



March 8, 2000

Mr. Richard Freeman  
Grant Advisor  
RR 6, Box 6315  
Moscow, Pennsylvania 18444

**Subject: Recycling Program Evaluation**

Dear Richard:

The purpose of this letter is to provide Covington Township with the results of the effort of R.W. Beck in evaluating the design of a multi-municipal drop-off recycling program that would allow the operation to effectively store, process and deliver to the County Recycling Center materials currently accepted. The present recycling program accepts materials from Township residents and small businesses, Saturday mornings at the Township's municipal building. The Township would like to expand the program to allow daily drop-off of materials from residents and small businesses in the North Pocono region of Lackawanna County.

The current program has served the recycling needs of Covington Township since 1990 at no cost to the residents. With a growing population and interest in the North Pocono region for expanded cooperative recycling services, the Township proposed to develop a drive-through drop-off facility that would be open Monday through Saturday on a weekly basis. An Act 101 – Section 902 grant application was submitted to the State in August 1998, requesting grant funds of \$238,966 to assist with implementing the Township's proposed system.

### **OVERVIEW OF CURRENT SYSTEM**

The current drop-off program accepts, aluminum cans, tin/bi-metal cans, clear, brown and green glass, and white goods. Drop-off collections are currently limited to Saturday mornings for residents and small businesses located in the Township. The collection area is located outdoors on an area adjacent to the municipal building. Materials are collected, stored and transported in a series of containers. Collected materials are transported to the Lackawanna County Recycling Center (LCRC).

### **PROPOSED PROGRAM**

Drop-off events currently take place out-of-doors, regardless of weather conditions. This presents a hardship to volunteers and the residents bringing materials to the drop-off area particularly given the winter weather experienced in the Covington Township region. To upgrade the operation, the Township is proposing to construct an enclosed garage type building to house the drop-off operation. It will be designed to accommodate four containers, two on either side of the

building to collect recyclable materials in and for transporting materials to the Lackawanna County Recycling Center for processing and marketing. The center area of the building will be left open for residents to use as a drive-through, when dropping off materials. It is the expectation of Township staff that the building could also serve as a consolidation center for recyclable materials collected by other North Pocono community drop-off programs to reduce transportation costs associated with shipping materials to the LCRC.

R. W. Beck's evaluation of the proposed program included, two visits to the Township to examine the area proposed for the new drop-off building, review of the proposed design and estimated costs of the project and a review of bid prices submitted to develop the site and construct the building.

The building will be sited in the same general area as the proposed new municipal garage, in fact the two structures will share a common driveway. This will enable municipal staff to have continual oversight of the building.

The building has been sized to accommodate the through flow of traffic dropping off materials while the four collection containers will be parked on either side of the building for direct loading. The length of the building allows for an office and restroom for municipal employees, volunteers and public using the drop-off. Costs associated with construction of the building and site development are estimated below:

- Drop-off Center (52' wide x 84' length) garage-type building with four overhead garage doors.  
Cost estimate based on 4,368 sqft @ \$30/sqft.....\$131,040
- Access Road (1,230 square yards @ \$18.00).....\$22,140
- Site development (clearing, grubbing and excavation).....\$8,000
- Utilities.....\$4,000
- Material Containers (four @ \$3,500).....\$14,000
- Engineering and administration – Project Development  
Cost estimate based on 15% of total project cost (\$179,180).....\$26,877
- Project total estimated cost (Project Development, Building, Site Development and Contingency – 15%).....\$236,966

**PUBLIC EDUCATION**

The Township will prepare a brochure for distribution to residents that explains the process at the new facility and reinforces the importance of recycling. To prepare and produce enough copies for each resident the estimated cost is \$2,000.

**LAND ASSOCIATED COSTS**

The proposed land to site the facility was appraised with a Market Value of \$60,000. This was for the unimproved 13.82 +/- acre parcel of land with pond. The \$60,000 was used as the match portion of the grant.

### TOTAL EXPECTED PROJECT COSTS

A summary of the total estimated project costs are shown below:

■ Project Development.....	\$26,877
■ Public Education.....	\$2,000
■ Collection Equipment.....	\$14,000
■ Building.....	\$135,040
■ Land Associated Costs.....	\$90,140
■ Other (Contingency).....	\$30,909
■ <b>Total.....</b>	<b>\$298,966</b>

Upon evaluation of the site and the proposed layout of the building, several suggestions were made concerning the facility. Specifically, there are four containers proposed for the operation but only one set of doors on one-side of the facility for servicing the containers. It appears that an additional set of doors on the opposing side of the building would serve to simplify the process of collecting the containers with the transport vehicle. Each container would then have its own door for servicing, eliminating the requirement to move containers around when serving the two that are not directly accessible through an overhead door. However, Township staff reported that the additional cost would preclude adding the two extra doors and that the containers will be mobile to facilitate servicing. When the project was later bid, the costs did exceed the estimates outlined in this analysis.

Also, since the building was being proposed to serve as a consolidation center for recyclable materials collected by other North Pocono municipalities, it was suggested that a split grade be used on one side of the building to accommodate materials being dumped into the transport container. This option was restricted by the nature of the site not easily accommodating the split grade.

However, in general, the project concept and projected costs seemed reasonable for the intended use and for the design assumptions. Once the grant was awarded the Township went out-to-bid on the project.

### BID PROCESS

The building construction and site development were bid together, while electrical, plumbing and mechanical were each bid separately. Bids on these four categories were opened October 5, 1999. Using the lowest base bid price for each category the actual cost of the project would be at least \$201,970 for preparing the site, constructing the building and installing required utilities. This cost is approximately \$37,000 more than the anticipated \$165,180 estimated for the grant application. Given the limits of the grant, the Township elected to rebid the project making some modifications to the bid specification. However, the project should not compromise the details, which are designed to make the program more user-friendly and convenient. Therefore, if the bid prices do not come in much lower than the original, the Township could prepare a second application requesting additional State assistance with the project.

Based on the lowest base bid price for each category the following shows the difference over estimated:

<b>Item</b>	<b>Estimated Cost</b>	<b>Lowest Base Bid Price</b>	<b>Difference</b>
Building	\$131,040	\$153,900	-\$22,260
Land Associated Costs	\$30,140	\$20,100	+ \$10,040
Electrical	All together estimated was \$4,000	\$9,970	-\$23,970
Plumbing		\$6,700	
Mechanical		\$11,300	

In addition to the overall higher costs of the building and site development, the costs associated with engineering are expected to increase due to rebidding the project. Therefore making a second application even more important for the Township to recover project capital costs.

The costs differences are in part attributable to the time lapse between when the project costs were projected and the actual implementation of the project.

**CONCLUSION**

- Covington Township has a solid drop-off recycling program for its residents and businesses.
- The existing program is being updated to accommodate improved handling of materials and increased opportunity and convenience for individuals to deliver materials to the drop-off location.
- Proposed upgrades will achieve the intended goals and justify the investment, and commitment being made for recycling in the North Pocano region by the Township and State.

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#### RECOMMENDATIONS

- The Township should prepare a second Act 101-Section 902 grant application to pay for costs in excess of the original grant estimates.
- The Township should invest in equipment to allow direct dumping materials brought in for consolidation into the on-site containers in bulk. Costs associated with this equipment could be recaptured up to 90 percent as part of the second grant application.

If you have any questions relating to the materials presented, please do not hesitate to call me at (717) 730-0404.

Sincerely,

R. W. BECK, INC.

Richard Schlauder

Director of Environmental Services

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