

July 26, 1999

Mr. Walter Young
Recycling Administrator/Township Supervisor
West Mead Township
1150 Morgan Village Road
P.O. Box 491
Meadville, PA 16335

Subject: Assessment of Needs for New Recycling Facility

Dear Walter:

This letter is to provide West Mead Township (Township) with the results of R.W. Beck's assessment of what the Township needs to plan and implement a new recycling processing facility to improve program efficiency, cost effectiveness, and ensure long term sustainability. The Township requested that R.W. Beck assist in developing facility conceptual designs and evaluating equipment options to enable it to serve as a regional operation for processing recyclable materials.

ASSESSMENT OF NEEDS FOR A NEW RECYCLING FACILITY

Much of the work performed as part of this project involved participating in meetings with Township and County officials to discuss the issue of planning and building a new processing facility, which included:

- Township and County visions of what building a new facility would accomplish.
- Crawford County's need to demonstrate in its Municipal Waste Management Plan Update how it plans to reach the state's 35 percent recycling goal.
- Coordination of efforts among Township and County officials.
- Cooperation among neighboring counties/municipalities, businesses, and existing facilities.
- Preliminary discussion of potential tonnage of material to be processed, building size, equipment needs, and potential sites.
- Development of a scope of work and budget that could be used in preparing a Section 902 Recycling Program Grant application.

THE NEED FOR A NEW RECYCLING FACILITY

R.W. Beck's previous report dated April 2, 1999 found the following:

- The Recycling Center's processing system is labor intensive and inefficient, which would probably limit its ability to manage significant amounts of additional materials.
- The Recycling Center's lack of sorting capability precludes marketing its processing services to Meadville and perhaps to potential curbside programs in Crawford County and existing curbside programs in adjacent counties.
- The Recycling Center is only processing about one third of Crawford County's reported Act 101 recycling tonnage (not including yard waste), so there is opportunity to expand its services within the County.

With the exception of 1995, when recycling markets were at an all time high, the West Mead Recycling Center has operated at a deficit, and the Township has borne these losses. It would be difficult, if not impossible, for the Center to reverse this trend without boosting throughput to achieve reasonable economies of scale and improving the efficiency of processing. The current processing system was established to manage a drop-off program that takes in source separated materials, but lack of space, a processing/picking line to remove contaminants, and adequate processing equipment limits the Center's ability to manage additional volume, or even to manage existing volume efficiently. A major goal is for a new facility to reduce handling of materials to a minimum, because every time materials are handled it adds cost to processing.

As noted in the first report, and as illustrated in Table 1, on average the Recycling Center currently manages less than one quarter of the recyclables generated in Crawford County. Table 2 shows that based on 1998 figures alone, adding Meadville's materials would boost the volume of materials to be processed by approximately 38 percent. Of course, adding Meadville's materials—or other curbside materials generated in Crawford County or surrounding counties—is not possible at this time because the Center cannot process commingled materials.

TABLE 1
REPORTED TONNAGE--WEST MEAD/CRAWFORD COUNTY

Reporting Entity	1996		1997	
	Reported Tonnage	% of Total	Reported Tonnage	% of Total
West Mead	1,200.9	25.7%	1,310.1	21.5%
County	4,673		6,086	

TABLE 2
REPORTED TONNAGE--WEST MEAD/MEADVILLE

	1996	1997	1998

Reporting Entity	Reported Tonnage	% Increase	Reported Tonnage	% Increase	Reported Tonnage	% Increase
West Mead	1,200.9	25.8%	1,310.1	29.9%	1,370.0	38.1%
Meadville	309.8		391.2		521.3	

NEW FACILITY REQUIREMENTS

R.W. Beck has participated in several meetings with Township and County representatives to discuss the requirements for a new facility based on the need to:

- Increase throughput to achieve economies of scale;
- Have weighing capability for recordkeeping and marketing purposes;
- Add sorting capability to handle commingled materials and to remove contaminants;
- Improve overall material handling efficiency; and
- Provide adequate room for future expansion.

Using the needs criteria identified above, Beck assisted the Township in identifying the approximate size of facility and type of building required, the amount of land required to accommodate the facility, and the equipment required to operate the facility.

