

REQUEST FOR BOARD ACTION

**HENDERSON COUNTY
BOARD OF COMMISSIONERS**

MEETING DATE: March 1, 2010

SUBJECT: EPA Source Reduction Grant

ATTACHMENTS: Yes
1. Grant Application

SUMMARY OF REQUEST:

A grant application was submitted on February 4, 2010 to the Environmental Protection Agency. The grant application requests \$20,000 for a debagger for the proposed material recovery facility. The proposed budget for the material recovery facility greatly exceeds all match requirements. In the event that the application is approved, the contract will be brought back to the BOC for consideration.

BOARD ACTION REQUESTED:

No specific Board Action is requested. This item is for informational purposes only.

Suggested Motion(s):

No motion suggested.

Grant Program Title: FY 2010 Source Reduction Assistance Grant Program

Funding Opportunity Number: EPA-HQ-OPPT-2010-02

Submitted to: Environmental Protection Agency, Region 4

Suganthi Simon

61 Forsyth Street SW

Atlanta , GA 30303

Tel: (404) 562-9384

Email: simon.suganthi@epa.gov

Title: Henderson County Materials Recovery Facility (MRF) Construction and Equipment Procurement Program

Short Description:

The Henderson county Materials Recovery Facility (MRF) Construction and Equipment Procurement Program will reduce air and water pollution by simplifying material reclamation and recycling. The use of recycled material in manufacturing significantly cuts pollutant emissions as compared to the use of raw materials. Additionally, a MRF will allow local packaging and processing of recyclable materials for marketing, reducing travel time to out of state MRFs. Moreover, recycling collection by haulers in the surrounding counties and cities will be simplified into a single-stream process. It is also anticipated that several jobs will be created for local residents. Grant money will be used towards the purchase of a debagger for extraction of single-stream recycling from blue bags.

Project Funding:

Total Project Funding: \$868,000

Requested Funding: \$20,000

Applicant's Contact Information:

Name: Will Sagar, Solid Waste Manager

Address: 800 Stoney Mountain Rd.

Hendersonville, NC 28791

Tel: (828) 697-4506

Fax: (828) 698-5154

Email: sagar@hendersoncountync.org

FY 2010 Source Reduction Assistance Grant Program
EPA-HQ –OPPT-2010-02

Henderson County Materials Recovery Facility Construction and Equipment
Procurement Program

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Project Narrative

In August 2009, the Henderson County Board of Commissioners approved capital improvements under the guidance of the Solid Waste Feasibility Study. In this study, it was realized that the challenges associated with operating a solid waste management program continue to increase every day. One of the most notable challenges pertained 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. Henderson County must also find ways to implement North Carolina Recycled Material Bans relating to how certain components of the waste stream must be collected, processed and ultimately disposed of. Current North Carolina General Statutes ban materials such as plastic bottles, wooden pallets, oil filters, and aluminum cans from the waste stream (NC G.S. § 130A-309.10). Enhanced recycling opportunities are a way to reduce disposal costs, achieve compliance with new regulations and reduce pollution as well as generate revenue. 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 MRF will be designed to handle 15,000 tons of recycling a year. It is anticipated that within the first year the MRF will process 7,000 tons of recycling. Half is anticipated to come from the Henderson County jurisdiction while the remainder would come from the City of Hendersonville, the Town of Fletcher and surrounding counties and cities. A significant increase in recycling is expected in the months leading up to January 2011 when all garbage haulers will be required by permit to offer recycling services. This compliance will be made easier by allowing haulers to pick up single-stream recycling which will be dropped on the MRF floor.

Currently, the MRF is in the design phase. It is necessary to purchase adequate and effective equipment to process single-stream recycling. A budget of \$868,000 will include all construction and equipment procurement. This grant specifically requests \$20,000 towards the purchase of a debagging machine to remove single-stream recyclables from blue bags utilized by recycling collections.

Programmatic Capability and Past Performance

1. Programmatic Capability

The materials recovery facility will be overseen by Will Sagar, the Henderson County Solid Waste Manager. Mr. Sagar has 18 years of progressive experiences as a solid waste director. Before entering employment in Henderson County, Mr. Sagar was the Solid Waste Manager in neighboring Transylvania County where he established an award winning recycling program and started a utility pricing program for solid waste. He has worked with Henderson

County for two years where he oversees environmental programs related to recycling, energy management, and environmental stewardship in addition to his duties as the Henderson County Solid Waste Manager.

Education, outreach, and data reporting for the materials recovery facility will be conducted by Alexis Baker, Environmental Programs Coordinator. She has worked with Henderson County for over two years in the planning department. Her current position as Environmental Programs Coordinator under the direction of Will Sagar, involves education and outreach and research in recycling and energy management. (See Appendix C).

