"What we do, at least in California, is really try to educate. In Santa Monica, we put stickers on every one of our containers which indicate—in photo, no text at all—what goes into the container and what can't go into the container," said Kim Braun, Resource Recovery & Recycling Manager at City of Santa Monica. "However, there are some things that are quite confusing. As an (Continued, see Confusion, page 28)

RECYCLING CONFUSION [CONT'D]

example, we do zero waste in our city hall so police do not have a trash can at their desk, they only have a recycling container, but they didn't know that their Starbucks cup itself is compostable so it goes in the green [bin], the plastic lid is recyclable so it goes in the blue, but the straw is neither and it goes into the waste. And these are the things, when you get to the ultimate every day materials that you have, where you ask, where is it going to go? ... So when the sorting facilities

—and it depends on your contractor and what the contract is for the residents that provide the service—they have to really get out there and make [residents] understand what it is that they need to do with their materials.”

On a larger scale, the nonprofit Recycle Across America has launched its first national TV campaign to promote the organization's recycling labels in an attempt to create a nationally adopted system. The 30- and 60-second ads will star celebrities

including Kristen Bell and Mark Ruffalo, who tell viewers, “Let's recycle right.” Billboards and print ads are also part of the campaign.

NWRA also plans to ramp up its “Begin with the Bin” consumer education campaign.

And the nonprofit Keep America Beautiful has several fall initiatives in the works, including Recycle Bowl, a national K-12 school-based recycling competition. ●

Kristin Musulin contributed to this report from Orlando.

Reprinted from www.wastedive.com, August 22, 2015.



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ALMOST ALL
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RECYCLING: RECYCLING IS STALLING IN U.S., AND BIG BLUE BINS ARE ONE REASON

BY AARON C. DAVIS, WASHINGTON POST

Once a profitable business for cities and private employers alike, recycling in recent years has become a money-sucking enterprise. The District of Columbia, Baltimore and many counties in between are contributing millions annually to prop up one of the nation's busiest recycling facilities, tucked in the woods 30 miles north of Washington, but it is still losing money. In fact, almost every facility like it in the country is running in the red. And Waste Management and other recyclers say that more than 2,000 municipalities nationwide are paying to dispose of their recyclables instead of the other way around.

In short, the business of American recycling has stalled. And industry leaders warn that the situation is worse than it appears.

"If people feel that recycling is important—and I think they do, increasingly—then we are talking about a nationwide crisis," said David Steiner, chief executive of Waste Management, the nation's largest recycler that owns the plant in Elkridge, Md., and 50 others.

The Houston-based company's recycling division posted a loss

of nearly \$16 million in the first quarter of the year. In recent months, it has shut nearly one in 10 of its biggest recycling facilities. An even larger percentage of its plants may go dark in the next 12 months, Steiner said.

The problems of recycling in the United States are both global and local. A storm of falling oil prices, a strong dollar and a weakened economy in China have sent prices for American recyclables plummeting worldwide.

Environmentalists and other die-hard conservation advocates question if the industry is overstating a cyclical slump.

Problems with recycling in the United States are both global and local. As larger bins have led to an increasingly polluted recycling stream, falling oil prices, a strong dollar and a weakened economy in China have sent prices for recyclables plummeting worldwide.

"If you look at the long-term trends, there is no doubt that the markets for most recyclables have matured and that the economics of recycling, although it varies, has generally been moving in the right direction," said Eric Goldstein, a lawyer with the

Natural Resources Defense Council who tracks solid waste and recycling in New York.

"And that's without factoring in the external impact of landfilling or anything else," Goldstein added.

"There aren't a lot of people saying, 'Send more material to landfills.'"

Still, the numbers speak for themselves: a three-year trend of shrinking profits and rising costs for U.S. municipalities—and little evidence that they are a blip.

Trying to encourage conservation, progressive lawmakers and environmentalists have made matters worse.

By pushing to increase recycling rates with bigger and bigger bins—while demanding almost no sorting by consumers—the recycling stream has become increasingly polluted and less valuable, imperiling the economics of the whole system.

"We kind of got everyone thinking that recycling was free," said Bill Moore, a leading industry consultant on paper recycling who is based in Atlanta. "It's never really been free, and in fact, it's getting more expensive."