The Township reported that at least some of the equipment needs are addressed in two Section 902 grant applications previously submitted to the Pennsylvania Department of Environmental Protection (DEP) (one is currently under contract, the other has been approved and the Township is awaiting a contract). Taking this information into account, Beck assisted the Township in developing cost estimates for a new facility that include:

- Project development to include preparation of facility design and bid documents, review of bids and selection of contractors, and monitoring of construction and equipment installation. Other project development needs are described in the next section.
- Additional collection equipment (to boost materials collected through the Countywide drop-off program).
- Additional processing equipment required—primarily a conveyor and sorting line.
- Construction costs based on a 30,000 square foot facility.
- Land associated costs, including site development and lease value.

The total budget required for the items identified above was estimated at approximately \$3,000,000, with the total project estimated at around \$4,000,000. Beck also advised the Township that the budgets for the two earlier grants (which make up the balance of the project costs) would need to be reconfigured to accommodate the change in focus from modifications to the existing facility to design and construction of a new facility, though

with some emphasis on ensuring that the existing facility can function adequately until a new facility becomes operational.

OTHER REQUIREMENTS

While providing input on designing a new facility was the primary focus of this project, Beck also advised the Township concerning other activities required to ensure success of the new facility and the program as a whole. These other activities include:

- Developing more reliable estimates of the amount of recyclable materials available within Crawford County and from contiguous counties/municipalities;
- Redesigning the Countywide drop-off system to make it more efficient;
- Promoting the program, including working with contiguous counties/municipalities, local haulers, existing recyclers, and commercial, institutional and industrial entities;
- Looking into marketing options based on increased volume and improved processing capabilities;
- Ensuring recordkeeping is efficient and meets DEP reporting requirements;
- Developing a public education program that: informs the public about changes to the drop-off system; advises municipalities about requirements for delivery of materials from curbside programs; advises commercial/institutional/industrial entities about the program and requirements for delivery of materials; and generally raises public awareness about recycling and the Countywide program;
- Determining the best management structure for the program;
- Developing a business plan that clearly states the mission and goals of the program, activities, and cost and revenue projections; and
- Involving the public in the planning/implementation of the new facility and changes to the program.

CONCLUSIONS

- A new processing facility designed to manage greater volumes of material efficiently will:
 - Make it possible to manage more of the recyclables generated in Crawford County in support of reaching the new 35 percent recycling goal;
 - Improve the program's cost effectiveness and ensure the long term sustainability of recycling in the County; and
 - Provide a cost-effective processing option for municipalities and businesses in bordering counties that are not currently served by other facilities.

- Equipment budgeted under an existing grant and a recently approved grant, along with project development, building/land and equipment costs budgeted under a recently submitted grant application will make it possible for the Township to construct a new facility that will meet and/or exceed the County's processing needs and improve efficiency and cost effectiveness.
- Other activities, including development of better recyclables generation estimates and potential feedstock for the facility, improving the Countywide drop-off program, coordination with neighboring counties, processors, haulers and businesses, research into marketing options, improved public education, and comprehensive planning and development of a business plan, will also help ensure the long-term success and sustainability of the Township's and County's recycling efforts.

RECOMMENDATIONS

- The Township should work with DEP to:
 - Reconfigure budgets for the grant currently under contract and the recently approved grant to provide funds to proceed with planning/project development for a new facility; and
 - Provide any additional information required by DEP for approval of the most recent grant application for planning, design, and construction of a new processing facility.
- The Township should continue efforts to coordinate with Crawford County and to meet with existing processors, haulers, other counties, municipalities and businesses who may have an interest in working with the facility or be affected in some way by it.
- The Township should develop a comprehensive business plan and develop and implement an appropriate management structure for the program.

A new facility that improves processing efficiency and cost effectiveness will provide a reasonable option for some municipalities and businesses that are not recycling now, which will help Crawford County and may help contiguous counties in the northwest region in their efforts to reach the 35 percent recycling goal.

Sincerely,
R.W. BECK, INC.

Sandra L. Strauss
Environmental Analyst

cc: Kathleen Kilbane, SWANA

Carl Hursh, DEP
Debbie Miller, R.W. Beck