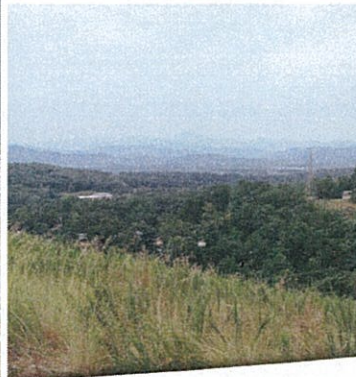


Solid Waste Feasibility Study

Henderson County, North Carolina



June 2009



SOLID WASTE FEASIBILITY STUDY

Henderson County, North Carolina

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EXECUTIVE SUMMARY

Solid waste management is an essential service provided by Henderson County to its respective citizens. In Henderson County, this service is managed by the Solid Waste Division operating under the leadership of the County Engineering Department. The Solid Waste Division is charged with the task of protecting human health and the environment by providing environmentally sound, cost efficient waste disposal. Effective solid waste management is also essential for the County to continue to grow and expand as new businesses and residents move into the area.

The Henderson County Solid Waste Division operates as an enterprise fund, separate from the general fund and property taxes. For the Division to continue to operate as a viable economic operation, it must provide excellent customer service, safe efficient access to all solid waste services, as well as value to its rate payers and the citizens of the County. The County must continually review and upgrade services and facilities to meet new challenges as well as continue to conform to new and ever changing environmental regulations.

In May 2008, Henderson County adopted their 20-Year Vision Plan for solid waste management in the County. One major aspect of this Plan was the development of a Solid Waste Feasibility Study. This Solid Waste Feasibility Study was prepared to evaluate the existing solid waste operations, identify capital projects needed to enhance operations, evaluate various waste collection options, and develop a long-term financial assessment to meet the County's goals.

The center of the Division's operation is the Stoney Mountain Road Landfill Facility located on Stoney Mountain Road. This facility presently operates as a transfer facility for waste collected within the County as well as providing collection and processing for various other components of the waste stream. Recyclable material collection is also provided on a limited basis. The facility is utilized by permitted private haulers as well as citizens transporting their own residential waste and recyclable material to the facility for disposal and/or processing. Over the years, the number of customers and citizens accessing this facility has grown, resulting in a need to provide new and/or expanded services. Several capital improvement projects have been proposed to expand/improve services as well as enhance the safe and efficient access to the site for the commercial customers and the citizens of the County. The proposed improvements should also enhance the flow of traffic along Stoney Mountain Road.

Collection of solid waste within the unincorporated areas of the County is handled by a network of private haulers licensed to provide these services by the Solid Waste Division. Some of these permitted haulers provide residential waste collection services for a fee to residents as an alternative to transporting their own waste to the Stoney Mountain Road Landfill Facility for disposal. Several incorporated municipalities within the County already provide residential waste collection services to their citizens. The County presently works in general partnership with these private haulers to ensure a general level of service is provided to the citizens in a cost effective manner. These permitted haulers provide a steady source of income for the Solid Waste Division. This partnership must be continued and expanded to enhance the opportunity for efficient cost effective collection of residential waste for all citizens in the unincorporated areas of the County.

The challenges associated with operating a solid management program continue to increase every day. One of the most notable challenges pertains to the increased costs associated with waste disposal. Reducing the tonnage of waste material that must be hauled off-site for disposal is one way to control this cost. Another major challenge pertains to the implementation of new regulations by the State relative to how certain components of the waste stream must be collected, processed and ultimately disposed of. Enhanced recycling opportunities are a way to reduce disposal costs, achieve compliance with new regulations as well as generate revenue. The County should continue to work in partnership with the permitted residential waste haulers to implement a County wide collection program for recyclable material. This, in conjunction with proposed capital improvements to the Stoney Mountain Road Landfill collection and consolidation facilities, should result in a notable increase in the volume of recyclable material collected for processing. With an increase in recyclable material collection comes the need to develop a material recovery facility (MRF) to separate the collected material by component type. The degree of separation can be as simple or as complex as the County may desire. The degree of sophistication is generally driven by available markets and market prices for the processed material. Regardless of the degree of separation, the sale of recyclable material has the potential to generate revenue for the Solid Waste Division.