(Continued, see Stalling, page 30)

RECYCLING IS STALLING [CONT'D]

Brent Bell, Waste Management's vice president for recycling, said the company has yet to see municipalities abandon recycling, and the company is maintaining its ability to recycle whatever cities send their way. But it is downsizing its operation and expecting little increase in recycling rates nationwide.

Last week, the Environmental Protection Agency announced a nationwide tally for recycling in 2013 that showed overall recycling had contracted for a second straight year, to 34.3 percent of the waste stream.

With those trends, Bell said the company is beginning tough discussions with cities about what it sees as a long-term economic reality: Cities must bear more of the financial impact of falling commodity prices.

That's the only way, Bell said, for recyclers like his company to invest in the business.

Steiner, Waste Management's chief executive, went further. "We want to help our customers, but we are a for-profit business. We won't stay in the industry if we can't make a profit," he said.

The problem with blue bins

Many of the problems facing the industry can be traced to the curbside blue bin—and the old saying that if it sounds too good to be true, it just might be. Anyone who has ever tossed a can into a bin knows what's supposed to happen: Anything recyclable can go in, and then somehow, magically, it's all separated and reused. The idea originated in California in the 1990s.

Environmental advocates believed that the only way to increase participation in recycling programs was to make it easier. Sorting took time and was messy. No one liked it. So-called Material Recovery Facilities, or MRFs, were created to do what consumers wouldn't.

With conveyers, spinning flywheels, magnets and contraptions that look like giant Erector Sets, companies found that they could recycle almost everything at once. Lightweight newspaper and cardboard were sent tumbling upward, as if in a clothes dryer. Glass, plastic and metal fell into a series of belts and screens. Automation was adopted to sort, bale and send to manufacturers all those tons of paper, bottles and cans.

From the start, it was hard to argue that glass should have been allowed in the curbside mix. It's the heaviest of recyclables but has always been of marginal value as a commodity. In the rough-and-tumble sorting facilities, a large share of it breaks and contaminates valuable bales of paper, plastic and other materials.

Today, more than a third of all glass sent to recycling facilities ends up crushed. It is trucked to landfills as daily cover to bury the smell and trap gases. The rest has almost no value to recyclers and can often cost them to haul away.

In recent years, the problem of contamination has spread beyond glass. The problem was exacerbated when municipalities began increasing the size of bins, believing that bigger was better to keep more material from landfills.

Consumers have indeed been filling the bigger bins, but often with as much garbage as recyclable material.

With the extra room, residents stopped breaking down cardboard boxes. Because a full shipping box sometimes fits inside, even with foam and plastic wrap attached, all of it more frequently shows up at sorting facilities.

Residents have also begun experimenting, perhaps with good intentions, tossing into recycling bins almost anything rubber, metal or plastic: garden hoses, clothes hangers, shopping bags, shoes, Christmas lights.

That was exactly the case last year, when the District replaced residents' 32-gallon bins with ones that are 50 percent larger.

"Residue jumped a ton," said Hallie Clemm, deputy administrator for the city's solid waste management division. In fact, so much nonrecyclable material was being stuffed into the bins that after an audit by Waste Management last fall, the share of the city's profit for selling recyclables plummeted by more than 50 percent.

That has driven up the city's processing price for recyclables

to almost \$63 a ton—24 percent higher than if it trucked all of its recycling material, along with its trash, to a Virginia incinerator.

The D.C. Council recently approved a payment of \$1.2 million to Waste Management for the contract year that ended in May. In 2011, the city made a profit of \$389,000.

Little demand for newsprint

A large part of the problem for recyclers is falling global commodity prices—a phenomenon largely out of recyclers' hands. But the negative impact of that trend is amplified by the contents of most recycling bins, because the composite of what Americans try to reuse has changed dramatically over the past decade.

Dwindling have been the once-profitable old newspapers, thick plastic bottles and aluminum cans that could be easily baled and reused.

With oil prices driving up transportation costs, manufacturers have engaged in a race to make packaging more lightweight. Coffee cans disappeared in favor of vacuum-packed aluminum bags; some tuna cans went the same way. Tin cans and plastic water bottles became thinner, too: The amount of plastic that once came from 22 bottles now requires 36.

There was an even more pronounced drop in newsprint. Long a lucrative recycling commodity, it's not a key commodity market. In its place is something known as mixed residential paper: the
(Continued, see Stalling, page 31)

RECYCLING IS STALLING [CONT'D]

junk mail, flattened cereal boxes and other paper items that these days can outweigh newspaper in a one-ton bale.

