



March 15, 2002

Mr. Jim Tate
Chair, Environmental/Recycling Committee
Willistown Township
9 Harvey Lane
Malvern, PA 19355

Subject: Improving Commercial and Institutional Recycling

Dear Jim:

This letter is to provide Willistown Township with the results of R.W. Beck's evaluation of the Township's recycling program as it pertains to the commercial sector.

The Township has requested assistance to develop methods to improve commercial recycling in the Township. Specifically, the Township has suggested that it is interested in forming a task force as a tool to improve commercial recycling.

EVALUATING WILLISTOWN TOWNSHIP'S COMMERCIAL RECYCLING PROGRAM

This evaluation is broken down as follows:

- Commercial recycling programs
- Commercial education and outreach
- Data collection
- Grant funding
- Development of a recycling task force/advisory committee

The following issues are considered:

- Identifying the major establishments or categories of establishments in the commercial and institutional sectors to facilitate development of strategies to promote recycling in these facilities.
- Collecting information/data from these facilities, possibly through a survey, as a means of assessing the status of recycling in the Township, real and potential barriers to recycling, and determining what is needed to improve recycling programs.
- Considering information/education needs and defining appropriate vehicles to reach commercial and institutional entities.
- Considering methods to streamline and simplify the reporting process to: (1) make it easy for businesses to report using a "user friendly" form; (2) get more data from haulers

and processors, rather than individual businesses, and from larger businesses and property management companies that manage their recyclables at a corporate level; (3) get data on more materials that can be counted toward the Commonwealth's 35 percent recycling goal; and (4) get as much of the commercial Act 101 data as possible to take advantage of changes to the Section 904 Performance Grant formula to maximize the grant award to the Township.

- Analyzing the potential for greater return on Section 904 Performance Grants by making improvements and/or changes/additions to the Township's recycling program.
- Developing a recycling task force/advisory committee to assist the Township in all facets of its recycling program.

IDENTIFYING COMMERCIAL AND INSTITUTIONAL ESTABLISHMENTS

It is difficult to truly assess the status of commercial recycling in Willistown Township. As a municipality mandated to recycle under the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), the Township must include mandatory recycling for all commercial and institutional establishments in its recycling ordinance.

It is not clear how much information commercial and institutional establishments have received concerning their obligation to implement recycling. The Township reports that most businesses do not know that recycling is mandatory. The Township has also identified a problem that makes notification of businesses difficult. There is no method available to identify all the businesses and institutions located in the Township. There is some identification by tax parcel, but this only includes entities that own or hold a property for tax purposes, which may not be the business or businesses located on that property. Therefore, one of the issues that must be addressed before substantial improvements can be made is that actual businesses and institutions operating in the Township must be identified in some way.

The Township may want to consider a survey to help in determining the best ways to promote commercial and institutional recycling in the Township. A suggested survey is included as Attachment 1. However, prior to distributing any survey, the Township should attempt to develop a list of businesses and institutions in the Township that will make it possible to target efforts to promote, implement, and improve commercial and institutional recycling efforts.

There are several ways to approach developing such a list. One is to look at various directories that already exist, from telephone directories (particularly the "business-to-business" type directories) to chambers of commerce and business association memberships. Churches, schools, government offices, hospitals and large businesses should be simple to gather. More difficult will be retail establishments and professional offices such as lawyers, doctors, accountants, etc. The only way to get a reasonably good list of all commercial and institutional establishments may be to do a street-by-street assessment of the Township and record findings. Volunteers could do this. A useful part of this kind of survey is to also identify those that are stand-alone entities, and those that are located within leased space operated by a property management group that is responsible for waste management for the entire facility, along with the name of the management entity. For the future, it may also be helpful to find a method that would make it possible for the Township to receive

information on new businesses as they locate in the Township. This is information that may turn out to be useful for other purposes as well, and is something that should be explored.

