MEMORANDUM

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TO: **MICHELE YOUNG**
San Jose Department of Environmental Services

FROM: **PAUL GOODWIN**
Goodwin Simon Strategic Research

RE: **Summary of Findings from Survey on Compostable Plastics Toolkit**

Introduction and Methodology

This survey was conducted by the San Jose Department of Environmental Services to inform the development of a compostable plastics toolkit which was the main deliverable for a grant received from the Urban Sustainability Directors Network. The survey was designed to gauge what municipal waste management professionals know about compostable plastics and to identify the most valuable resources to help municipal waste professionals manage compostable plastics.

The survey was distributed via email to approximately 2,500 waste industry and government online listserv recipients, including regional Technical Advisory Councils, State Recycling Coordinators, the California Resource Recovery Association, the US Composting Council, and members of the Urban Sustainability Directors Network. During the release of the survey, the City was part of a media story by Waste & Recycling News, and the request to complete the survey was also posted for a national audience through Waste & Recycling News. Due to self selection style for responses, those who completed the survey were often more familiar with compostable plastics than the average municipal waste management professional.

Methodology note: A substantial fraction of respondents skipped (did not answer) many of the questions in this survey. In creating this summary, we usually chose to exclude those who did not respond to each question from the data for that question. This changes the proportions we report from those found in the raw data set. For example, 16 of 153 respondents did not offer a response to question 1, so 137 respondents did answer the question. Thus with 72 who indicated that they were "very familiar" with compostable plastic products, the proportion we report in this summary is 72/137 = 53%, rather than 72/153 = 47%.

P.O. Box 366 Culver City, CA 90232 310/558-4761 (phone) 310/558-0539 (fax)
email: paulg@goodwinsimon.com website: www.goodwinsimon.com

Overview

This online survey of 153 respondents surveyed mostly local government workers, but also some who work in the private or nonprofit sectors, including several respondents who work in the plastics or composting industries.

The survey found high levels of familiarity with compostable plastic among respondents (93 percent of respondents who answered this question were at least "somewhat" familiar with it). However, respondents believe that the general public is much less aware of compostable plastic (estimating that 3 of 4 are not familiar with it), and offered a similar view when asked about local businesses in their area (estimating that about 7 in 10 local businesses are not familiar with it).

About half the respondents indicated that their jurisdictions have some kind of goal or program to encourage the use of this material, and about half indicated in a follow up question that their agency has some kind of plan to develop such programming.

Respondents identified several commonly-noted barriers to expanded use of compostable plastics: poor labeling of such plastics, the difficulty of identifying compostable plastic at the recycling facility, contamination of the recycling stream, and not having a local compost facility that will accept them. In fact, 60 percent of those who responded to the question indicated that they were not aware of a local compost facility that will accept compostable plastics.

About 40 percent of those responding said in a subsequent question that their area has no collection services for this material. This barrier appears to be especially a concern for residential collection, with many more respondents reporting that commercial waste collectors pick up compostable plastics compared to residential waste collectors (41 percent to 28%). Compostable bags, cups, lids, and utensils are the plastics most often picked up.

When asked to identify useful components of a *municipal tool kit to support sustainable management of compostable plastics*, the most valuable tool in the view of respondents would be a list of approved compostable products, followed by labeling and identification guidelines, and sample outreach materials for business technical support and for residential audiences. Nearly six in ten (56%) said they would be interested in receiving information about when the toolkit is ready.

There is modest interest in *receiving assistance from our national industry task force* on this issue. Overall, about 45 percent indicated they would be very or somewhat interested in receiving assistance from the task force. The preferred formats for getting information on compostable plastics, regardless of the source, is from webinars and background documents. Videos and in-person conferences appear to be the least popular ways of getting information.

Detailed Findings

Question 1: *How familiar are you with compostable plastic products?*

The survey finds that most respondents were familiar with compostable plastic products. In fact, more than nine in ten (93 percent) respondents who answered the question said they are "very" familiar (53 percent) or "somewhat" familiar (40 percent) with compostable plastic products. Just eight percent are "not that" familiar (four percent) or "not familiar at all" (four percent).[1] Sixteen of the 153 respondents surveyed did not answer the question (10 percent of respondents).

Figure 1: How Familiar Are You with Compostable Plastic Products?

