

## **Abstract**

### Adapting Equipment to Burn LFG

NASA's Goddard Space Flight Center (GSFC) located in Greenbelt, Maryland began burning landfill gas in January 2003. GSFC is the first federal facility in the country to implement a landfill gas energy project. Two of the five boilers began burning landfill gas supplied by the Sandy Hill Landfill. The two boilers were modified to burn a mixture of landfill gas and a secondary fuel. The newly installed burners and controls have greatly reduced the NOx emissions, and once stack testing is complete these reductions will be quantified. After the NOx reduction is documented, various alternatives for the use of these credits will be discussed. Stack testing is scheduled for June 16, 2003. The proposed paper will also detail the operational aspects of the two boilers, including landfill gas delivery, burning ratios of landfill gas to the secondary fuel, and offer 'real-world' advice on startup landfill gas boiler.

## **Biographies**

### Ann Wager

Ann Wagner has a B.S. in mechanical engineering from Columbia University. She has worked as an instrumentation/controls systems engineer and mechanical engineer for Stone & Webster Engineering Corporation. She is currently employed by NASA as a planner/mechanical engineer in the Facilities Management Division. Her area of responsibility includes planning and engineering support to the site utilities and central plant at Goddard Space Flight Center.

### Kathleen Moxley

Kathleen Moxley has a B.S. in environmental engineering from The Pennsylvania State University and an M.S.E. in environmental engineering from The Johns Hopkins University. She has worked as the Water Program Manager for the Air National Guard Readiness Center and is currently employed by NASA's Goddard Space Flight Center (GSFC) in the Safety and Environmental Division. Her responsibilities include Air Program Manager at GSFC.

### Luke Conner

Luke Conner has a B.S. in Engineering and Technology from McNeese State University in Lake Charles, Louisiana. He has 24 years of controls and instrumentation experience in the petrochemical, oil field, pulp and paper, food processing and other manufacturing industries.

Mr. Conner founded CPL Systems, in Lafayette, Louisiana, and is presently president of the company. CPL implements combustion and energy projects in the manufacturing and process industries. A particular emphasis of the company is developing boiler efficiency and maintaining emission levels using alternative fuels such as refuse-derived fuels, tire-derived fuels, refinery fuels, several liquid waste fuel streams, waste oils, bark, rice hulls, and bagasse.