It should be noted that the Township has identified some of the larger commercial and institutional entities, and has provided an overview of the other types of facilities that exist. These include:

- Paoli Memorial Hospital
- Insurance Institute of America
- One elementary and one middle school (though this may decrease to one school)
- Approximately one half dozen restaurants
- Limited retail establishments
- Two medical buildings
- Churches
- Park
- Apartments—one complex with approximately 400-500 residents

The street-by-street survey suggested above could be used to gather the initial information about businesses and institutions in the Township. This effort could be followed up by telephone survey to get specifics concerning the mailing address and recycling/waste contact. All this information could be entered into a database that would make it simple for the Township to contact these entities when necessary, and to update when changes are required.

PUBLIC EDUCATION

It appears there have been no comprehensive education efforts to assist the commercial and institutional sectors in either implementing or improving their recycling programs.

The information that would be collected through the recommended survey should help set the direction for future commercial recycling promotions. While this information will help in developing more specific educational efforts, there are some basic strategies that would help the Township to better target its educational activities and to collect more commercial and institutional recycling data more efficiently.

It is important to know who the target audiences are. The list provided in the previous section identifies most of the major sectors that would need to be addressed in Willistown Township, and could be amended as the Township builds a commercial/institutional list for its recycling program. While there is information concerning basic requirements that pertains to all of these establishments, the materials generated and approaches that facilitate recycling sometimes differ dramatically from sector to sector. A basic education campaign should include the following:

- Requirements—state, county, and local, including data collection requirements
- Basic program components to implement new or improve existing programs.

In addition, it is helpful to be prepared to provide information more specific to the targeted sectors. Attachment 2 includes basic commercial public education materials, including fact sheets targeted at specific sectors or certain materials.

Educating Reluctant Commercial Establishments. Many small businesses are reluctant to implement recycling programs because they believe that recycling will result in greater waste management costs. While it is true that recycling does entail some cost, most businesses and institutions should find that their overall waste management costs—that is, cost for collection and disposal of waste and collection and processing of recyclables combined—should not increase, and in fact, there is significant potential for reduced cost.

Before going further, however, it should be noted that businesses and institutions in Willistown are mandated to recycle under Act 101. The Township must require them to recycle by ordinance. It is always preferable, however, when a municipality can use a “carrot” instead of a “stick” approach to convince businesses and institutions to recycle.

There has almost always been a misconception that businesses and institutions should earn money from recycling. While this may be possible for larger entities when the market price for recyclables is high, it is usually not possible for small businesses and other small entities. The reason for this is because the revenue from sale of materials almost certainly will not cover the cost to collect and process the material. It should, however, result in a less costly service, since revenue should offset a portion of the cost.

A mistake that many businesses make is that when they implement recycling programs, they do not take corresponding measures to reduce waste collection and disposal services. Most businesses pay by the pull for waste—this means that they pay a flat amount every time a waste container is emptied or pulled based on the size of the container, regardless of how full the container happens to be. When a business implements a recycling program, depending on the amount of recyclables produced, fewer waste collections should be required. Many, if not most, businesses should be able to reduce the number of waste pickups/pulls, and this should result in a reduction in disposal cost that correlates to the reduction in pickups/pulls. The savings achieved by reducing waste collection should, in most instances, cover the cost of recycling collection and processing.

Unfortunately, it is difficult to provide any meaningful data to illustrate how recycling will affect a given business in a given community. The resulting overall cost depends on a variety of factors, including, but not limited to, rates in a given area (which varies by region, population density, cost of labor, disposal cost, and what the market will bear, among other things), the materials a business is recycling and the weight and volume of the material, and recycling markets (i.e. what the market price is for any given material, which fluctuates and often varies by region). As noted above, however, managing services efficiently should ensure that overall waste management cost, which includes recycling, should not increase.

There are also some strategies that have been used in other communities to assist small businesses with recycling. Possible options include:

- **Cooperative efforts.** Several businesses located within a given area could act cooperatively to bid for recycling collection and processing services. This would require some coordination concerning internal efforts and materials to be recycled. In this scenario, several businesses could deposit their recyclables into a common container or containers for collection, and the cost of service would be prorated among the participants.