Question 2: *How familiar do you think the residents in your community are with compostable plastic products?*

The respondents answering the question generally do not think their communities are familiar with compostable plastic products. Just one percent of those responding believe residents in their community are "very" familiar and 23 percent believe residents are "somewhat" familiar, for a total familiarity level of 24 percent. Slightly less than half (45 percent) believe residents are "not that" familiar and 31 percent said residents are "not familiar at all," for a total of 76 percent. Fifteen of the 153 respondents did not answer the question (10 percent).

[1] Percentages may not equal 100% because of rounding.

Figure 2: How Familiar Are Residents in Your Community with Compostable Plastic Products?

Question 3: *How familiar do you think the businesses in your community are with compostable plastic products?*

Survey respondents also believe businesses are generally unfamiliar with compostable plastic products. Just one percent of those responding believe businesses in their community are "very" familiar and 29 percent "somewhat" familiar, for a total familiarity of 30 percent. Half (49 percent) believe businesses are "not that" familiar and 20 percent said they are "not familiar at all" (for a total of 79 percent). Seventeen of the 153 respondents did not answer the question (11 percent).

Figure 3: How Familiar Are Businesses in Your Community with Compostable Plastic Products?

Question 4: *Does your jurisdiction currently have declared goals or programs to encourage the use of compostable plastics in any of the following areas? (Multiple responses accepted)*

Half of those who responded to this question (50 percent) indicated that their agency has no declared goals or programs to encourage the use of compostable plastics in their jurisdiction. One in four (25 percent) said such goals and programs exist in *public events and venues* and 20 percent said such goals and programs exist for *business usage and collection programs*. A slightly lower 16 percent said their jurisdiction has *residential food scrap collection programs* and 15 percent said such goals and programs exist for *government/institutional facilities*. While 12 percent volunteered another program or goal, 13 percent were not sure if such goals or programs existed in their jurisdiction.

Figure 4: Does Your Jurisdiction Have Goals or Programs to Encourage Use of Compostable Plastic Products?

Question 5: *Does your jurisdiction have future plans to develop programming to encourage the use of compostable plastics in any of the following areas? (Multiple responses accepted)*

Approximately two in ten said their jurisdiction has plans to develop programming to encourage compostable plastics in each of the following areas: *business usage and collection programs* (21 percent), *public events and venues* (20 percent), *government/institutional facilities* (19 percent), and *residential collection programs* (19 percent).

Just over one in three respondents (35 percent) indicated that their jurisdiction has no plans at this time to develop future programming to encourage the use of compostable plastics. Another 16 percent indicated that *we discourage the use of compostable plastics in our programs*. Sixteen percent were unsure and 11 percent gave another response.

Figure 5: Does Your Jurisdiction Have Plans to Develop Programming to Encourage Compostable Plastic Products in...?

Question 6: *Does your program require the use of certified compostable plastics that meet ASTM 6400, ASTM 6868 or are certified by BPI?*

Just under three in ten (28 percent) respondents answering the question said their program requires the use of certified compostable plastics that meet ASTM 6400, ASTM 6868, or are certified by BPI. Another 28 percent said the program does not require these standards, and 24 percent said their program does not specify any type of certification for compostable plastics. Ten percent were unsure and 10 percent gave another response. Nineteen respondents of the 153 did not answer the question (12 percent of all respondents).

Figure 6: Does Your Program Require the Use of Plastics that Meet Standards?

Question 7: *Please choose the top three challenges that compostable plastics present to your municipality/jurisdiction.*

The most mentioned challenges presented by compostable plastic are that they are *confusing, misleading or missing labeling,* and that it is difficult to *identify compostable plastics at sorting or compost facilities*, with two-thirds (67 percent) of respondents choosing each of these challenges among the list of five provided. Another 50 percent chose *contamination of the recycling stream* and 47 percent *contamination of compost*. Twenty-two percent said the biggest challenge is that compostable plastic is *not allowed in compost for certified organic use*. Sixteen percent gave an "other" response and seven percent were unsure.

Figure 7: Top Challenges that Compostable Plastics Present

Question 8: *Does your local compost facility accept compostable plastics?*

Forty percent of those responding said their local compost facility accepts compostable plastics. Another 29 percent said it does not and 12 percent said they have no local compost facility. Two in ten answering (19 percent) were unsure. Eighteen of the 153 surveyed did not give a response (12 percent of all survey respondents).

Figure 8: Does Your Local Compost Facility Accept Compostable Plastic Products?

Question 9: *If your local compost facility does not accept compostable plastics, please explain why not.* (Open-ended question)

We classified the individual responses to this question into broader categories, as shown in the table below. Many comments could be classified into more than one category, so the totals shown in the chart exceed 100%.

