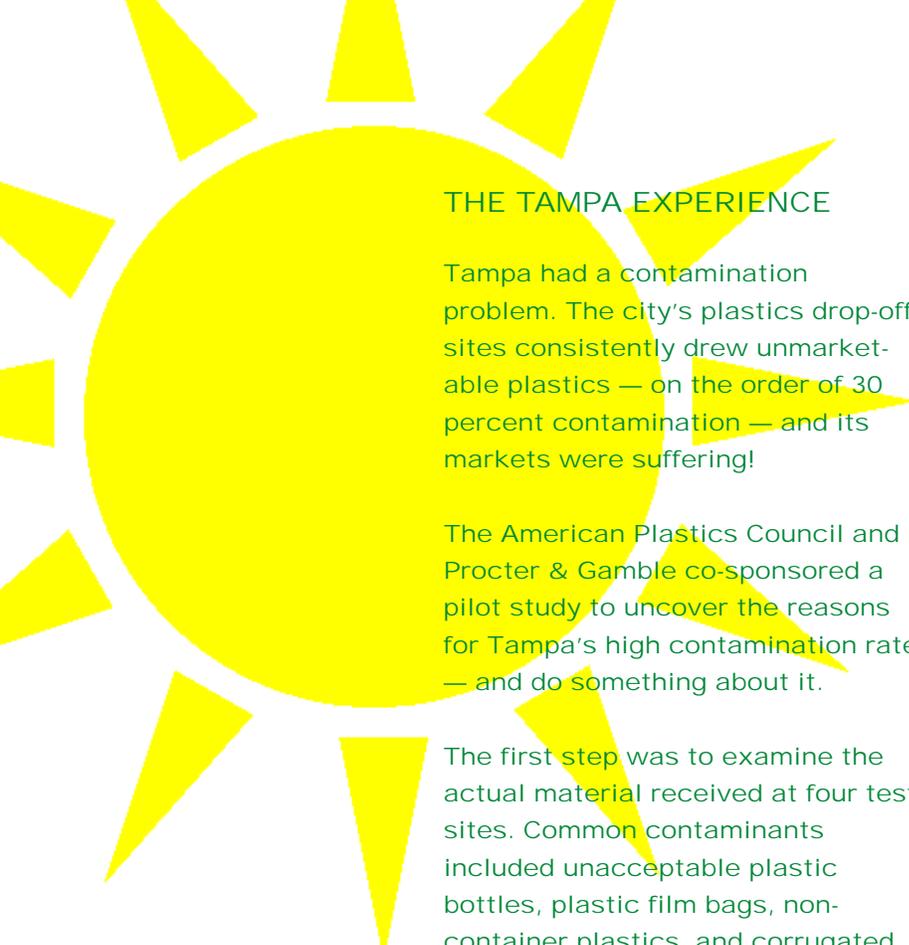


*perfecting the  
plastics drop-off*





## THE TAMPA EXPERIENCE

Tampa had a contamination problem. The city's plastics drop-off sites consistently drew unmarketable plastics — on the order of 30 percent contamination — and its markets were suffering!

The American Plastics Council and Procter & Gamble co-sponsored a pilot study to uncover the reasons for Tampa's high contamination rate — and do something about it.

The first step was to examine the actual material received at four test sites. Common contaminants included unacceptable plastic bottles, plastic film bags, non-container plastics, and corrugated cardboard.

Observers stationed at the sites watched people deposit their recyclables, then asked them a series of questions designed to uncover weaknesses in site design and signage. The observations revealed some of the underlying causes of the high contamination:

- People frequently misinterpreted the signs because the wording was unclear.
- People placed unacceptable materials in the recyclables bin because no disposal container was available.

- People found the heavy container lids awkward to hold open while attempting to place recyclables inside. It was easier to toss the whole bundle in along with its bag or box.

These findings led to new signs that abandoned reliance on resin identification codes to determine acceptable plastics. Acceptable bottles were specifically depicted and labeled and examples of unacceptable materials were provided. A trash container, marked by a large arrow, was placed beside the recycling bin to encourage participants to discard unacceptable items.

To counter the bulk placement problem, 12-inch holes were cut in the recycling bin lids. This move both eliminated the need to lift the lid and forced participants to place items one at a time — ideally confirming each bottle's suitability at the same time.