One bright spot has been an increase in cardboard. Analysts say that with more people buying items through online merchants, cardboard can account for up to 15 percent of cities' recyclable loads—more than double that of a decade ago.

The demand for that paper and cardboard, however, remains at a near-decade low. In China, containerboard, a common packaging product from recycled American paper, is trading at just over \$400 a metric ton, down from nearly \$1,000 in 2010. China also needs less recycled newsprint; the last paper mill in Shanghai closed this year.

With less demand, Chinese companies have become pickier about the quality.

Last week in Elkridge, an inspector from a Chinese company studied bales of paper being loaded into shipping containers bound for the port of Baltimore and, eventually, Asia.

If the inspector found more than five nonpaper items protruding from any one side of the bale, it was rejected, forcing workers to break down the material and send it all back through the processing facility.

The lightweight vacuum packs for food and paper-thin plastic bottles are increasingly part of the problem. They are so light that they get blown upward with the paper.

“We’ve seen economic downturns in the value of material in the past, but what’s different now is that the material mix has changed,” said Patty Moore, head of California-based Moore Recycling Associates, which specializes in plastic recycling. “The problem is, to get the same value out of your scrap, you have to shove a whole lot more material through the facility. That was fine when scrap values were high, but when they dropped, we realized it’s expensive to push all of this lightweight stuff through, and we’re in trouble.”

Brent Bell, Waste Management’s vice president for recycling, said the company has yet to see municipalities abandon recycling, and the company is maintaining its ability to recycle whatever cities send their way. But it is downsizing its operation and expecting little increase in recycling rates nationwide.

Last week, the Environmental Protection Agency announced a nationwide tally for recycling in 2013 that showed overall recycling had contracted for a second straight year, to 34.3 percent of the waste stream.

With those trends, Bell said the company is beginning tough discussions with cities about what it sees as a long-term economic reality: Cities must bear more of the financial impact of falling commodity prices. That’s the only way, Bell said, for recyclers like his company to invest in the business.

Steiner, Waste Management’s chief executive, went further. “We want to help our customers, but we are a for-profit business. We won’t stay in the industry if we can’t make a profit,” he said.

Clemm, the District’s recycling chief, said small efforts can begin to turn the tide. The District must begin by getting more garbage out of its recycling stream.

“Residents have a way to influence this by making sure they are recycling right,” she said.

Another possibility is to follow the urgings of the environmental community by expanding recycling programs to include composting—the banana peels and grass clippings degrading in landfills that by some estimates have become the nation’s third-biggest source of methane gas contributing to global warming. Composting is partly credited with the success of such cities as San Francisco, Portland and Seattle in increasing the share of the waste stream that is recycled each year.

There are also a few encouraging signs downstream in the recycling market. A recycled-plastics company in Troy, Ala., processes more than 500 million pounds of recycled material annually from plastic bottles—and with 450 employees, the company is growing. In the Midwest, another company opened two additional facilities this month to feed an Indiana paper mill that churns out 100 percent recycled cardboard.

Turning a profit on the initial, dirty task of sorting and processing the nation’s recyclables, however, may take a larger overhaul, said Patty Moore. Governments may need to set standards or even consider taking over part of the process to better encourage investment and ensure that profits remain a public benefit.


“If we’re going to be serious about secondary-materials management, we’re really going to have to address it as a state or preferably national level,” she said. “We need to harmonize what we’re doing and make it work in a way that we’re not spending all this money and spinning our wheels.” ●

Reprinted from The Washington Post, www.washingtonpost.com, June 22, 2015.

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REIFENHÄUSER BLOWN FILM IS BOOSTING QUALITY AND FLEXIBILITY

The need for barrier film is growing worldwide and so are the requirements for film properties in high quality barrier packaging applications. Parallel to this, producers are demanding high production flexibility to serve the market with different products. Reifenhäuser Blown Film’s answer to rising performance requirements is the development of a highly flexible and efficient 11-layer blown film line.

