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March 23, 2000

Mr. James M. Close Director, Department of Public Works City of Harrisburg 1690 S. 19<sup>th</sup> Street Harrisburg, PA 17104

Subject: Improving Recycling in Commercial Establishments

Dear Jim:

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

The City is in a unique position as the state capital, with access to recycling data/tonnage from the large number of state government facilities located in the City for use in annual reports and grants. Recent changes to the formula used to calculate awards for the Act 101 Section 904 Recycling Performance Grants stand to benefit the City significantly, and this has prompted the City to review its current reporting system and the status of recycling in commercial establishments.

Because the previous formula limited the amount of commercial and institutional recycling tonnage that could be used for the purpose of calculating the dollar value of Section 904 Performance Grants, the City did not undertake aggressive efforts to obtain data from businesses and institutions in the City, or even to enforce the City's mandate for commercial recycling. The City has a recycling ordinance that requires the recycling of aluminum cans, high grade office paper and corrugated cardboard from these facilities. However, without enforcement to ensure that reports are submitted as required and programs are implemented, the Department of Public Works not only does not have good recycling information from these sectors, it does not know which facilities are in fact in compliance with the City's recycling requirements.

The City has requested assistance to: (1) evaluate the status of commercial recycling several years after a survey performed by Pennsylvania Department of Environmental Protection (DEP) interns; (2) develop a profile for an outreach and education program for the commercial sector; and (3) develop a better reporting and accounting system for recording commercial recyclables generated in the City.

# EVALUATING HARRISBURG'S COMMERCIAL RECYCLING PROGRAM

This evaluation is broken down as follows:

- Commercial recycling programs
- Commercial education and outreach
- Data collection
- Grant funding

The following issues are considered:

- Identifying the major establishments or categories of establishments in the commercial sector to facilitate development of strategies to promote recycling in these facilities.
- Collecting information/data from commercial establishments through a survey as a means of assessing the status of recycling in the City, real and potential barriers to recycling, and determining what is needed to improve recycling programs.
- Reviewing information/educational materials provided to commercial and institutional establishments in the past to help determine information/education needs and define appropriate vehicles to reach these entities.
- Reviewing the current reporting and accounting system to simplify and streamline the process to: (1) make it easier for businesses to report by developing a more "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 and maximize the grant award to the City.
- Analyzing the potential for greater return on Section 904 Performance Grants by making improvements and/or changes/additions to the City's recycling program.

### COMMERCIAL RECYCLING

In many ways, the status of commercial recycling in Harrisburg is an unknown. As a municipality mandated to recycle under the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), the City must include mandatory recycling for all commercial establishments in its recycling ordinance. The City notified commercial establishments initially in 1990 that they were required to recycle corrugated cardboard, high grade office paper and aluminum cans, the minimum required for commercial establishments by Act 101. Since then, the City's only contact with these establishments has been through the mailing of the annual report forms. These forms have provided basic information about the City's recycling ordinance and what is required for commercial establishments, but no efforts have been undertaken to enforce return of these reports or to

determine if commercial establishments in the City are in compliance with the ordinance/Act 101 mandate. There have been no comprehensive education efforts to assist this sector in either implementing or improving their recycling programs.

Interns from DEP did survey a number of businesses in Harrisburg in 1995 and found at the time that some businesses had excellent recycling programs, but some were not recycling and were not likely to implement programs without some pressure to do so. Those that were found to have exemplary programs were recognized for their efforts by DEP. R.W. Beck was requested to assist the City in following up with some of these businesses to assess where they are with their programs nearly five years later. To prepare for this, Beck obtained a copy of the survey conducted in 1995, along with the responses from the businesses that participated.

An updated version of the survey was prepared and a list of commercial establishments was drawn, including what were in 1995 both "good" and "bad" or nonexistent programs. The survey, included as Attachment 1, is designed to determine the current status of recycling programs, what they are doing and/or would like to be doing, and real and perceived obstacles and what might help in overcoming them. Unfortunately, this is an activity that cannot be completed in this project due to budget constraints. The City might want to consider enlisting the assistance of an intern or part-time student assistant to complete the survey.

### PUBLIC EDUCATION

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 City to better target its educational activities and to collect more commercial recycling data more efficiently.

It is important to know who the target audiences are. A list of target sectors for the City is provided in Exhibit 1. 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.