Figure 9: Why Does Local Compost Facility Not Accept Compostable Plastics?

The most common response (39%) explaining why their local facility does not accept compostable plastics is related to a sense that such plastics are not suitable for composting: either they take too long to break down or they contaminate the other items they are recycling. Examples of comments related to this category include:

- *The composter states that bio-plastics are not a beneficial nutrient and they are a gateway to other types of contamination*
- *They do not compost quick enough*
- *Inability to break down during composting process*
- *Potential of non-compostable contamination.*

Next most common (mentioned by 20%) is that it is hard either for consumers or vendors to tell what is and is not compostable plastic:

1. *Being able to identify between compostable and non-compostable plastics*
2. *Compostable plastics are difficult to identify in the initial sorting stage*
3. *Too difficult to tell the difference between compostable and non-compostable.*

About one in six respondents (17%) said something about their local facilities not accepting these materials:

- *Our local compost facility....does not take compostable utensils*
- *Compost facility operator's policy*
- *We have some facilities that accept the material and some that ask to have it pre-screened from the stream.*
- *The nearest facility that accepts compostable plastic is 130 miles away.*

Other reasons to not accept compostable plastics for composting that were mentioned include:

- No local policy for it (10%)
- Accepting only green waste for composting
- No permit for it (8%)
- OMRI issues (7%)
- Can't take utensils (3%).

Question 10: *Does your local hauler accept compostable plastics in any of the following collection services? (Multiple responses accepted)*

Forty-one percent of respondents said their local hauler accepts compostable plastics for *commercial collection services*, while 33 percent said they do for *events and venues* and 28 percent for residential. Thirteen percent gave an "other" response, while 39 percent said they have no collection service for compostable plastics and eight percent were unsure.

Figure 10: Does Your Local Hauler Accept Compostable Plastics in Any of These Services?

Question 11: *If your local hauler accepts compostable plastics in collection services, what types are accepted? (Multiple responses accepted)*

Of those who said their local hauler accepts compostable plastics in collection services, 84 percent said they accept *compostable bags*, 79 percent *compostable food serviceware*, 69 percent *compostable cutlery and utensils*, and 29 percent *compostable film wrap*. Seventeen percent gave another response.

Figure 11: What Types of Compostable Plastics Does Your Hauler Accept?

Question 12: *Included below are some possible tools that might be created for a municipal tool kit to support sustainable management of compostable plastics. How valuable would each tool be to your jurisdiction in understanding and managing compostable plastics?*

More than eight in ten or greater consider each tool mentioned to be at least "somewhat" valuable. The most valuable tool based on the percentage considering it "extremely" valuable is *lists of approved compostable products from municipalities and compost facilities*, with 61 percent giving this response. Another 18 percent gave a "2" rating, indicating it is "moderately" valuable, for 79 percent giving a top rating to this tool.

The second highest rated tool is *labeling and identification guidelines*, with 53 percent giving this a "1" rating indicating they find it "extremely" valuable. In all, 82 percent gave a "1" or "2" rating.

Nearly half of respondents consider *ideas and sample outreach materials for residential audiences* and *ideas and sample outreach materials for business technical support* to be "extremely" valuable, with 48 percent giving this response. In all, these two tools receive a "1" or '2" rating from 76 percent and 71 percent, respectively.

Lesser rated tools, albeit still at least "moderately" valuable to more than six in ten respondents, include *sample protocols to test compostable plastics disintegration at the compost facility* (39% "1" rating, 65% "1" or "2" rating), *sample purchasing policies* (37%, 63%), *sample certification labeling for municipal adoption* (33%, 64%), and *current and emerging research clearinghouse* (28%, 67%).

Figure 12: How Valuable Would Each Tool Be in a Took Kit?

Question 13: *If your municipality/jurisdiction has an existing program to support the collection of yard trimmings or food scraps using compostable plastics, please mark any of the tools that you have developed for use in your program.*

Forty percent of respondents said their municipality/jurisdiction does not have an existing program to support the collection of yard trimmings or food scraps using compostable plastics. Thirty-seven percent said they have used *outreach for business technical support.* Thirty percent use *outreach for residential audiences.* Lower numbers use *purchasing policies* (18 percent), *labeling and identification guidelines* (18 percent), *research on the use and function of compostable plastics* (15 percent), and *municipal ordinances* (13 percent). Just eight percent have developed *municipal certification labeling for approved compostable plastics* and five percent *sample protocols to test disintegration of compostable plastics at the compost facility.* Twelve percent gave another response.

