

February 19, 2003

Dan Grow
Solid Waste and Recycling Coordinator
Schuylkill County
401 N. Second Street
Pottsville, PA 17901

Subject: Establishment of Signage for County Recycling Drop-off Sites

Dear Dan:

This letter provides a summary of the basis for and objectives of developing signage for Schuylkill County's recycling drop-off sites. These signs have been developed as part of the Pennsylvania Recycling Technical Assistance program. While the primary deliverable for this project are the full-size drop-off site signs, this report provides background on the project. The report is divided into the following sections:

- Background;
- Signage considerations;
- Schuylkill County Recycling Drop-off signs; and
- Conclusions.

A small scale example of the two signs designed for this project has been included as Attachment 1 to this letter report. A full-scale electronic file of the signs have been provided to the County.

Background

Schuylkill County currently has a county-wide drop-off recyclables collection program consisting of 27 drop-off sites. The County uses specialty drop-off containers and a customized collection vehicle designed by Haul-All to service the sites. The Haul-All system combines a series of connected drop-off containers with material-specific openings, that are serviced by a special collection vehicle that works interchangeably with each material type. Residents and small business customers can drive up to the drop-off containers and place their recyclables in the appropriately marked container openings.

Example pictures of the County's drop-off sites are shown in Figures 1 and 2. As shown in both figures, the drop-off sites are neat, uniform in appearance, and attractively marked as County drop-off sites. Each of the containers has commodity-specific openings in which residential and business users place appropriate materials. There is some verbiage next to each opening that describes the specific materials that are allowed in that specific container, with specific clarifications for plastics. The County's recycling logo adorns the lower front panel of each container. However, there is no central educational signage that provides more detailed reference, nor is illegal dumping addressed.



Figure 1 Schuylkill County Drop-off Site at Ashland



Figure 2 Schuylkill County Drop-off Site at North Manheim

In Pennsylvania as a whole, there are a total of 12 counties that have implemented the Haul-All drop-off collection system. This system appears to be well-suited for serving rural areas that are not dense enough to support curbside collection of recyclables. Table 1 shows all of the counties across Pennsylvania that also utilize the Haul-All drop-off recycling system.

Table 1 Counties with Haul-All Drop-off System

Allegheny	Crawford	Monroe
Blair	Dauphin	Pike
Cambria	Fayette	Schuylkill
Carbon	Mercer	Somerset

It is of interest to note that Schuylkill County is among the minority of counties using the Haul-All drop-off system that does not have extensive signage at their drop-off sites¹ (beyond the verbiage that is included on the recycling containers themselves). This has resulted in three main problems for the County:

- Higher contamination rates due to greater confusion about the materials that are included in the program;
- Frequent placement of recyclables on the ground next to or behind the recycling containers, either because of confusion about where to place materials, or from overflow; and
- Improper attempts to recycle plastic grocery bags at the sites.

All of these problems are understandable in light of the lack of on-site signage. Based on this background, the County has requested assistance to develop clear, easily understandable, visually attractive signage for these drop-off sites that will address their primary problems by attempting to educate drop-off site users.

Signage Considerations

When crafting the signs for the County's drop-off sites, we employed time tested signage "do's and don'ts." In general, successful signage should have:

- Large lettering that is clearly visible from the expected observation distance;
- Bright, high-impact colors that draw attention while still blending in with the overall site surroundings and container coloration;
- Professional graphics that are easy to interpret and clearly reinforce the intent of the sign; and

¹ Fayette, Pike and Somerset Counties also do not have extensive signage.

- Labels under each graphic that clearly defines the item.