### DATA COLLECTION

In the past, the City has sent a form to a list of commercial and institutional establishments to request annual recycling data. While some respond voluntarily, most do not, including many establishments that may be generating significant amounts of recyclables.

Sending the form as the City has done addresses the letter of the law, but does not really meet the spirit of the law. No attempts have been made to follow up to have the forms returned, and there have been no repercussions for those failing to respond.

R.W. Beck reviewed the reporting form currently used by the City. The first impression was that the form is not "user friendly." It is dominated by text, and the reasons for the form and the information being sought are not immediately obvious. It also limits data collected to the mandated materials, and provides no space for reporting other materials that may be

Type of Organization	<u>Examples</u>	
Associations/Business Organizations	Chamber of Commerce Pennsylvania Bar Association Farm Bureau County Commissioners Association of PA Sierra Club	
Banks	AllFirst First Union Fulton Bank Harris Savings Bank	Mellon PNC Bank PSECU
Churches		
Corporate Offices	Penn National	
Government Offices	City of Harrisburg Dauphin County/Courthouse Commonwealth of Pennsylvania Federal Government	
Grocery Stores/Markets	Broad Street Market Giant	
Hotels	Capital Inn Harrisburg Hilton Holiday Inn Express Ramada Inn Market Square	
Management Companies	Campbell Jackson Cross Commercial Industrial Realty Commercial Realty Group Cumberland Management High Associates Landmark Commercial Realty	

### EXHIBIT 1 TARGET COMMERCIAL SECTORS—CITY OF HARRISBURG

	100 Cameron Associates Property Management, Inc. RVG Management and Development Rosewein Realty United Investment Properties Vartan
Miscellaneous	Patriot News
Professional Offices	Accountants Attorneys Consultants Medical—doctors, dentists
Restaurants	
Shopping Center/Retail	Kline Plaza Strawberry Square

recycled. Collecting more comprehensive data in light of the revised Section 904 Performance Grant formula can benefit the City, since there will now be financial return for <u>all</u> 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 revised annual reporting/data collection form. It is simpler, gathers basic information about respondents to ensure more accurate accounting, and requests data on a range of recyclable materials that could potentially be managed in the commercial/industrial sector. Also included is a cover letter that provides some of the information that is on the form currently being used by the City.

While this form would still be mailed to the original list of commercial establishments, the City 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 Harrisburg, there are only two major haulers that collect recyclables from commercial establishments in the City. These haulers can report on all commercial, institutional and industrial establishments located in the City 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 City information on who is in basic compliance with recycling requirements, which will help as the City 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**. Several brokers, including Harrisburg Waste Paper and Spectrum Industries, collect recyclables directly from commercial and institutional establishments in the City.

Similar to haulers, they can report for all customers on a single form, and should provide a list of their City 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 City. Beck contacted the Dauphin County Recycling Coordinator and found that only one company—Bell Atlantic—had reported at the county level.

Property/rental management companies are usually responsible for managing all the waste in multi-story buildings 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 City, 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 City 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 City may wish to consider hauler licensing, with some conditions of licensing being that those who haul within the City (1) submit annual recycling reports on the forms provided by the City and (2) provide lists of customers with the reports. Some counties license haulers, and these are sometimes conditions of county licensing. If this is the case, the City should be able to collect the desired data citing the county's requirements.

### **GRANT FUNDING**

Harrisburg 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	1998 Tonnage	1998 Tonnage + 50% More Commercial	1998 Tonnage + 100% More Commercial
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Residential	1,226	1,226	1,226
Commercial	6,478	9,717	12,956
Total Recycling	7,704	10,943	14,182
904 Award-Previous	\$26,334	\$26,334	\$26,334
Formula			
904 Award-New Formula	\$78,854	\$111,244	\$143,634

The recycling rate used to prepare these estimates is based on waste generation of 0.8 tons per person 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 41 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 around 82 percent greater than the estimate based on current tonnage. At this rate, it might be worth hiring an additional person to assist in promoting commercial recycling and data collection.