Thanks to the variable choice of layer structures offered producers by an 11-layer blown film line, there is no need for the time-consuming and costly laminating step in the conversion of some products. Furthermore, the greater flexibility achieved with more layers often results in a higher overall performance when processing polyolefins. “But it gets even better,” says Ralf Wiechmann, Product Manager at Reifenhäuser Blown Film GmbH: “We have developed a screw design for our extruders that can effortlessly handle almost every polyolefin type and every barrier raw material without modification of the machine.” Therefore, product changeover becomes as simple as child’s play: purging the line, changing to a new recipe and just watching another barrier film being conveyed to the winder. In this way, also comparatively small lot sizes of speciality film can be economically produced.

High quality for an optimal conversion

Another special feature of the 11-layer line is its innovative design. A skilful choice of an asymmetric high-barrier structure (see ill.) by the producer can almost completely prevent curling of the film without using a normally required water bath (critical with regard to hygienic production conditions).

Curling of the film edges is caused by the different speeds at which raw materials cool down.

Furthermore, the specially developed EVOLUTION Ultra Flat haul-off ensures high winding quality and fast, smooth further processing, such as conversion, laminating and printing. Thanks to a minimized stretching of the film via heating-cooling rolls, a perfect flatness of the web can be achieved with this technology.

Easy handling and high energy efficiency

For an optimum distribution of the eleven layers Reifenhäuser Blown Film has developed a special die head based on the proven Reifenhäuser technology. The individual adjustment of layer thicknesses allows for an ideal distribution of the raw materials depending on the product.

The well thought-out operation of the line facilitates easy handling of the eleven film layers and the large amount of line data: Operators have direct access to all important parameters via a 24” touchscreen. Ralf Wiechmann explains: “Handling is as easy as using a Smartphone. This concept which we also use in other lines, is particularly useful for eleven layers.”

In a similar way, this is also valid (Continued, see Film, page 34)

Multilayer Blown Films
Why 11-layers?

Lidding film with high barrier properties and high gloss

PET	Tie	LLDPE	LLDPE	Tie	PA	EVOH	PA	Tie	LLDPE	mLLDPE
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Structure for retortables with barrier properties (optimized layer thicknesses)

CoPP	PP	PP	PP	Tie	PA	EVOH	PA	Tie	PP	CoPP
------	----	----	----	-----	----	------	----	-----	----	------

Thermoforming film for cheese packaging (thinner tie layers)

PA	Tie	LLDPE	LLDPE	Tie	PA	Tie	PA	Tie	LLDPE	mLLDPE
----	-----	-------	-------	-----	----	-----	----	-----	-------	--------

- Superior flexibility in layer ratio / thin or thick outside layers
- Advanced, high barrier structures
- Asymmetric barrier structures, balanced with minimum curling without water bath

REIFENHÄUSER BLOWN FILM [CONT'D]

for the energy efficiency measures Reifenhäuser Blown Film offers for their 11-layer line under the keyword "Blue Extrusion." Investments in these optionally selectable measures pay off very fast due to the required high operating temperatures of 200 to 270°C.

For example, producers who opt for highly efficient electric motors and gearboxes, insulation/damping of cylinders and heater bands, or the customized design of a complete production line with a focus on targeted energy optimization, can save energy and reduce production costs.

Interested persons have the opportunity to witness the advantages of the 11-layer EVOLUTION line live in the Blown Film Technology Center at the Troisdorf site. ●

Reprinted from Reifenhäuser press release, August 20, 2015.

ABOUT REIFENHÄUSER GROUP

The Reifenhäuser Group, based in Troisdorf in North Rhine-Westphalia, is the world's leading supplier of plastic extrusion lines, machines, and components. The Group brings together one of the world's largest intracorporate networks of experts in extrusion technology: Six business units, together with nine subsidiaries, bring together highly specialized expertise in the areas of design, process engineering, automation, planning, manufacturing, project management, and logistics. Together, the Group covers the most extensive range of products for extrusion technology. The company offers lines for manufacturing film, sheets, nonwovens, monofilaments, as well as the corresponding components. The CEO of the Group with its 1,400 employees is Dipl.-Volksw. Bernd Reifenhäuser.

ABOUT REIFENHÄUSER BLOWN FILM GMBH

With over 60 years of experience and more than 7,000 lines installed Reifenhäuser Blown Film, a subsidiary of the Reifenhäuser Group, ranks among the worldwide leading providers of blown film extrusion lines and other machines for the production and conversion of high-quality plastic films. The modular EVOLUTION product series newly developed in 2010 covers the entire spectrum of blown film, from 3- to 11-layer lines. The technology enables both the production of simple packaging applications and sophisticated technical films and food packaging with specific barrier properties. Managing Director is Dr. Fritz Dorner.