The results were dramatic. The new signs greatly aided participants' understanding of how to place and sort materials. The unacceptable material plummeted to less than 7 percent at the four pilot sites. Program-wide, contamination fell to just over 11 percent — an acceptable range for a well-run drop-off program whose public education has been confined largely to the signs at the sites.

The American Plastics Council thanks the City of Tampa, Chatham County, NC, and Procter & Gamble for their participation in developing this model program.

# perfecting the plastics drop-off

Can clean, marketable plastics be collected at unattended drop-off sites?

Yes!...if the program is designed with attention to program logistics and an understanding of human behavior.

People are eager to recycle, and many are willing to take their plastic containers to special drop-off centers if their communities cannot provide curbside collection. With clear, simple instructions and convenient, well-designed sites, householders will readily separate, prepare, and deliver market-quality materials.

Even communities that already collect plastics at drop-off sites can improve their success by making a few low-cost, common-sense changes in their collection strategies. Whether you're starting from scratch or fine-tuning an existing program, this booklet offers practical suggestions. It has been developed from actual experiences in Tampa, Florida, and Chatham County, North Carolina.



# location, location, location!

The old real estate maxim applies to drop-off sites, too. Even the keenest recyclers are more likely to participate if drop-off sites are easy to access. Most people consider about two miles a convenient driving distance to a drop-off site, especially if it's near a destination point such as a busy supermarket or a convenience store. Retailers may find a recycling site attracts drop-in traffic, and shoppers simply put bagged recyclables in the car, along with the dry cleaning and library books, as part of the weekend errand circuit.

Drop-off sites should be clearly marked, attractive, and easy to reach. Try to place facilities on well-known, heavily traveled streets or intersections to attract both frequent and occasional travelers. (You can get information about traffic patterns and volume from

local planning or public works departments.) Distinctive signs at major intersections will help direct people to the site.

Look for potential sites in high-density population areas. (Again, local planning departments or state commerce departments can furnish population and demographics data.) Residents and businesses in districts without nearby recycling facilities may welcome a well-designed and well-maintained drop-off location.

Plan the site layout with convenience in mind. Allow plenty of room to park and unload recyclables; a drive-through arrangement is ideal. Provide adequate lighting for evening users and place clearly marked trash containers beside the recycling bins for unacceptable materials and incidental waste.



# what they know is what you get

The public's understanding of material requirements can make or break a drop-off program. People must be thoroughly familiar with the specific containers wanted before they arrive at the site, or they may deposit unacceptable materials just to avoid taking them back home for disposal.

*At Home.* Leaflets or posters for home use will help people select and prepare material correctly. Use simple, active language in instructions. Explain why certain materials are not acceptable; the knowledge will help people make correct decisions, and that will lower contamination.

Combine written and visual elements in printed material. Specify exactly what containers (not resins) are acceptable; avoid using technical names such as "HDPE" or "polystyrene." Also specify "bottles with necks" if you don't want to receive tubs or other containers.

A list or graphic showing "Yes" containers on one side and crossed-out "No" containers on the other can be particularly helpful in the decision process. Be sure to include a telephone number to call for further information.

Line drawings communicate better than photographs because they emphasize important information and eliminate distracting details (shadows, backgrounds, and so on). Depict the containers as you want them delivered. For example, show containers without their screw-on caps.

*At the Site.* When people arrive at a drop-off site, they need to know exactly what to do. They'll generally be in a hurry, so signs, graphics, and instructions should be visible, brief, and easily understood. Signs, facility layout, and container design should not only encourage appropriate action, but also deter incorrect action.



## CAVEAT ABOUT RESIN IDENTIFICATION CODES

The resin identification codes — now mandated in 39 states — were developed at the request of recyclers to facilitate plastics sorting at the processing center.

Some communities, however, have attempted to use the codes in community education efforts, which often leads to problems. Consumers may look for the code only, not looking to see if the container meets other criteria, such as “bottles with necks only.”

Whenever possible, drop-off signs and educational materials should emphasize precise descriptions of acceptable containers using the resin identification code only when required by markets.

You might also want to consider signs that can change as your markets change. The display case shown here holds actual products (acceptable and unacceptable ones) attached with Velcro. A folder for educational brochures is located below the display case.

Make sign instructions clear and specific. A sign calling for “Plastics Only” or showing the resin identification code is likely to be interpreted as “any plastics” and that’s just what you’ll get.

