JEFFERSON COUNTY SOLID WASTE AUTHORITY & PUNXATAWNEY BOROUGH

PUNXATAWNEY BOROUGH CURBSIDE RECYCLING PROGRAM EVALUATION

NOVEMBER 2000

GANNETT FLEMING Harrisburg, Pennsylvania

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Problem Statement

Punxsutawney Borough is required under Act 101 to provide curbside recycling services to its residents. The Borough has requested that the Jefferson County Solid Waste Authority (JCSWA) administer their recycling program. Currently the Borough's curbside program participation rate is estimated at 30%. The Authority agreed to assume responsibility of the program on August 1999. In addition to improving the participation rate in the curbside program, the County hopes to expand and improve the weekly curbside collection and special collections by establishing additional permanent drop-off sites and improving commericial recycling volumes that are not reported/documented. To date, a drop-off site for plastics, magazines and newspaper has been established at the Punxsutawney Borough Public Works Building.

Project Scope

This analysis evaluated past administration and performance of the curbside recycling program. Surveys (Appendix A) were developed for residents, commerical establishments and solid waste haulers to be used to: 1) determine current status of recycling program from the view of the participants; 2) inquire as to changes/improvements that could be incorporated into a new or overhauled curbside recycling program; and 3) foster ideas on future curbside program initiatives and programs that can be instituted within the Borough.

A plan of action with recommendations to improve current recycling program participation by Borough residents, commerical establishments and waste collection and hauling companies is provided. This included recommendations for additional effective public education program. New recycling matierials collection programs are also highlighted that may include used paint, used motor oil, Christmas trees, white goods, and plastics.

Finally, an analysis of the current program to record curbside recycling program volumes for submission to PADEP for annual performance grant reporting was performed.

<u>Background</u>

Punxsutawney Borough

The Borough of Punxsutawney is Jefferson County's largest community (Figure 1¹). Located in southcentral Jefferson County, the Borough's population was 6,782 persons in 1990. Census figures for 2000 projected the Borough's population at 6,536 persons.

Punxsutawney Borough occupies 3.2 square miles and has approximately two thirds of its land developed. The development is primarily single-family residential units with some commercial and manufacturing establishments. The 1990 Census indicated Punxsutawney had 2,950 occupied housing units. The Borough has 241 commercial establishments and seven manufacturing centers. There are two nursing homes with a

¹ Figure 1 is not presented in the on-line version of this report

total of 126 beds and three personal care homes with a total of 89 beds. Punxsutawney has six schools with approximately 2,400 elementary and high school students and the Punxsutawney Branch Campus of the Indiana University of Pennsylvania with approximately 250 students. There is one municipal building (the Mahoning Civic Center), two fire stations, the Troop C Headquarters for the Pennsylvania State Police, and one public works building. There are also two high-rise apartment towers occupied by senior citizen tenants. The Punxsutawney Area Hospital is located in Young Township, is located just outside of the Borough.

Existing Waste Management System

Municipal Waste Collection

The Borough does not provide any regular refuse collection service. Residents and commercial establishments are required to contract individually with private waste haulers. The Borough requires by ordinance that residents and commercial establishments have regular refuse removal service. Haulers that collect waste in the Borough include: Superior Waste Services, Brockway, PA; Hugill Sanitation, Inc., Mahaffey, PA; and Yeager Sanitation, Big Run, PA. Under Borough Code (Sec. 139-7), refuse haulers must obtain a license in order to operate in the Borough. One firm, Superior Waste Services, Inc. collects an estimated 70% of all commercial and residential refuse generated within Punxsutawney. Superior estimates service is provided to approximately 2,000 Borough homes. There is currently no limit on the number of bags or cans residents may set out for collection. The cost to households for waste collection and recycling is about \$18.00 per month, on average.

Superior also collects a great deal of the commercial waste generated within the Borough. While some Borough businesses are served by other firms, it is estimated Superior that he serves 175-200 commercial establishments within the Borough. Businesses are charged about \$150 per for biweekly collection of 8 cubic yard dumpsters. Recyclable materials collected from commercial establishments include cardboard and high grade office paper.

