

# Columbus County, North Carolina Landfill Gas Utilization REQUEST FOR PROPOSALS

*Deadline: Tuesday, February 12, 2008*

The Columbus County Landfill Gas Task Force is soliciting proposals from environmental or energy management organizations, turnkey system providers and environmental engineering firms for the development of beneficial use of landfill gas (LFG) from the Columbus County Landfill.

## **BACKGROUND**

The Columbus County Landfill opened in 1973 and was closed in 1997. The average annual acceptance rate for municipal solid waste was approximately 50,000 tons per year and the total waste in place is 1.2 million tons. In 2006 a landgem computer model estimated that collecting over 300 scfm of landfill gas should be possible from this landfill in 2008.

The Appalachian State University Energy Center selected Columbus County as a participant in the Community TIES Program. This program, funded by the Golden LEAF Foundation, Appalachian State University, Z Smith Reynolds Foundation, and the North Carolina State Energy Office, has a goal of using landfill gas from these county's landfills to stimulate economic development.

## **SERVICES TO BE PROVIDED**

The Columbus County Landfill Gas Task Force hereby requests proposals for a turnkey landfill gas project at the Columbus County Landfill. The proposal should include as a minimum:

- Design and installation of a landfill gas collection system including gas collection wells, collection lines, condensate collection system, blower, and gas destruction flare.
- Measurement, verification, and marketing of greenhouse gas (carbon) credits.
- Identification and acquisition of all available incentives for greenhouse gas reduction and renewable energy production.
- Design and installation of landfill gas delivery pipelines to the site of end use facilities (to be designated by the Columbus County Landfill Gas Task Force).
- Design and construction of electricity generating facilities to be installed as part of a landfill gas utilization system. Although there may be some localization or even on-site uses for small quantities of gas, the proposal should assume that all of the landfill gas will be used for electricity generation within 500 feet of the blower/flare. The Landfill Gas Task Force, however, hopes to identify a direct use of the gas that will create new jobs and stimulate local economic development.

## **UTILIZATION OF LANDFILL GAS**

The Landfill Gas Task Force hopes to recruit a new facility adjacent to the landfill or an existing facility within pipeline distance that would create new jobs and economic development. If no user is found, the Task Force will direct the developer to go ahead with an electricity generating facility as a last resort.

## **PROJECT FINANCING**

The Landfill Gas Task Force hopes to have the developer pay for all up-front costs of developing this project. Proposals should address, in detail, how such a financing arrangement would be structured.

## **TIMELINE**

The Columbus County Landfill Gas Task Force hopes to have the entire piping, flare and electricity generation systems installed by the end of 2008. The Task Force will work with the developer to identify early on the most economically beneficial end use of the landfill gas so that any electricity generating system could be installed by the end of December 2008.

## **TRANSPARENCY OF PROPOSAL AND CONTRACT ECONOMIC FACTORS**

The proposal prepared by the developer shall provide as much transparency as possible and will provide as a minimum:

- The estimated value of carbon credits and associated marketing expenses.
- Detailed cost estimate of the collection system design and installation.
- Estimated cost of design and construction of a 500-foot gas delivery pipeline.
- Detailed cost estimate of an appropriate electricity generating system, fueled by landfill gas.
- Proposed value of the landfill gas and price to be offered to Columbus County for it.
- Expenses and income projected for electricity generation.
- Expenses and income from the sale of landfill gas to a third party, if any, or all landfill gas that is not used for electricity generation.

**NOTE: The Columbus County Landfill Gas Tax Force recognizes that some firms may not be interested in a complete turnkey operation, but may be interested in providing one or more of the services identified in “Services To Be Provided”.**

## **PROPOSAL DEADLINE**

Please submit your written proposal no later than close of business on **Tuesday, February 12, 2008** to:

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