In addition to these general concepts, signage for drop-off recycling sites should also consider:

- Clearly defining the types of paper that are included in each container;
- Clearly defining the types of plastic that are collected in the program. The Schuylkill County program targets only #1 and #2 plastic bottles. The County's containers do a good job of clearly stating that only #1 and #2 plastic bottles" are acceptable. Signage should avoid using vague terms like "#1 and #2 plastics" or "plastics only." Such vagueness will assure high contamination with tubs, non-targeted resins, and assorted mixed plastics that are not recyclable.
- Listing some common contaminants that should be avoided in the program;
- Asking people to prepare their recyclables appropriately, by
 - Taking newspapers out of plastic sleeves;
 - Cutting cardboard into a size that will fit into the recycling containers;
 - Rinsing out their containers before placing them in the drop-off containers;
 - Removing and discarding caps to plastic and glass bottles;
- In this age of widely available cellular phone usage, providing a phone number to call in case someone has questions.

Effective signage for recycling drop-off sites should avoid using too many words, or using overly technical language that may not be commonly known by drop-off site users.

The Schuylkill County signs were designed with these concepts in mind.

Schuylkill County Drop-off Recycling Signs

Based on discussions with the County, it was determined that signage was needed to convey three distinct messages:

- **Leaving Recyclables on the Ground is Illegal Dumping:** To minimize illegal dumping, the sign should alert drop-off users as to illegal and unacceptable discarding of recyclables or waste on the ground next to the drop-off containers, and also call attention to the fact that the County will prosecute violators;
- **Reinforce Recyclable Material Definitions:** Although there is verbiage on each of the containers describing which materials are allowable, the sign should serve as a resource for all drop-off site users to illustrate acceptable and unacceptable materials in a concise summary page, without too many words of too detailed of a description; and

- **Clarify that Plastic Grocery Bags are not Recycled here.** Each site has a small receptacle at one end of the recycling containers that is called a “Hid-a-Bag.” This receptacle provides a place for residents to dispose of the bags they used to bring their recyclables to the site, and also to dispose of refuse. Over time, many residents have come to believe that the “Hid-a-Bag” receptacle explicitly targets plastic grocery bags for recycling, and have begun to bring their grocery bags to the drop-off sites. This results in these bags being disposed as contaminants.

Illegal Dumping

Most illegal dumping occurs when residents place recyclables and/or waste material on the ground in front of, beside, or behind the drop-off containers. In addition to creating windblown litter, this can also disrupt the flow of vehicles and foot traffic attempting to reach the container openings to use the site. Several counties in Pennsylvania have developed signage to alert drop-off center users to the problem of illegal dumping. Figures 3 and 4 show several sample signs of this nature from Blair County’s drop-off sites



Figure 3 Blair County Illegal Dumping Sign, Example 1



Figure 4 Blair County Illegal Dumping Sign, Example 2

An illegal dumping message has been incorporated into the Schuylkill County sign.

Material Definitions

Because Schuylkill County targets many materials in their drop-off program, it is also important to include signage at the drop-off sites to indicate the appropriate materials, as well as to discourage contaminants. Figure 5 shows an example of material definition signage in Mercer County.



Figure 4 Mercer County Material Definition Sign

In Schuylkill County, we have attempted to provide County-specific definitions targeted recyclable materials, as well as graphical examples of targeted recyclables. The resulting sign is shown in the first Attachment. It is envisioned that this sign can be placed at any of several locations as preferred by the County:

- At one or both ends of the drop-off containers at County drop-off sites;
- Next to the entry point of the site with any existing signage; or
- Smaller versions could be affixed as decals to many places on the containers themselves.

The County may also wish to consider placing a weather-protective plastic case to dispense educational brochures that further define the do's and don'ts of the County's drop-off program.

Plastic Grocery Bags

A separate 9"x11" decal was also developed for this project to alert residents as to the proper recycling of plastic grocery bags. The decal is brightly colored and designed to be affixed directly above the opening to the Hid-a-Bag disposal receptacle. The decal informs would-be recyclers that it is not appropriate to recycle plastic grocery bags at the County drop-off site, and provides the phone number to the County Recycling Coordinator's office so that interested parties can call to find out where else the grocery bags can be taken for recycling.

This decal is shown as the second Attachment.