Waste Disposal

The majority of municipal waste collected in Jefferson County, including Punxsutawney Borough, is disposed of at Superior-Greentree Landfill in Elk County or County Landfill in Clarion County. The Jefferson County Solid Waste Management Plan lists disposal of all waste generated in the county are disposed at either of these facilities.

Recycling Program – Data Analysis

Licensed refuse haulers must also collect and recycle designated materials. In addition to the waste collection service, the Borough also provides for curbside recycling, as mandated by Act 101. Superior Waste Service also conducts a recycling program. Residential customers have been provided with 15 gallon recycling containers when the program began in 1991. Additional containers have been provided to residents upon request.

Superior Waste Service collects clear glass, colored glass containers, and aluminum cans. Curbside containers are provided by Superior to collect recyclables. Materials collected include tin and aluminum and glass (clear, green & amber). The driver sorts the materials onto the truck from the curbside container. Paper is not currently being collected but may be added in the future.

The recyclable material is sorted at the curb and placed into a compartmentalized dump truck. All colors of glass are sold to PA Cullet, Corsica, PA.

Resident participation has been estimated by JCSWA to be about 20 percent from 1997-1999. The actual percent participation is difficult to estimate because the recyclables collection is done on a weekly basis and a great deal of the residents do not place their containers out every week.

Volumes of materials recycled by residents and commercial establishments in Punxsutawney Borough from 1997 to 1999 are shown in Tables 1 & 2, respectively. Table 1 shows that volume of materials recycled was 119.14 to 135.38 tons and included newsprint, phone books, aluminum cans, steel/bi-metal cans, glass (all colors) and commingled materials. Table 2 lists volumes recycled in the commercial sector of the Borough and ranged from a low of 235.8 tons in1998 and a high of 806.7 tons in 1997. Volume of materials recycled in 1999 was 531.13 tons. Materials recycled included corrugated cardboard, ferrous and non-ferrous metal, high-grade office paper, plastic (PET) and steel and bi-metal cans.

TABLE 1 VOLUME OF MATERIALS RECYCLED PUNXSUTAWNEY BOROUGH – RESIDENTIAL (TONS)

(1	99	7-1	999))
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YEAR	NEWSPRINT	PHONE BOOKS	ALUMINUM CANS	STEEL/ BIMETAL	AMBER GLASS	CLEAR GLASS	GREEN GLASS	COMMINGLED MATERIALS	TOTAL
1997	23.6	0	8.0	32.4	33.3	15.6	12.3	1.1	126.3
1998	0	2.0	7.25	27.4	82.49 ⁽¹	NR	NR	NR	119.14
1999	0	0	0.85	1.10	2.40	0.25	2.10	128.68 ⁽²⁾	135.38
(1) Glass reported as commingled.									

(2) Commingled volumes includes glass, aluminum and steel/bi-metal cans.:

NR - Not Reported

Source: Punxsutawney Borough and JCSWA, 2000.

TABLE 2 VOLUME OF MATERIALS RECYCLED PUNXSUTAWNEY BOROUGH – COMMERCIAL (TONS) (1997-1999)

YEAR	CORRUGATED CARDBOARD	FERROUS METAL	NON-FERROUS METAL	STEEL/ BIMETAL	OFFICE PAPER	PLASTICS (PET)	TOTAL	
1997	805.4				1.3		806.7	
1998	223.8				12.0		235.8	
1999	528.48	0.40	1.40	1.10	0.60	0.20	531.18	
Source: Pun:	Source: Punxsutawney Borough and JCSWA, 2000.							

Residential and Commercial Establishment Surveys

As part of the process to determine participation and effectiveness of recycling initiatives in the Borough surveys were prepared and distributed for residents and businesses within the Borough.