- **Non-profit services.** In some areas, non-profit agencies like Goodwill have developed collection programs for recyclables. Because their costs are much lower, the cost to customers is usually much lower.
- **Joint bidding by an umbrella organization.** Some business and professional groups such as chambers of commerce have acted on behalf of members to bid for services, often at a reduced price for the group.
- **Drop-off recycling.** Some municipalities have elected to provide for the drop-off of recyclables from small businesses. While this requires some initiative by the business to deliver materials to a drop-off site, it can provide a nearly no cost option for recycling. This can be as simple as the program in Camp Hill Borough, where containers for paper and cardboard are provided in the Borough's parking lot, or can be as elaborate as the staffed facility in the City of Bethlehem that takes nearly every material imaginable. Obviously this kind of program does result in cost to the municipality, but any costs can be offset by (1) Section 902 grants to pay for any equipment or education, and (2) Section 904 performance grants that are based on the weight of material and the recycling rate that can be used to pay for operation. The amount of effort to the municipality can be kept to a minimum by doing what Camp Hill does, which is simply to contract with a local company to set containers on site, pick up materials, and process and market them.

DATA COLLECTION

It is not clear how the Township has gone about data collection in the past. The Township is required to obtain recycling information from commercial and institutional entities to prepare an annual recycling report for Chester County. This report is due to the County by February 15 of each year. The Township can continue to solicit and collect information throughout the year, however, to be used to develop an annual Section 904 Performance Grant application, which has been due on or around September 30 for the last few years. Of course, any additional information collected should be provided to the County to be used toward the County's recycling rate. The governor has established a goal of 35 percent recycling for each county by 2003.

R.W. Beck has developed a "user friendly" reporting form to collect commercial and institutional recycling data. Collecting comprehensive data in light of the revised Section 904 Performance Grant formula can benefit the City, since there will now be financial return for all Act 101 materials collected by businesses, not just those that make up a one-to-one match with materials collected from residences.

Attachment 3 is a proposed annual reporting/data collection form. It is simple, gathers basic information about respondents to ensure accurate accounting, and requests data on a range of recyclable materials that could potentially be managed in the commercial/industrial sector.

While this form is designed to be mailed to all commercial and institutional establishments, the Township would be better served by undertaking a strategy that would result in more data per contact. This is a strategy that has been recommended for several years by the Professional Recyclers of Pennsylvania (PROP), and involves targeting the following entities for information:

- **Haulers.** In Willistown Township, there are only a handful of haulers that collect recyclables from commercial and institutional establishments. These haulers can report on all commercial, institutional and industrial establishments located in the Township on a single form, so the data is collected even if many individual businesses don't report. These haulers should also be required to provide a list of the customers they serve for two primary reasons: (1) it gives the Township information on who is in basic compliance with recycling requirements, which will help as the Township works toward gaining compliance from all commercial and institutional establishments; and (2) it helps to prevent double counting of data if it is reported by both the hauler and the individual business.
- **Brokers.** In some cases, brokers may be collecting recyclables directly from commercial and institutional establishments in the Township. Similar to haulers, they can report for all customers on a single form, and should provide a list of their Township customers.
- **Corporations and others that manage their own recyclables (including property/rental management companies).** Some larger companies manage their recyclables at the corporate level and they collect and market materials directly. This is usually true for larger retailers like WalMart and for large grocery store chains like Giant. These entities sometimes report to county recycling coordinators only, and sometimes to both the county and municipalities where their facilities are located. The county recycling

coordinator should be contacted to determine whether or not there is any data reported to the county that has not been reported to the Township.

Property/rental management companies are usually responsible for managing all the waste in multi-story buildings or complexes that house a number of businesses. They can provide aggregate data for entire buildings, and should be required to provide a list of tenants, similar to haulers providing customer lists. Many—probably most—may be using one of the haulers operating in the Township, however, so this should be ascertained in order to avoid double counting of data.