Conclusions and Recommendations

We believe the sign developed for Schuylkill County will clarify the targeted recyclable materials in their drop-off program, reduce the placement of recyclables and waste materials on the ground beside the recycling containers, and reduce improper attempts at recycling plastic grocery bags at the County sites. Ideally, although most other counties have already established some signage for their sites, it is hoped that this sign can also be adapted by other interested counties that have implemented a drop-off recycling collection program.

In addition to the on-site signage developed for this project, we would also recommend that the County consider the following supporting actions:

- When procuring a sign manufacturers to develop the actual signs, the County should assure consistency in sign placement and content across all of their 27 drop-off sites;
- Although an evaluation of the County's overall recycling public education program was beyond the scope of this project, it is important to mention that the drop-off site signage should continue to be supported by comprehensive recycling public education, featuring reinforcement of program details through brochures, leaflets, elementary school education, and other local media; and
- To further combat illegal dumping, the County should make sure their ordinance is updated to define the illegal dumping actions and to establish enforcement mechanisms to the extent such dumping occurs even after deployment of the new signage—ideally the ordinance number prohibiting such dumping could be added to the signs.

Dan Grow
Solid Waste and Recycling Coordinator
February 19, 2003
Page 8

Thank you for the opportunity to work with the County on this project. Please feel free to call me at (407) 648-3563 with any questions relating to this report

Regards,

John Culbertson
Project Manager

cc: Brent Dieleman, SWANA
Carl Hursh, DEP

Attachment 1

RECYCLE HERE

Please use containers. Leaving your recyclables on the ground is **ILLEGAL DUMPING**.
Violators will be prosecuted.

CARDBOARD



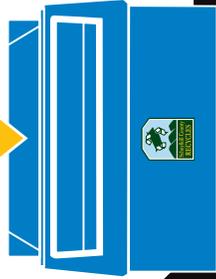
Corrugated Cardboard
Boxboard
Brown Paper Bags



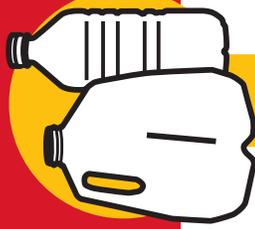
Please break down boxes



Pizza boxes



PLASTICS



#1 PET and #2 HDPE
Plastic Bottles

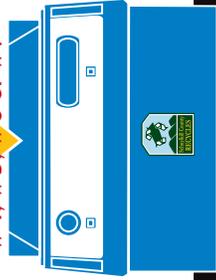
Examples:

- Milk Jugs
- Soda Bottles
- Juice/Water Bottles
- Detergent Bottles



Styrofoam

Plastics Labeled #3,
#4, #5, #6 or #7



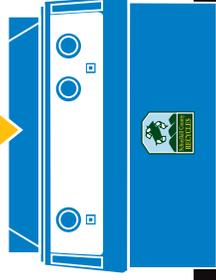
METALS



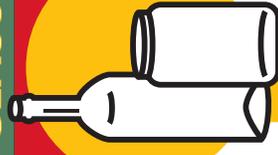
Aluminum Cans
Steel and Bi-Metal
Food and Beverage
Cans



Small Appliances
Electronics



GLASS

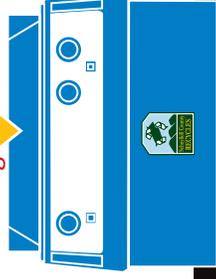


Glass Food and
Beverage Bottles and
Jars

Clear, Green and
Brown Glass



Metal Caps/Lids
Ceramics
Light Bulbs



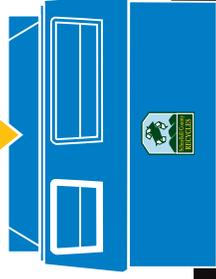
PAPER



Newsprint
Phone Books
Magazines
Catalogues
Office Paper
Junk Mail



Plastic Grocery Bags
Clothing



NOTICE

Schuylkill County does not accept plastic grocery bags for recycling. Plastic bags placed in this container will be disposed.

Please contact the County at (570) 628-1220 for a list of establishments that accept plastic grocery bags for recycling.