Figure 13: Which Tools Does Your Jurisdiction Have ?

Question 14: *Does your municipality/jurisdiction work with outside agencies, consultants or nonprofits to provide technical assistance with compostable plastics for businesses, residents or public programs? If so, please indicate the types of services these partners provide your jurisdiction? (Multiple responses accepted)*

Twenty-six percent have chosen not to include compostable plastics in their programming, and 45 percent have not worked with outside agencies for compostable plastics.

Twenty-six percent said they have worked with outside agencies, consultants or nonprofits to provide *educational programs and outreach materials*. Twenty-one percent have used outside agencies, consultants or nonprofits to provide *policy development,* while 17 percent each said *collection program design* and *compost operations*. Another 10 percent gave another response.

Figure 14: Does Your Jurisdiction Work With Outside Agencies to Provide Technical Assistance with Compostable Plastics?

Question 15: *How interested are you in receiving assistance from our national industry task force on the issue of compostable plastics management?*

The results we present for this question count those who skipped it, on the assumption that not answering the question is an indication of lack of interest in receiving assistance from the task force. About 46 percent of respondents answered that they are "very" (24 percent) or "somewhat" (22 percent) interested in receiving assistance from our national industry task force on the issue of compostable plastics management. The balance were neutral, not interested, or did not answer. Thirty-five respondents did not answer the question (23 percent of all respondents).

Figure 15: How Interested Are You in Receiving Assistance from Our National Industry Task Force?

N = 153

Question 16: *In order to help you understand new information and resources about compostable plastics, in which format do you prefer to receive information? (Top three choices accepted)*

The most mentioned formats to receive information when asked to choose their top three sources are *webinars* (59 percent) and *background information documents* (56 percent). Just over one-third of respondents chose *graphic source files—outreach examples* (35 percent) and *PowerPoint presentations* (34 percent) among their top three choices. Another 29 percent put *conference sessions* in their top three, followed by 27 percent choosing *contact with subject matter experts*, 23 percent *videos*, and 22 percent *training workshops.* Five percent chose none of the options.

Figure 16: In Which Format Do You Prefer to Receive Information?

Question 17: *Please select the industry category that best describes your role.*

Of the 119 respondents answering the question, 60 percent said they were best described as a *local government employee*. Less than 10 percent chose any other response, with eight percent choosing *non-profit agency*, six percent *private sector agency*, five percent *consultant*, four percent *commercial composter*, two percent *plastics manufacturer or distributor*, and 15 percent giving another response. Thirty-four respondents (22 percent of the total sample) did not answer the question.

Figure 17: Which Category Best Describes Your Role?

Question 18 was not analyzed by this report.

Question 19: *The population of the municipality that you represent is:*

Of those answering, 22 percent came from a municipality with under 50,000 residents, 20 percent with 50,000 to 100,000 and 40 percent with 100,000 to 500,000 residents. Another 10 percent came from municipalities of 500,000 to one million residents and eight percent from larger regions. Thirty-seven participants (24 percent) did not answer the question.

Figure 19: Population of Your Municipality

Question 20: *Does your municipality have any of the following material management programs in place or planned for implementation in the next two years. (Multiple responses accepted)*

Nearly two-thirds of respondents answering the question said their municipality has in place or is planning to implement a *food scraps collection program for businesses* (65 percent) and a *backyard composting program* (64 percent). Nearly half (48 percent) gave this response regarding a *food scraps collection program for residents*. Just under two in ten have or are implementing *mandatory use of recyclable or reusable packaging* (18 percent), 12 percent for *mandatory composting for businesses*, and 10 percent each for *mandatory composting for residents* and *mandatory use of compostable packaging.* Eighteen percent said they neither had in place nor were implementing any of these programs and 11 percent mentioned other programs.

Figure 20: Do You Have Any of These Material Management Programs in Place or Planned?

Question 21: *Would you like to be notified when the compostable plastics tool kit is available online, or receive more information about the sustainable use of compostable plastics in your municipality?*

The results we present for this question count those who skipped it, on the assumption that not answering the question is an indication of lack of interest in being contacted about a compostable plastics tool kit. So about 56 percent of respondents indicated they would like to be notified when the compostable plastics toolkit is available. About 18 percent made it clear they did not want to be notified, and another 23 percent skipped the question.

Figure 21: Would You Like to Be Notified When the Took Kit is Available or Receive More Information?

N = 153