Solid Waste and Recycling data is reported to the North Carolina Department of Environment and Natural Resources on a yearly basis. Henderson County intends on obtaining a password and username to participate in the National Pollution Prevention and Data System.

2. Past Performance

Currently, the Planning Department, which oversees public transportation for the County, has applied for and has received grant funding to replace up to four of the six fixed route buses in the public transportation fleet and approximately four senior and disabled compressed natural gas (CNG) vans. The County is scheduled to build a CNG fueling station in 2010 and to place the CNG vehicles in operation by early 2011. The remaining vehicles will be replaced as funds become available. Mr. Marcus Jones has led the efforts to move the project forward in bus procurement and CNG fueling station design. The station and bus replacement will be performed according to schedule.

Preliminary approval has also been received in February 2010 from the North Carolina Department of Commerce for the Energy Efficiency Community Block Grants for a lighting retrofit project. Henderson County is using Munis, an electronic asset and accounting system, to set up a separate account system to track all grant funding. All installations and retrofits and their corresponding invoices will be incorporated into the system within a week of installation.

The Material Recovery Facility will use the existing scale software to track recycling. This information will be available to the Environmental Protection Agency and the North Carolina Department of Environmental and Natural Resources.

Work Plan

1. Project Strategy

a. Environmental and Public Health Concern

Henderson County, North Carolina falls under the objectives of Region 4. By building a MRF and obtaining proper equipment, specifically a debagger, the County will “promote P2 using lean an green initiatives by encouraging industries, utilities and municipalities to reduce pounds of pollution, conserve water and/or energy, reduce greenhouse gases, and save money (RFP 2010, 4).” By increasing recycling in the region and creating a simplified recycling process, it is believed that all goals in this objective will be easily accomplished. Simplifying the recycling collection process in the County will encourage haulers, residents, and commercial businesses to utilize recycling services. Additionally, manufacturers’ use of recycled materials will increase with a readily available resource in the area, thus reducing air and water pollutants arising from the processing of raw materials into marketable products.

b. Target Audience

The target audience or beneficiaries of the Henderson County Materials Recovery Facility (MRF) Construction and Equipment Procurement Program will be the residents, commercial businesses, and the recycling and waste haulers. Additionally, Henderson County will benefit by offering proper recycling processing facilities creating a new source of revenue for the County and decreasing the amount of solid waste transferred to out of state landfills, which further exacerbates fuel costs and increases interstate pollutants from transport.

c. Transferability

Recycling haulers will utilize the MRF to increase their business by offering single-stream blue bag recycling to customers. Profits obtain by Henderson County will be used to expand or upgrade services. All operational documentation will be made available to the public for inspection.

2. Environmental Measures

Outcome and Outputs	Quantity
Tours of MRF	6 per year
Recycling Classes for students and citizens	12 per year
Recycling Tonnage Reports to EPA and NCDENR	1 per year
Pollution Prevention Estimates EPA and NCDENR	1 per year
Recycling literature distributed	1 per year
Newspaper or media releases	6 per year

Recycling tonnage measurement data will be collected through the existing scale accounting software. Data is imported into an access database and generated into reports. These reports will be issued to state and federal agencies on a yearly basis or whenever requested. Additionally, educational opportunities will be conducted at a minimum of twelve times per year.

Estimated Energy and Emission Reductions from Materials Recovery Facility Recycling Program					
Composition of Recycling	Percentage*	Tons	KWH Reduced**	Pounds of GHG Reduced***	Tons of GHG Reduced
Mixed Paper	58.8%	4,116	16,875,600	20,756,988	10,378
Cardboard	11.6%	812	3,329,200	4,094,916	2,047
Glass	13.7%	959	40,278	49,542	25
Steel Cans	5.7%	399	256,158	315,074	158
Aluminum	2.2%	154	2,156,000	2,651,880	1,326
Plastic	8.0%	560	3,233,440	3,977,131	1,989
Total	100.0%	7,000	25,890,676	31,845,531	15,923

*Based on NCDENR, Recyclable Materials in North Carolina's Disposed Waste Stream

**Stanford University. [Http://recycling.stanford.edu/recycling/caq_benefits.html](http://recycling.stanford.edu/recycling/caq_benefits.html)

*** Land of Sky Regional Council. 1.23 lbs of greenhouse gas produced per kilowatt hour in North Carolina

It is estimated that 15,923 pounds of greenhouse gas could be reduced by recovery 7,000 tons of recyclable materials a year. This equates to approximately 25,890,676 kilowatt-hours saved.