Residential surveys were set-out at the Borough building and the response was poor. Due to the lack of response from residents, there was no information obtained from this survey process.

Commercial establishment surveys (Appendix A) were mailed to 132 businesses in Punxsutawney Borough and 17 responses were received by the Borough for a return rate of only 13 percent. Table 3 provides information provided by those businesses that responded to the survey.

The survey does indicate that more commercial recyclable materials is occurring in the Borough than reported on the PADEP annual report forms for 1999.

TABLE 3 COMMERCIAL ESTABLISHMENT SURVEY RESULTS

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Business	Solid Waste Hauler	Waste Volume Generated (tons/cy/yr)	Recycle	Recycling Processor/Hauler	Materials Recycled ⁽¹⁾	Volume Recycled (tons/lbs /yr)	Cost Savings	Comments On Recycling Program
1. Paris Cleaners	None	0	Yes	Paris hauls to Superior Recycling Center	2,5,6	NP	NA	No Comment
2. BFG Electroplating & MFG Co. Inc.	Superior	89 tons	Yes	Superior	1,4,6,7,8	2.67 tons	Minimal	Good Program
 King – Maceyko Dermatology 	Superior	17.3 cy	Not at present	None	None	None	None	No Comment
4. ISDA	Superior	NA	Yes	Superior	4,6,7	NA	NA	No Comment
5. Servistar Mahoning Hardware Co.	Superior	NA	Yes	Superior	1,5,6,7,8	NA	NA	-More promotion -Permanent drop-off site (newspaper, plastic, and magazines)
6. Paul Beatty Jewelers, Inc.	Superior	50 cy	Yes	Superior	4,7	NA	NA	No Comment
7. Punxsutawney Area Community Center	NP	None	No	NA	None	None	None	Not familiar enough to give opinion.
8. Krise Bus Service, Inc.	Superior	150 cy	No	None	None	None	None	No Comment
9. Fezzel's County Market	Superior	358 tons	Yes	Recycled Fibers	6	415.5 tons	Receives rebate checks from Recycled Fibers	-Not effective for large businesses. -Need to provide containers for other materials in smaller volumes.
10. East End Laundromat	Superior	52 cy	Yes	Charles Blose	3,4,7,10 (tin)	3-200 lbs 4–200 lbs 7-400 lbs 10-100 lbs	None	-Public not educated about types of recyclable materials. -Need a large container for corrugated cardboard drop- off.

NP – Not Provided

NA – Not Available; (1) 1- Office paper, 2- Mixed paper, 3- Newspaper, 4- Glass, 5- Plastics, 6- Corrugated Cardboard, 7-Aluminum, 8- Scrap Metal, 9- Yard Waste, 10- Other Materials

cy - cubic yards

TABLE 3 (continued) COMMERCIAL ESTABLISHMENT SURVEY RESULTS

Business	Solid Waste Hauler	Waste Volume Generated (tons/cy/yr)	Recycle	Recycling Processor/Hauler	Materials Recycled ⁽¹⁾	Volume Recycled (tons/lbs/yr)	Recycling Cost Savings	Comments On Recycling Program
11. Dr. Vancheir Orthodontics	Superior	50-100 cy	Yes	Superior	6	NA	NA	-Stricter participation -Let residents and business know what their responsibilities are.
12. Punxsy Paint and Decorating	Superior	30 cy	No	None	None	None	None	-Not familiar with services -Corrugated drop-off is needed.
13. Jefferson County Team PA Career Link	Superior	<1 ton	Yes	NP	2,3,4,7	2-500 lbs 3-200 lbs 4-20 lbs 7-10 lbs	NP	No Comment
14. Burke and Sons, Inc.	Superior	2,700 cy	Yes	Superior/Blose	1,5,6,7	NA	-Break even on aluminum -Cardboard cost company due to separation	No Comment
15. Jefferson County Assistance Office	Superior	500 cy	Yes	NP	1,2,4,6,7,8	1-2,000 lbs 2-2,000 lbs 4-25 lbs 6-150 lbs 7-50 lbs 8-10 lbs	NP	No Comment
16. P & N Coal Company, Inc.	Superior	25 cy	Yes	NP	1,2	1-200 lbs 2-250 lbs	NP	-Too time consuming to separate materials and drop-off at recycling center.
17. Thermal- Guard	Superior	3,600 cy	Yes	Dluhak's Glass Company – glass onlly	4,6,7, 10-vinyl	4-540 tons 6-321 tons 7-100 lbs 10-36 tons	None	No Comment