The financial assessment portion of this Study is essential to understanding the implications of future regulatory compliance issues, proposed capital expenditures and other aspects of the overall solid waste management program. The assessment complements the County's ability to evaluate programmatic and technical alternatives prior to actual implementation. Several capital improvement projects were recommended as a part of this Study. A particular component of the financial assessment evaluated these proposed capital improvements in conjunction with various residential waste and recyclable material collection/processing options and sources of revenue associated with the citizen's convenience center to estimate future tipping fee rates. Based on this assessment, the County should be able to implement the proposed capital improvements to enhance the overall operational efficiency and effectiveness of the solid waste management program. This could be done without the need for substantial increases in the disposal fee charged to commercial customers.

INTRODUCTION

Henderson County is a vibrant community facing challenges and opportunities brought on by continued growth and diversity. To be successful as a government entity, the County must respond strategically to the needs of its citizens in this ever-changing environment. The Solid Waste Division is an integral part of this process as it provides waste disposal services for the citizens of the County. The overall goal of the Solid Waste Division is defined in its mission statement as follows:

MISSION STATEMENT:

The mission of the Henderson County Solid Waste Division is to protect human health and the environment by providing environmentally sound, cost efficient waste disposal.

The Henderson County Solid Waste Division presently operates a transfer station facility and other solid waste services at the Stoney Mountain Road Landfill Facility off Stoney Mountain Road just north of the City of Hendersonville. A map of the County showing the location of the Solid Waste Division's facilities is included in Appendix A. The Solid Waste Division operates under the supervision of the Henderson County Engineering Department. The Division operates as an enterprise fund and does not receive monies from the general fund or property taxes. In order to continue to provide environmentally sound and cost effective waste disposal services to its citizens, the Division must continually evolve to address the ever changing challenges of higher operating costs and more aggressive regulatory requirements.

To assist the Solid Waste Division and the Henderson County Board of Commissioners, a Solid Waste Advisory Committee (SWAC) was formed to address issues pertaining to present and future solid waste and recycling programs and methods in the County. The SWAC is comprised of ten (10) members headed by Mr. Stan Kumor. Commissioner Chuck McGrady serves as the Board of Commissioners representative to the committee. The other committee members are made up of local citizens, private waste haulers and Solid Waste Division staff. A copy of the SWAC's By Laws is included in Appendix A. Meetings are held on a regular basis to address pertinent solid waste issues as well as assist the Solid Waste Division develop its long term waste disposal and recycling goals. In May 2008, the SWAC presented a "Twenty Year Vision" plan addressing the current solid waste team, current waste handling process and the challenges faced by the Division, both now and in the future. Solutions to address the challenges were also presented. A copy of the "Twenty Year Vision" plan presentation and its Executive Summary is included in Appendix A. One noted solution was to conduct a feasibility study to address the challenges faced by the County relative to its solid waste disposal program.

In October 2008, McGill Associates, P.A., was hired to conduct the feasibility study of the County's solid waste management operations. The study was performed in conjunction with the Solid Waste Division with input from the SWAC. The study was charged with addressing the Stoney Mountain Road Landfill Facility's current operation as well as providing recommendations for future use and/or upgrades to the facilities and programs to assist the

County in meeting its long term goals of providing efficient and environmentally sound waste disposal services for its citizens. Included in the study is a financial assessment of the current operations as well as the preparation of a disposal rate analysis outlining proposed tipping fees necessary to fund capital improvements associated with the recommended enhancements to the disposal, residential waste collection and recycling programs.

The Feasibility Study is arranged under the following major headings with applicable appendices included at the end of the report:

- Existing Waste Stream and Vehicular Traffic Review
- Current Facility Operations and Procedures
- Population Growth and Projected Waste Stream
- Proposed Facility Upgrades and Improvements
- Countywide Collection Services
- Recycling
- Financial Assessment
- Summary and Recommendations
- Appendices

McGill Associates wishes to thank the Solid Waste Advisory Committee and the County's staff for their support, recommendations and valuable input during the preparation of this Study. With this degree of support and foresight, the Henderson County Solid Waste Division should maintain the Mission Statement goals and remain a viable asset to the County for many years to come. McGill Associates appreciates the opportunity to perform this Study and looks forward to continuing to work with the County to assist with the implementation of the proposed recommendations summarized in this Study.