3. Budget Detail

Detailed Budget for Material Recovery Facility	
Wages	\$75,000.00
Benefits	\$26,250.00
Equipment maintenance	\$21,700.00
Contracted Services	\$100,000.00
Utilities	\$32,500.00
Rent	\$111,000.00
Total Operational	\$366,450.00
Capital	
Feed belt	\$75,000.00
Input screen	\$105,000.00
Pick line	\$275,000.00
Baler	\$250,000.00
Debagger	\$25,000.00
Bunkers	\$78,000.00
Skid Steer and Fork truck	\$60,000.00
Total Capital	\$868,000.00
Tip fees	\$26,000.00
Sale of Recyclables	\$228,000.00
	\$254,000.00

The total capital budget for the materials recovery facility is estimated at \$868, 000. The grant is requesting \$20,000 for a debagger to be used for single-stream bluebag recycling.

4. Project Timeline

Currently, design on the materials recovery facility is being performed by McGill and Associates. It is anticipated that the project will be completed within calendar year 2010 according to the following schedule:

March-April 2010: Design Completed on Materials Recovery Facility

June 2010: Request of Bids advertised and accepted

August 2010: Construction begins and equipment is purchased.

November 2010: Materials Recovery Facility is operation

Applicant Name: Henderson County

Award Number: _____

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Henderson County	66.717			\$920,450		\$920,450
2. EPA	66.717			\$20,000		\$20,000
3. NC DPPEA	66.717			\$40,000		\$40,000
4 Tipping fees	66.717			\$26,000		\$26,000
5 Sale of Recyclables	66.717			\$228,000		\$228,000
6 Totals		\$0	\$0	\$1,234,450.00	\$0	\$1,234,450.00
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity					Total (5)
	Recycling Separation and Bal	EEO's				
a. Personnel	\$75,000					\$75,000
b. Fringe Benefits	\$26,250					\$26,250
c. Travel						\$0
d. Equipment	\$868,000					\$868,000
Utilities	\$32,500					\$32,500
f. Contractual	\$100,000					\$100,000
Maintenance	\$21,700					\$21,700
Rent	\$111,000					\$111,000
i. Total Direct Charges (sum of 6a-6h)	\$1,234,450	\$0		\$0		\$1,234,450
j. Indirect Charges						\$0
k. Totals (sum of 6i-6j)	\$1,234,450	\$0		\$0	\$0	\$1,234,450
7. Program Income						\$0

Section C - Non-Federal Resources					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) Totals	
8. EPA Grant			\$20,000	\$20,000	
9. NC DPPEA Garnt		\$40,000		\$40,000	
10. Solid Waste Reserve Fund	\$920,450			\$920,450	
Tipping fees	\$26,000			\$26,000	
11. Sales of Recyclables	\$228,000			\$228,000	
12. Total (sum of lines 8 - 11)	\$1,174,450	\$40,000	\$20,000	\$1,234,450	

Section D - Forecasted Cash Needs					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	\$20,000	\$0	\$20,000	\$0	\$0
14. Non-Federal	\$1,214,450				
15. Total (sum of lines 13 and 14)	\$1,234,450	\$868,000	\$122,450	\$122,150	\$122,150

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project					
(a) Grant Program	Future Funding Periods (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16. EPA Grant	\$0	\$0			
17. Energy Expenditure savings reinvested in program					
18. Municipal support					
19.					
20. Total (sum of lines 16-19)	\$0	\$0	\$0	\$0	

Section F - Other Budget Information	
21. Direct Charges	22. Indirect Charges

23. Remarks

Instructions for the SF-424A

Public Reporting Burden for this collection of information is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Please do not return your completed form to the Office of Management and Budget; send it to the address provided by the sponsoring agency.

General Instructions

This form is designed so that application can be made for funds from one or more grant programs. In preparing the budget, adhere to any existing Federal grantor agency guidelines which prescribe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the later case, Sections A, B, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

Section A. Budget Summary Lines 1-4 Columns (a) and (b)

For applications pertaining to a **single** Federal grant program (Federal Domestic Assistance Catalog number) and **not requiring** a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a **single** program **requiring** budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in **Column (a)** and the respective catalog number on each line in Column (b).

For applications pertaining to **multiple** programs where one or more programs **require** a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1-4, Columns (c) through (g)

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5—Show the totals for all columns used.

Section B. Budget Categories

In the column headings (a) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-i—Show the totals of Lines 6a to 6h in each column.

Line 6j—Show the amount of indirect cost.

Line 6k—Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7—Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by the federal grantor agency in determining the total amount of the grant.

Section C. Non-Federal Resources

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project

Lines 8-11—Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a)—Enter the program titles identical to Column (a), Section A. A breakdown by function or activity is not necessary.

Column (b)—Enter the contribution to be made by the applicant.

Column (c)—Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d)—Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e)—Enter totals of Columns (b), (c), and (d).