NP – Not Provided NA – Not Available

(1) 1- Office paper, 2- Mixed paper, 3- Newspaper, 4- Glass, 5- Plastics, 6- Corrugated Cardboard, 7-Aluminum, 8- Scrap Metal, 9- Yard Waste, 10- Other Materials

cy – cubic yards

Recyclable Materials Recovery and Processing

M. Blose and Sons

M. Blose and Sons operates as a scrap processing and buy-back center located on Walston Road in Punxsutawney. Currently, the firm accepts clear, brown and green glass containers, aluminum cans, aluminum scrap, non-ferrous scrap and tin cans. No paper or plastics are being accepted at this location.

M. Blose and Sons has arrangements with commercial establishments for collection and/or processing of recyclables. The firm will provide a roll-off container in which the client places recyclable materials.

Superior Waste Services, Inc.

Superior collects the majority of waste and recyclable materials generated in Punxsutawney Borough. All recyclables collected by Superior are processed for market at their recycling processing facility located on Route 219 in Brockway, PA. Materials collected and processed include those mandated for collection within the Borough.

County-Owned Recycling Equipment

Jefferson County has purchased recycling equipment through Act 101 – Section 902 recycling grants and currently leases some of this equipment to local haulers to implement county and borough recycling programs.

Superior leases the following equipment from JCSWA: multi-purpose baler, 4 compactor boxes for plastics. Yeager Santiation leases 4–12 cubic yard open top roll-off containers for the collection of tin, aluminum, and three colors of glass.

Conclusions

In 1991, when the Punxsutawney Borough curbside recycling program was introduced, it was estimated by Weaver Sanitation (now Superior) that 50-60 percent of the residential households in the community were participating in the curbside program. Towards the end of the 1990s, the JCSWA determined that participation in the program had declined to under 20 percent. As a result of this study and the surveys conducted in the residential and commercial recycling establishments and waste hauler interviews the following observations are noted as possible reasons for the decline in the programs participation rate and volumes of materials recycled.

- The survey response rate depicts a community that is either apathetic toward recycling or is uninformed that the Borough is mandated to recycle. It appears that public education is lacking within the community for the residents. Respondents to the commercial establishment survey also indicated the program lack media coverage or educational programs.
- Table 3 lists volumes of materials recycled from commercial establishments that indicate a larger volume of materials is being recycled in the commercial sector than is reported to the Borough and JCSWA. For example, 7 of 17 respondents indicated their companies recycled 1,318.43 tons annually. This number is 787.25 tons higher than that reported to JCSWA as part of the annual report to PADEP.
- As a result of limited education and media coverage of the recycling program within the Borough, some residents may not be aware of their responsibilities to recycle. The Borough and waste haulers must share the responsibility to inform residents and commercial establishments that recycling is mandated within their community.

Recommendations

- The Borough should review its public education program to include new approaches and innovative and creative promotions that inform and educate individuals and businesses and recognize these entities for achievements in recycling as a means of increasing media coverage and encouraging greater participation in all aspects of the recycling program.
- Recycling program goals and objective should be formulated by the Borough and JCSWA to provide program focus including future program intitatives that may include adding new materials to recycle.
- The Borough and JCSWA currently require all haulers that operate within the Borough of Punxsutawney to provide curbside recycling services to its customers. These haulers are also required to report volumes of materials recycled in its annual report to the Borough/JCSWA. This licensing provision must be enforced and a program developed that assures that volumes of materials collected by haulers is reported. An alternative to the current program would be for the Borough to request bids for contracted municipal waste and recyclable materials collection services for its residents.
- Commercial establishments that do not submit an annual recycling report can be contacted, and encourage to report. A list of companies that historically do not report should be developed and annual mailing requesting information should be provided.