It should be noted that haulers, including brokers that collect recyclables, are usually reluctant to provide customer lists because they consider it to be proprietary information. The Township should find a strategy that ensures that this information is provided. An assurance that the information will be kept confidential has often been enough for some municipalities and counties, since it is only a list and does not provide specific data for each customer—information that could be valuable to competitors. If haulers refuse to provide this information, the Township should contact the county recycling coordinator to find out about any hauler licensing requirements the county might have. Many counties include provisions that haulers (1) submit annual recycling reports and (2) provide lists of customers with the reports. If this is the case, the Township should be able to collect the desired data citing the county’s requirements.

GRANT FUNDING

The Township has the potential to qualify for significantly more funds through the Section 904 Performance Grant. Improved collection of commercial (and institutional) data under the new grant formula could potentially result in the level of grant awards illustrated in Table 1.

TABLE 1
ESTIMATED 904 GRANT AWARD WITH EXPANDED COMMERCIAL DATA COLLECTION

| Category | 1999 Tonnage | 1999 Tonnage + 50% More Commercial | 1999 Tonnage + 100% More Commercial |
|--|---------------------|---|--|
| Residential | 21.16 | 21.16 | 21.16 |
| Commercial | 355.05 | 532.58 | 710.10 |
| Total Recycling | 376.21 | 553.74 | 731.26 |
| Estimated 904 Grant Award* | \$3,573 | \$5,348 | \$7,123 |
| Recycling Rate for 904 Performance Grant | | 0.53% | |

**Calculated as follows: \$5 plus \$.53 (based on 904 recycling rate) times residential tonnage plus 1:1 match with commercial tonnage (total 42.32 tons), plus \$10 times the remaining commercial recycling tonnage (total 333.89 tons); totals for additional commercial tonnage include the greater balances of commercial tonnage after the 1:1 match*

The recycling rate used to prepare these estimates is based on waste generation of 0.8 tons per person per year. At 10,000 population, the waste generation rate is 8,000 tons per year. As illustrated, boosting the commercial recycling tonnage reporting by 50 percent—which should be achievable given the low level of data collection currently—would boost the Section 904 grant award under the new formula by approximately 50 percent. Collecting data on double the current commercial tonnage, which might require work to get these establishments to implement or improve programs, could potentially result in a Section 904 award that is nearly 100 percent greater than the estimate based on current tonnage. At this rate, it might be worth putting additional resources into promoting commercial recycling and data collection.

Another area to consider for boosting the grant awards is to maximize residential curbside collection. Any activity that helps to increase curbside collection of recyclables will help in the bottom line. In particular, newsprint should receive attention because it is the most significant recyclable material by weight in the residential waste stream. Newsprint generally makes up 40 to 50 percent of the tonnage collected in curbside programs. Boosting the curbside tonnage would allow the Township to use more of the commercial tonnage in estimating the Township's recycling rate. A higher recycling rate means more paid per ton collected under the Section 904 grant formula. For example, in Table 1, the Township gets \$5.00 per ton for the 21.16 tons of residential recyclables and for 21.16 tons of the commercial tonnage. The estimated recycling rate using these figures is 0.53 percent, so an additional \$.53 is paid per ton for the 42.32 tons cited above (for a total of \$5.53 per ton). Under the new formula, the Township would receive a flat \$10.00 per ton for the remaining commercial tonnage.

If the Township were to boost curbside-only diversion of recyclables to five percent of total municipal waste, the Township could then use an increased equivalent commercial tonnage to estimate its recycling rate, which would be 9.44 percent, rather than .53 percent. The Township would receive \$5.00 per ton for all residential recyclables plus \$5.00 per ton for the equivalent amount of commercial recyclables. The City would then receive an additional \$9.44 per ton for the total of residential plus the matching commercial tonnage, for a total of \$14.44 per ton. This is not only a higher rate per ton, but it is paid on more tonnage. As explained above, the Township would receive \$10.00 per ton for the remaining commercial tonnage. Table 2 illustrates how boosting the curbside recycling rate to five percent could benefit the Township under the Section 904 grant program.