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MEMBER PRESS RELEASE:

OSTERMAN AND INDUSTRIAL MAFRA ANNOUNCE JOINT VENTURE

Osterman Plastics de Mexico S. de R.L. is a new joint venture company announced today by Industrial Mafra S.A. de C.V., a leading distributor of plastic resins in Mexico, and Osterman & Company, Inc., one of the top worldwide plastic resins distributors.

Combining the logistics, expertise and product availability of two leading resin distributors gives both resin manufacturers and plastics fabricators a new choice in the Mexican market. In addition to market expertise, Osterman Plastics de Mexico customers have access to a complete team of experienced sales professionals, technical support personnel, and logistics know how.

“We’re creating a fast, direct line between supply and demand,” Osterman company officials said. “We look at this as a business gateway that combines world-class logistics, strong relation-

ships and resin choices Mexico has never had available before. This is the next step in our ongoing strategy to increase our presence and capabilities in the region.”

Osterman Plastics de Mexico was created after research showed supply gaps in the Mexican market. The new company is positioned to be a complete resin resource, with new alternatives, a higher level of service, and technical rigor local fabricators are looking for.

Osterman Plastics de Mexico joins Osterman’s Latin American Polymers, LLC (LAP) and Quimtec Polymers, LLC (Quimtec) as another major force for resin sourcing for the Americas. It’s a powerful distribution system for polyethylene, polypropylene, polystyrene and engineered resins.

ABOUT OSTERMAN & COMPANY

Osterman & Company is a premier global plastic resin distributor that’s been helping customers for more than four decades. With a focus on integrity, relationship building, product expertise and intuitive service, Osterman satisfies a diverse range of customers from offices around the world. For more information, visit www.osterman-co.com.

ABOUT INDUSTRIAL MAFRA

With over 24 years’ experience, Industrial Mafra is a leading distributor of low density (LDPE), high density (HDPE) and linear low density (LLDPE) for injection molding, blow molding and rotational molding in the Mexican marketplace. For more information, visit www.industrial-mafra.mx/. ●

Reprinted from Osterman Plastics de Mexico press release, July 30, 2015.

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GREEN:
**IN CALIFORNIA, MILLIONS
OF 'SHADE BALLS' COMBAT
A NAGGING DROUGHT**

BY KATIE ROGERS, *NEW YORK TIMES*

Facing a long-term water crisis, officials concerned with preserving a reservoir in Los Angeles hatched a plan: They would combat four years of drought with 96 million plastic balls.

On Monday, Mayor Eric Garcetti of Los Angeles arrived at the 175-acre Los Angeles Reservoir to release the final installment of the project: 20,000 small black orbs that would float atop the water.

The scene resembled something found at a playground — “You turned the reservoir into the world’s largest ball pit? #best-mayorever,” wrote one supporter on the mayor’s Facebook page — but the initiative has serious implications for the city’s water supply.

Mr. Garcetti said that the dark balls would help block sunlight and UV rays that promote algae growth, which would help keep the city’s drinking water safe. Officials also said the balls would help slow the rate of evaporation, which drains the water supply of about 300 million gallons a year. The balls cost \$0.36 each and are part of a \$34.5 million initiative to protect the water supply.

In a video posted on Monday to Facebook, an official is heard saying, “2, 1 ... Shade balls away!” A moment later, the remaining balls skitter down a slope, heading for the reservoir.

The Los Angeles Reservoir, which holds 3.3 billion gallons, or enough water to supply the

city for up to three weeks, joins three other reservoirs already covered in the shade balls, officials said. They are also being used in nearby areas. Officials from the Las Virgenes Municipal Water District released a batch of the balls into a reservoir in June.

The balls are expected to safely float in the water without emitting chemicals, the Los Angeles Department of Water and Power told *The Los Angeles Times*. ●

Reprinted from The New York Times, www.newyorktimes.com, August 12, 2015.



BUSINESSES ARE UNCERTAIN JUST HOW MUCH 'DOING THE RIGHT THING' WILL COST THEM.