If signs picture acceptable and unacceptable items, make the two groups readily distinguishable from one another. Use bigger, brighter illustrations of the “do” containers or perhaps show “don’t” items in black and white, or behind the familiar red-barred NO symbol.

Paint collection bins with bright, attractive colors. Use consistent colors and graphics at all sites to promote awareness and participation.

Set up your bins so that they are user-friendly and conducive to proper participation. Many people find lids heavy and awkward to hold while they place materials inside the bin. This encourages them to “bulk unload” — to toss recyclables into the bin in the boxes and paper or plastic bags used to transport them. This not only intro-

duces contaminants in the form of bags and boxes but also prevents double-checking to make sure that an individual container is acceptable.

Cutting a 12-inch diameter hole (big enough for a 2 1/2 gallon water jug) in the collection bin lid both eliminates the need to lift and forces recyclers to deposit containers one piece at a time. Circle the hole with a bright-colored warning, such as “Stop! Not for all plastic!” Then, direct attention to a graphic or list showing acceptable containers. To further discourage bulk unloading, lock the bin’s access door.

Make sure a trash bin is handy and clearly marked for “trash only.” Paint the trash containers a different color from the recyclables bins.

Keep the site clean and tidy. Overflowing trash and collection bins attract pests, annoy neighbors and property owners, and discourage participation. If necessary, clean the site daily and arrange for more frequent trash pickup and recyclables collection.



*signs* — how they look and what they say — are the key to a successful drop-off program.

## DO

### SIGNS

- Use large signs with large lettering.
- Use bright, high-impact colors.
- Use graphics and pictures to convey information.
- Label items pictured.

### INSTRUCTIONS

- Be specific about what is acceptable and what is not acceptable.
- Ask people to rinse containers well.
- Ask people to remove caps and throw them away.
- Provide a telephone number for questions.

## DON'T

### SIGNS

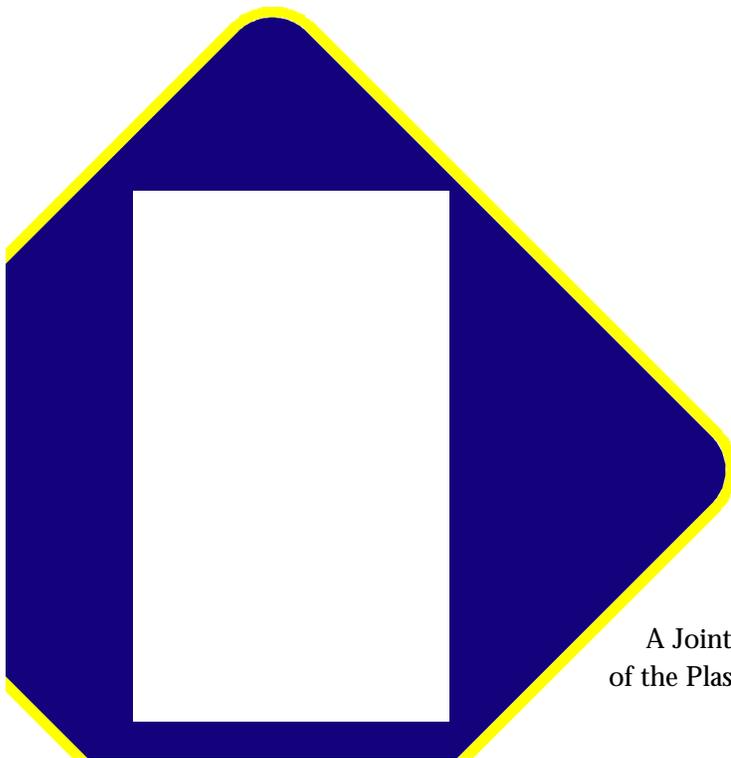
- Use many words.
- Picture acceptable containers with caps attached.

### INSTRUCTIONS

- Use language like "all #1's and #2's," unless you want bags, cups and other non-bottle containers.
- Use vague words like "plastics only."
- Use the resin identification code unless you follow the guidelines suggested in "A CAVEAT ABOUT CODES" on the preceding page.

## *summing up*

Drop-off plastics recycling can be a cost-effective alternative to curbside plastics collection, without sacrificing product quality. With strategic siting, forceful signage, and minor bin modifications, the public will consistently deliver material comparable to what would be expected in more costly curbside programs.



A Joint Initiative with The Society  
of the Plastics Industry, Inc.