Table 3 illustrates how boosting the residential recycling and improving data collection could benefit the Township even more.

As indicated, the combined effect of increasing residential diversion and improving commercial data collection would yield an even greater effect than either option alone. However, as Tables 1, 2 and 3 illustrate, improvements in either of these areas could make a significant difference to the Township's bottom line.

RECYCLING TASK FORCE/ADVISORY COMMITTEE

In a municipality like Willistown Township, where size and budget limit the ability to hire personnel to manage a recycling program or time that existing personnel can dedicate to recycling, it may be useful to form a recycling task force or advisory committee to assist with

TABLE 2
ESTIMATED 904 GRANT AWARD WITH EXPANDED RESIDENTIAL TONNAGE AT 5 PERCENT DIVERSION

| Category | Estimated Tonnage | + 50% More Commercial | + 100% More Commercial |
|--|--------------------------|------------------------------|-------------------------------|
| Residential @ 5% diversion | 400.00 | 400.00 | 400.00 |
| Commercial* | 355.05 | 532.58 | 710.10 |
| Total Recycling | 755.05 | 932.58 | 1,110.10 |
| Estimated 904 Grant Award** | \$10,902 | \$13,326 | \$15,101 |
| Recycling Rate for 904 Performance Grant | 9.44% | 10.00% | 10.00% |

**Based on 1999 actual for initial estimated tonnage*

***Calculated as follows: \$5 plus \$9.44 (based on 904 recycling rate) times residential tonnage plus 1:1 match with commercial tonnage (total 755.05 tons), plus \$10 times the remaining commercial recycling tonnage (total 0 tons); totals for additional commercial tonnage include the greater balances of commercial tonnage after the 1:1 match and higher 904 Recycling Rate of 10%*

TABLE 3
ESTIMATED 904 GRANT AWARD WITH EXPANDED RESIDENTIAL TONNAGE AT 10 PERCENT DIVERSION

| Category | Estimated Tonnage | + 50% More Commercial | + 100% More Commercial |
|--|--------------------------|------------------------------|-------------------------------|
| Residential @ 10% diversion | 800.00 | 800.00 | 800.00 |
| Commercial* | 355.05 | 532.58 | 710.10 |
| Total Recycling | 1,155.05 | 1,332.58 | 1,510.10 |
| Estimated 904 Grant Award** | \$22,452 | \$28,860 | \$36,056 |
| Recycling Rate for 904 Performance Grant | 14.44% | 16.66% | 18.88% |

**Based on 1999 actual for initial estimated tonnage*

***Calculated as follows: \$5 plus \$14.44 (based on 904 recycling rate) times residential tonnage plus 1:1 match with commercial tonnage (total 1,155.05 tons), plus \$10 times the remaining commercial recycling tonnage (total 0 tons); totals for additional commercial tonnage include the higher 904 Recycling Rates*

planning and implementation efforts. To date, the Township has depended on volunteer contributions to plan and promote the program, and while this has contributed to the program's success so far, there are limits to the effectiveness of such an approach.

In most programs that rely on volunteers, there is usually a dedicated core group of volunteers that are dependable, and finding others willing to commit is difficult. However, even the most committed volunteers find themselves having to back away from these volunteer commitments due to moves, changes in employment or other circumstances, burnout, or lack of support from the municipality. Often, as volunteers discontinue their participation, new volunteers are not available to replace them.