- The Borough should consider the possibility of providing drop-off bins for corrugated cardboard near commercial establishments that can share the bins.
- The JCSWA and Borough should consider developing a mail survey to all residential establishments to gather more in-depth information regarding the Borough's recycling program. This survey could assist JCSWA and Borough officials develop improvements to and identify future programs that will increase volumes of materials recycled and resident participation in the program.

Appendix A

Residential Recycling Program Survey

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COMMUNITY & RESIDENTIAL RECYCLING PROGRAM SURVEY

September 1999

Dear Resident:

Punxsutawney Borough is required under Act 101 to provide curbside recycling services to its residents. In Punxsutawney, this is accomplished by requiring waste haulers to collect tin, aluminum and clear, green and amber glass at the curbside. The Borough has requested the Jefferson County Solid Waste Authority (JCSWA) to administer the recycling program. Currently the Borough's curbside program has a participation rate below 20%. Once formal arrangements are agreed upon, the Authority will assume responsibility of the program. In addition to improving the participation rate in the curbside program, the County hopes to expand and improve the bi-monthly and special collections by establishing a permanent drop-off site for old newspapers, plastics and magazines.

The JCSWA is evaluating the Borough existing recycling program with assistance from the Punxsutawney Borough and Gannett Fleming, Inc. Engineers and Planners. The County will continue to provide recycling services to its residents and establishments and would like to set new goals and actions designed to make our communities better places to live. Public participation and involvement are important components in the planning process. Your response is very important to us!

This survey will assist the County to evaluate past administration of and determine current status of the recycling program from the view of the participants. The final product of this evaluation will be used to set forth changes/improvements that could be incorporated into a new or overhauled recycling program, and foster ideas on future recycling program initiatives that can be instituted within the Borough.

This survey provides you with an opportunity to express your views and concerns on the existing conditions and future direction of the recycling program for the Borough. Completed survey forms will be compiled and analyzed, and the results will be shared with the community. Please be assured your responses and any written comments will remain confidential.

Thank you for your time and participation. Should you have any questions regarding this survey, please do not hesitate to contact Susan J. Maczko, Punxsutawney Borough Manager at (814) 938-4480 or Tracy Frampton of the Jefferson County Solid Waste Authority at (814) 849-3047.

Jefferson County Solid Waste Authority and Punxsutawney Borough

Punxsutawney Borough Community & Residential Recycling Program Survey

(Please **PRINT** all information)

General Information

- 1. Name (optional):______
- 2. Address:_____
- 3. Telephone (include area code):_____
- 4. Type of housing unit (single-family, multi-family [apartments], townhouse):_____
- 5. Name of waste hauler:_____

Recycling Program

2. Name of waste hauler: _____

3. Please check each type of material collected and recycled:

High Grade Office Paper	Corrugated Cardboard
□ Mixed Paper	🗆 Aluminum
Newspaper	🗆 Tin
🗆 Glass	□ Yard Waste
Plastics	Other Materials*

* Other_____

Note: Tin, glass and aluminum are required by Borough Ordinance to be recycled.

- 4. Does the hauler provide you with a container for recycling or are you required to provide your own container? Also, please provide type and size of container(s) used to store recyclable materials.
- 5. What is your general opinion of the recycling program and services in Punxsutawney Borough?

6.6. Please provide suggestions for improvements or expansion of the Borough's recycling program (services, facilities, etc.)?

Other Relevant Recycling Information

Please return this questionnaire to:

Punxsutawney Borough Office 301 East Mahoning Street Punxsutawney, PA 15767 c/o Susan Macko, Borough Manager

Phone: (814) 938-4480 Fax: (814) 938-7158