GREEN:

EVALUATING ON-SITE ORGANICS MANAGEMENT OPTIONS

BY TERRY FULTON AND VERONICA BAKER, BIOCYCLE

In 2015, the Metro Vancouver region in the lower mainland of British Columbia, Canada, instituted an organics disposal ban. Metro Vancouver is a regional government representing 21 municipalities, one Electoral Area, and one Treaty First Nation, and is responsible for managing the solid waste produced by 2.4 million residents. Its organics disposal ban targets food scraps being disposed by residents and businesses. From January until July 2015, an extensive education campaign was used to raise awareness and encourage compliance with the ban.

Starting July 1, 2015, the regional government is enforcing the ban at its disposal facilities. Loads containing more than 25 percent visible organics by volume are issued a 50 percent surcharge on the tipping fee. Although the organics disposal ban applies to all sectors, this 25 percent threshold effectively targets the largest generators first, such as restaurants and food retailers. Pending political direction, Metro Vancouver may decrease this threshold over time. Monitoring during the six-month education period showed that 99 percent of the region's customers are in compliance with the 25 percent limit.

For a restaurant or grocery store, a pamphlet introducing a new organics disposal ban can be the

start of a logistical challenge. Without the proper tools, businesses are uncertain just how much "doing the right thing" will cost them. Staff training, hauling contracts and new disposal procedures all become part of a long stream of questions that foodservice establishments are asking, and answers can be hard to find. With the onset of the organics disposal ban, Metro Vancouver sought to provide businesses with appropriate tools and resources, including an on-site organics management review. Metro Vancouver retained the services of Tetra Tech Inc. to conduct a desktop review of options available for storage, hauling, and automated processing of organic material on-site for establishments producing between 10 to 1,000 metric tons (11 to 1,100 tons) of food waste per year. The review evaluated and compared on-site organics management options available in North America and used successfully in various industries, but excluded technologies that discharged a slurry to sewer without recovering materials or energy.

Available Options

Because of the abundance of available technologies, Tetra Tech grouped them into four overarching options: Storage, Pretreatment, Aerobic In-Vessel, and Anaerobic Digestion. Storage is what most users are already familiar with—they have bins,

organics are put in the bins, and they get taken away. Specialized storage options, such as a compactor equipped with a biofilter, make this even easier for organics by providing capacity for larger volumes and designs that are better suited to dense organics.

Pretreatment and other processing options increase the commitment to managing more of the organics processing on-site. Pretreatment rapidly reduces the volume of organics by removing the largest component: water. Excess water can be removed through a mechanical process (dewatering), or by heating the organic material to accelerate evaporation and stimulate biological activity (dehydration). These technologies are effective for establishments that are short on space or time, as they can fit in a dishwashing area and the process is generally measured in hours or days, not weeks or months like other processing options.

For those aiming for the next level of on-site organics management, aerobic in-vessel systems are available to help businesses create a ready-to-cure material or, in some cases, ready-to-use soil amendment that can be applied on-site. The downside is that aerobic in-vessel systems require more time and space; staff would need to be trained to (Continued, see Organics, page 39)

ON-SITE ORGANICS MANAGEMENT [CONT'D]

ensure the system is operating efficiently and might spend an hour or two each day on keeping the system running smoothly. The “black gold” payoff is sweet, however; for businesses with landscaping, gardens or green roofs this can be an excellent option to close the loop.

For those who want other benefits—such as electricity—small anaerobic digesters can process food scraps while simultaneously creating energy-rich biogas. Not only do these systems help manage organics, they can reduce reliance on grid electricity and save a business money. There’s always a catch of course as these systems have a higher capital cost compared to other options. The on-site options review assessed the medium and large options most readily available in the North American marketplace.

For both aerobic and anaerobic in-vessel systems, Tetra Tech’s study reviewed three sizes (Table 1): small (approximately 10 metric

tons/year or four 32 gallon containers per week), medium (approximately 100 metric tons per year or one 6 cubic yard (cy) container per week) and large (approximately 1,000 metric tons/year or one 40 cy compactor per week).

Decision Making Steps

To give businesses a starting point, Tetra Tech provided the following set of questions for a business to ask, to help them choose which option best suits their needs:

- How much organic material do we produce?
- What type of organic material do we produce?
- How much space do we have?
- How much labor is required?
- What sort of corporate sustainability benefits can we expect?
- How close will we get to producing compost?
- How much will it cost?