A recycling task force or advisory committee, consisting of personnel who have a stake in recycling in the community, may provide the best option to assist the municipality in expanding and improving its recycling program. This group should contain a cross-section of people representing a wide range of interests in order to address recycling issues in a manner that considers and meets the needs of all involved. Representatives should have an interest in recycling, and should be, to the extent possible, known and respected in the community. The following is a list of the organizations that should be considered for representation on a task force or advisory committee:

- Willistown Township administration
- Elected official
- Waste/recycling hauler
- Recyclables processor
- End user of recycled materials
- Business organizations such as:
 - Chamber of Commerce
 - Rotary
 - Business and professional associations
- Service organizations such as:
 - Kiwanis
 - Lions
 - Jaycees
- Environmental organizations
- School district
- Media
- Major businesses that recycle or are able to contribute time/funds to program
 - Hospital
 - Insurance Institute of America
 - Property management companies (that manage complexes with multiple businesses)
 - Banks
 - Respected professionals such as lawyers, doctors, etc.
- Citizens/volunteers

There may be other organizations or individuals that the Township is able to identify who could make valuable contributions to this type of effort as well. Having representation from all sectors can help in: (1) identifying the issues that need to be addressed; (2) identifying businesses and institutions that should be recycling or may require assistance; (3) identifying types of materials generated and in projecting the tonnage/volume of materials that might be expected; (4) public education; and (5) data collection.

Perhaps more significant, a task force or committee may be able to make additional contributions beyond those identified above. For example, a task force or committee may want to implement a technical assistance program to help businesses and institutions that are having difficulty with their recycling programs or have not implemented a program. Representatives from businesses that are doing well could be paired with similar businesses in a sort of “peer match” approach to help those that are struggling. This kind of group may also want to consider cooperative efforts among businesses that would improve collection efficiency and achieve cost savings for businesses that participate.

Finally, a task force or advisory committee spreads the workload over a larger group, and a group where members are affected directly by the decisions of the group. This approach should help to reduce burnout and boost commitment.

CONCLUSIONS

- Recycling is mandatory for businesses and institutions in Willistown Township, and it is believed that most are not aware of this.
- There is no method available to identify all the businesses and institutions located in the Township.
- It appears there have been no comprehensive education efforts to assist the commercial and institutional sectors in either implementing or improving their recycling programs.
- While all known commercial and institutional establishments are sent annual reporting forms to submit recycling and waste data to the Township, many do not respond and there have been no enforcement activities to encourage greater compliance.
- The Township has the potential to qualify for significantly more funds through the Section 904 Performance Grant.
- The Township has expressed interest in forming a Task Force/Advisory Committee to assist in improving the commercial recycling program.

RECOMMENDATIONS

- Willistown Township should use the survey provided in Attachment 1 to collect information from the list of facilities also provided in the attachment as a means of determining the status of recycling in commercial establishments.
- The Township should develop a comprehensive list of commercial establishments and institutions that it can use for the purpose of recycling data collection.
- The Township should use the annual reporting form provided in Attachment 3 in future years to collect annual recycling data and to obtain more complete information from commercial establishments in the Township.
- The Township should enforce submission of annual reports by commercial establishments and institutions, but should also implement a data collection program that helps to streamline the process and allow for more complete collection of data. The Township should request data directly from haulers, brokers, and property managers, and should require that they submit customer lists with the data. The Township should

consider changes to its ordinance to require these entities to submit both data and customer lists.

- The Township should implement a comprehensive education program for commercial establishments and institutions, beginning with the use of materials provided in Attachment 2. Ideally, the Township should assign some employee time to improving the Township's recycling program, tasking that employee to provide information and technical assistance to commercial establishments and to establish a comprehensive data collection program. This assignment of time could be justified given the potential for additional grant awards as illustrated in this report.
- Even if the Township is not willing to consider assigning a person to work on recycling, it should consider improving commercial data collection and/or boosting recycling from residences as a means of boosting the award available through the Section 904 Performance Grant program.
- The Township should establish a Task Force or Advisory Committee consisting of key persons from all sectors of the Township to assist the Township in expanding and improving its recycling program.

Willistown Township is mandated to recycle, yet recycling is barely visible. The Township stands to benefit financially from an improved commercial recycling program, and for that reason, the Township should strongly consider implementing the recommendations listed above.

Sincerely,
R.W. BECK, INC.

Sandra L. Strauss
Environmental Analyst

cc: Kathleen Kilbane, SWANA
Carl Hursh, DEP
Debbie Miller, R.W. Beck