Another area to consider to boost the grant awards is to include newspaper in residential curbside collection, though any activity that helps to increase curbside collection of recyclables will help in the bottom line. Newspaper is the most significant item, however, because newsprint generally makes up 40 to 50 percent of the tonnage collected in curbside programs. Boosting the curbside tonnage allows the City to use more of the commercial tonnage in estimating the City'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 City gets \$5.00 per ton for the 1,226 tons of residential recyclables and for 1,226 tons of the commercial tonnage. The estimated recycling rate using these figures is 5.74 percent, so an additional \$5.74 is paid per ton for the 2,452 tons cited above (for a total of \$10.74 per ton). Under the new formula, the City would receive a flat \$10.00 per ton for the remaining commercial tonnage.

If the City were to add newspaper to its curbside collection and it was 40 percent of the total tonnage collected, the City could then use an increased equivalent commercial tonnage to estimate its recycling rate, which would be 9.57 percent, rather than 5.74 percent. The City 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 \$9.57 per ton for the total of residential plus the matching commercial tonnage, for a total of \$14.57 per ton. This is not only a higher rate per ton, but it is paid on more tonnage. As explained above, the City would receive \$10.00 per ton for the remaining commercial

tonnage. Table 2 illustrates how adding newspaper could benefit the City under the Section 904 grant program.

		1998 Tonnage	1998 Tonnage
Category	1998 Tonnage	+ 40% ONP	+ 50% ONP
Residential	1,226	2,043	2,452
Commercial	6,478	6,478	6,478
Total Recycling	7,704	8,521	8,930
904 Award-Previous Formula	\$26,334	\$59,543	\$80,818
904 Award-New Formula	\$78,854	\$103,889	\$121,078

# TABLE 2 ESTIMATED 904 GRANT AWARD WITH CURBSIDE COLLECTION OF NEWSPAPER

Again, it is easy to see that this additional tonnage could benefit the City in terms of grants.

Table 3 illustrates how both adding newspaper and boosting commercial recycling and improving data collection could benefit the City even more.

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

# TABLE 3ESTIMATED 904 GRANT AWARD WITH EXPANDED COMMERCIAL DATA COLLECTIONAND CURBSIDE COLLECTION OF NEWSPAPER

Category	1998 Tonnage	1998 Tonnage + 50% Commercial +40%ONP	1998 Tonnage + 100% Commercial +50%ONP
Residential	1,226	2,043	2,452
Commercial	6,478	9,717	12,956
Total Recycling	7,704	11,760	15,408
904 Award-Previous Formula	\$26,334	\$59,543	\$80,818
904 Award-New Formula	\$78,854	\$136,279	\$185,858

## CONCLUSIONS

- The status of the City of Harrisburg's commercial recycling program is essentially unknown due to lack of follow-up since implementation in 1990.
- While all commercial establishments are sent annual reporting forms to submit recycling and waste data to the City, most do not respond and there have been no enforcement activities to encourage greater compliance.
- The annual reporting form is not "user friendly," which may discourage businesses from completing it. Also, commercial establishments are only asked to provide information for the three mandated materials—office paper, corrugated cardboard, and aluminum cans. The City is not getting information on other materials that would be beneficial in calculating the City's recycling rate and would contribute toward commercial tonnage that is now eligible for award under the state's Section 904 Performance Grant program.
- The only public education aimed at commercial establishments is the annual report form sent by the City each year. This form is not an adequate educational piece by itself.
- There are actions the City could take that would dramatically increase the award available through the Section 904 Performance Grant program.

### RECOMMENDATIONS

- The City of Harrisburg 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 City 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 City.
- The City should enforce the requirement for commercial establishments to submit the reports, but should also implement a data collection program that helps to streamline the process and allow for more complete collection of data. The City should request data directly from haulers, brokers, and property managers, and should require that they submit customer lists with the data. The City should consider hauler licensing or changes to its ordinance to require these entities to submit both data and customer lists.
- The City should implement a comprehensive education program for commercial establishments, beginning with the use of materials provided in Attachment 2. Ideally, the City should hire a person dedicated to improving the City's recycling program who could provide information and technical assistance to commercial establishments and who could establish a comprehensive data collection program. This position could be justified given the potential for additional grant awards as illustrated in this report.
- Even if the City is not willing to consider hiring a person dedicated to recycling, it should consider improving commercial data collection and/or collecting newspaper from residences as a means of boosting the award available through the Section 904 Performance Grant program.

Harrisburg is the capital of a state with a mandatory recycling law, yet recycling is barely visible. It would be ideal if the Capital City could serve as an example for the state. More importantly, however, the City stands to benefit financially from an improved commercial recycling program, and for that reason, the City 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