The amount of organics produced is the first determining factor for filtering options. If an establishment fills a 40 cy compactor of organics each week, obviously a small in-vessel system wouldn’t be sufficient [Table 1 available in BioCycle Magazine in print: biocycle.net/subscribe]. Most options are scalable to some extent, but in general, smaller producers are more likely to be looking at storage or pretreatment and larger producers may need to look at higher capacity systems.

The amount alone doesn’t dictate what options might be applicable; the type of organic material is also important. Some systems have limitations on what type of material can be accepted (Figure 1). Bioplastics and yard and garden debris in particular can cause problems in some systems. Harder items, such as bones, may negatively impact mechanical parts in some systems. When determining acceptable materials, it is best to confer directly with the chosen technology provider, and, if the organic material will be sent to a local processor, what’s accepted at that facility should also be verified.

Space is the most important selection factor for businesses located in a dense urban core. Good intentions aside, if the system can’t fit into the space you have, with room to load, unload, and store any input, output or bulking agent material, it’s not going to be viable. Pretreatment options are well suited to a small footprint as they take up less space compared to other tech-

nologies reviewed. Our report estimated that a dehydration unit uses about 10 square feet (sq. ft.), and a dewatering unit uses 2 sq. ft. Aerobic in-vessel systems can take up as little as 20 square feet (and up to 300 sq. ft.), and new anaerobic systems are starting to make their way into the smaller market, but generally, the in-vessel composting and digestion options require more space. By comparison, a 64-gallon rolling cart uses 5 sq. ft., a yard container uses about 30 sq. ft., and a roll-off container uses about 160 sq. ft.

While some businesses might have space, do they have time to maintain an on-site system? Most staff are accustomed to throwing material into a bin—but what happens when a system needs to be installed and maintained? Minimal effort is required for basic operation of a pretreatment unit, where starting the process may be as easy as pressing a button. However aerobic in-vessel and anaerobic in-vessel systems often require careful monitoring of process parameters, addition of bulking agent or moisture, and routine maintenance to keep things running smoothly. The larger systems may even require a full-time operator.

Not all benefits are strictly tangible; some businesses are more interested in how they can help the environment, or how they can be perceived to help the environment. With this consideration in mind, more involved on-site processing options may be preferred. While pretreatment may (Continued, see Organics, page 40)

Figure 1. Type of organic material and on-site management options

Option	Key:				
	✓ Option works for feedstock	✗ Option does not work for feedstock	⚠ Option potentially works, with caveat(s)		
	Food scraps	Bones and carcasses	Paper and cardboard	Compostable plastic	Yard and garden debris
Storage	✓	✓	✓	✓	✓
Dewatering	✓	⚠ ¹	⚠ ²	⚠ ³	✗
Dehydration	✓	✓	✓	✓	✗
Small aerobic in-vessel	✓	✓	⚠ ²	✓	⚠ ⁴
Medium aerobic in-vessel	✓	⚠ ⁵	⚠ ²	⚠ ⁵	✓
Large aerobic in-vessel	✓	✓	⚠ ²	✓	✓
Medium anaerobic in-vessel	✓	✓	✗	✗	✗
Large anaerobic in-vessel	✓	✓	✓	✗	✗

1. May jam mechanical components of system. 2. Maximum 10% of feedstock. 3. Maximum 5% of feedstock must be shredded. 4. Maximum 20% of feedstock. 5. Acceptable, but may not degrade completely.

ON-SITE ORGANICS MANAGEMENT [CONT'D]

reduce overall greenhouse gasses by reducing hauling, aerobic in-vessel systems are producing a usable end product and may eliminate the need for hauling altogether. Anaerobic digestion can also generate energy. In general, the more complex the process, the more sustainable benefits result and can be leveraged for public relations value (Figure 2).