Line 12—Enter the total for each of Columns (b)-(e). The amount in Column (e) should be equal to the amount on Line 5, Column (f) Section A.

Section D. Forecasted Cash Needs

Line 13—Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14—Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15—Enter the totals of amounts on Lines 13 and 14.

Lines 16-19—Enter in Column (a) the same grant program titles shown in Column (a), Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding periods (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants. If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20—Enter the total for each of the Columns (b)-(e). When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

Section F. Other Budget Information

Line 21—Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22—Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23—Provide any other explanations or comments deemed necessary.



HENDERSON COUNTY ENGINEERING

100 North King Street
Hendersonville, North Carolina 28792
(828) 694-6560

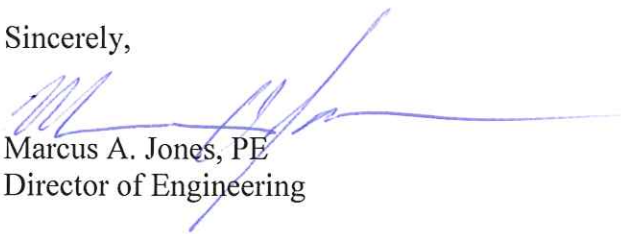
February 4, 2010

Dear Sir or Madam:

We fully support the Solid Waste Division's Materials Recovery Facility (MRF) for Henderson County. We envision that it will be a benefit to our citizens and commercial businesses. Additionally, we will utilize this service to improve our recycling efforts for the residents of Henderson County and the surrounding area. We believe that this facility will forward our goals of reducing air and water pollution as well as reducing the need for landfill space to dispose of our wastes.

Sincerely,

Sincerely,



Marcus A. Jones, PE
Director of Engineering



KEY CONTACTS FORM

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name: _____

Title: _____

Complete Address: _____

Phone Number: _____

Payee: *Individual authorized to accept payments.*

Name: _____

Title: _____

Mail Address: _____

Phone Number: _____

Administrative Contact: *Individual from Sponsored Program Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc.)*

Name: _____

Title: _____

Mailing Address: _____

Phone Number: _____

FAX Number: _____

E-Mail Address: _____

Principal Investigator: *Individual responsible for the technical completion of the proposed work.*

Name: _____

Title: _____

Mailing Address: _____

Phone Number: _____

FAX Number: _____

E-Mail Address: _____

Web URL: _____



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Name: _____

Title: _____

Mailing Address: _____

Phone Number: _____

FAX Number: _____

E-Mail Address: _____

Web URL: _____

Will Sagar

Education and Training:

University of North Carolina at Chapel Hill, B.S. Economics and Mathematics (1976)

Professional Experience:

May 2008-Current, **Solid Waste Manager**, Henderson County, NC

- Redesigned citizen's convenience center
- Overhauled equipment maintenance program
- Managed Environmental Programs

July-1989-November 2005, **Solid Waste Manager**, Transylvania County, NC

- Created award winning recycling program
- Started Utility pricing program for solid waste

Synergistic Activities.

Will has launched county and municipal recycling programs and implemented incentives for waste reduction through unit pricing for waste collection. He has served on the boards of the North Carolina Solid Waste Association and as president of the North Carolina Recycling Association. He constructed the first synthetic lined, leachate collected municipal waste landfill in the Southern Appalachian Region of North Carolina.

Alexis Baker

Education and Training: University of North Carolina at Chapel Hill, B.A. Environmental Studies (1998-2001)
University of North Carolina at Charlotte, M.A. Geography (2003-2006)

Professional Experience:

May 2009-Current. **Environmental Programs Coordinator**, Henderson County, NC

- ❖ Led seminars and educational outreach on environmental stewardship, energy management, and recycling
- ❖ Organized special events related to recycling and energy management
- ❖ Authored press releases and articles for local media outlets
- ❖ Authored energy management plans and environmental policy documents
- ❖ Researched and assisted with grant proposals and writing.
- ❖ Acted as staff to the Environmental Advisory Committee and Solid Waste Advisory Committee

April 2007-April 2009, **Planner**, Henderson County, NC

- ❖ Authored policy documents and community plans
- ❖ Approved and ensured subdivision compliance with all local and state regulations
- ❖ Led community input meetings for community plans
- ❖ Acted as staff to the Etowah and Horse Shoe Communities Advisory Committee and the Historic Committee
- ❖ Created shapefiles and geodatabases for planning department.

Synergistic Activities.

- ❖ NCI Certified Charrette Planner (April 2008)
- ❖ Green Design and Development (March 12, 2008 and May 8, 2008)
- ❖ Grant-writing Courses (AB-Tech, March-April, 2007; Land-of-Sky, November 16, 2009)
- ❖ Photovoltaic Courses (Appalachian State University, September 18-20, 2009 and October 2-4, 2009)