Figure 2. Sustainability benefits

Option	Volume reduction	Greenhouse gas reduction	Closing the loop	Minimal ecological footprint	Staff participation
	Amount of organic material hauled is substantially reduced	Reduce greenhouse gas emissions (reduced hauling)	After curing, end product can be used as soil amendment	System produces more electricity than it consumes	Technology enhances staff education and environmental awareness
Storage		✓			
Pretreatment	✓	✓			
Aerobic in-vessel	✓	✓	✓		✓
Anaerobic in-vessel	✓	✓		✓	✓

For some businesses, especially those with a use for soil amendment, how close they will get to producing compost is an important factor. For pretreatment, most technologies produce a biomass which may look like compost, but lacks some of the “maturity” provided by an active composting process with a curing phase to follow. Aerobic in-vessel systems generally produce a “ready-to-cure” material, although some now claim to produce ready-to-use soil amendment. Anaerobic in-vessel systems are more complex with a solid digestate that may need further processing as well as a liquid component and biogas.

With these questions, businesses can essentially select what option works for them by a process of elimination. This leaves the final, and for many, the most important question: How much will it cost? While the marketplace is rapidly changing with newly emerging options, when looking strictly at capital and maintenance costs, storage is cheapest and anaerobic digestion systems are the most expensive. However, the cost of hauling adds another important layer for

consideration, and the business case for many of these options becomes apparent.

Figure 3. Comparative analysis
For an overall comparison of all of these factors at a glance, Tetra Tech created a summary of key factors, ranked from mediocre to best, in a consumer report-style matrix (Figure 3).

Practical Example
So how would this work? Imagine a small restaurant in a busy downtown core. To begin to follow the decision making process,

they measure their source separated organic material and determine that about two 32 gallon rolling carts per week are generated, which works out to about 700 kilograms per week (1,500 pounds) of organic material. Based solely on weight, the primary options that could be considered are storage, pretreatment, and small or medium aerobic in-vessel systems.

The back alley behind the restaurant is already tightly packed, as is the kitchen, so the restaurant can only fit smaller options,

which effectively eliminates in-vessel composting. Another eliminating factor is the time required for in-vessel composting. With a small staff and a busy lunchtime rush, staff don’t have much time to operate an in-vessel system and therefore would most likely consider either storage or pretreatment.

The restaurant owner prides herself on being environmentally conscious and would like to choose an option that would help reduce her restaurant’s environmental impact. She doesn’t simply want organics hauled away, nor does she want them going down the drain. That means pretreatment will likely be the option of choice. A pretreatment system could reduce volume by up to 70 to 90 percent with a corresponding reduction in frequency of hauling. Cost savings could be even greater if the restaurant were to partner (Continued, see Organics, page 41)

Figure 3. Comparative analysis

Option	Weekly capacity	Capital cost (per ton basis)	Annual maintenance cost	Footprint	Materials accepted	Time (labor) commitment	Corporate sustainability benefits	Odor control	Output material	Maintenance	Capital	Process time	Installation requirements	Capacity	Electricity requirements
Conventional storage	Depends on hauling	Up to \$1,000	Minimal	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre	Mediocre
Specialized storage	Depends on hauling	\$4,000-6,000	Minimal	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Dewatering	Up to 400,000 kg/week	\$25,000	\$250	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Dehydration	Up to 14,000 kg/week	\$27,000-50,000	\$200	Better	Better	Better	Better	Better	Better	Better	Better	Better	Better	Better	Better
Small aerobic in-vessel	150-3,500 kg/ week	\$18,000	\$400	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best
Medium aerobic in-vessel	700-8,000 kg/ week	\$30,000+	\$600	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best
Large aerobic in-vessel	2,000-18,000 kg/ week	\$450,000	\$500	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best
Medium anaerobic in-vessel	5,000-20,000 kg/ week	\$240,000+	\$14,000	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best
Large anaerobic in-vessel	20,000 kg/ week	\$825,000+	\$10,000	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best	Best

ON-SITE ORGANICS MANAGEMENT [CONT'D]

with other establishments nearby to reduce capital cost of a pretreatment system.

All types of businesses could follow these same steps and determine different options suitable to their situation. Then, by contacting individual distributors, they could price out different options and more specific

features, and soon have their own organics management systems up and running.

The full report, "On-Site Organics Management Options Review," was published in Fall 2014 and is available on Metro Vancouver's food scraps landing page under each sector's Tools and Resources link [[click here](#)].

Although the report was designed with commercial establishments in mind, this guide may also come in handy for multi-family buildings containing at least 50 units. With this decision-making tool in hand, a business's perception of the organics disposal ban can shift from logistical headache to a new opportunity to

reduce waste and benefit from positive publicity. ●

Reprinted from www.biocycle.net, August 2015.



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