

Lee County Resource Recovery Facility Expansion Project

Sam M. Rosania, R.E.M.
Malcolm Pirnie, Inc.

Municipal solid waste from Lee County and Hendry County is processed at the Lee County Solid Waste Resource Recovery Facility (the "Facility"). Lee County (the "County") owns the Facility, which began commercial operation in December 1994. The Facility's current permitted capacity is 1,320 tons per day (tpd), provided by two 660-tpd boiler units, at a reference waste of 5,000 Btu. Covanta Energy of Lee, Inc. operates and maintains the Facility under the terms of a Service Agreement with the County that runs through 2014. Covanta also designed and constructed the Facility. The expansion of this Facility will be the first new construction of a municipal waste combustion (MWC) unit since the New Source Performance Standards were adopted. Despite the County's comprehensive recycling program, the amount of solid waste the County delivers to the Facility has increased each year since the Facility began operation, primarily due to population growth. In 1999, this amount reached the Facility's guaranteed annual capacity of 372,300 tons. In 2000, the Facility processed over 392,000 tons of municipal solid waste, while the County landfilled nearly 44,000 additional tons of processible waste. Current population projections for Lee and Hendry Counties suggest that processible solid waste generation will continue to increase, reaching nearly 550,000 tons by 2010. Rather than landfilling processible waste generated in excess of the Facility's current capacity, it is the County's intention to expand the Facility by adding a third 660-tpd boiler unit which would increase the Facility's permitted capacity to 1,980-tpd. The original application for the Facility's Power Plant Site Certification anticipated such an expansion, including provisions for a third 660-tpd MWC unit. Certain provisions for this third unit were incorporated into the Facility's design and construction as well. These included providing the physical space for the third unit, the physical space for an additional flue for the third unit, and sizing the tipping floor, refuse pit, and certain common equipment for three units. The expansion will require a second turbine-generator unit and expanded switchyard, an extension to the existing turbine-generator building, as well as the addition of a third boiler unit and air pollution control equipment. The expansion will also require modifications to certain equipment and systems common to all boiler units in order to meet the additional capacity requirements of the expanded Facility. As of February 2003, the County is waiting for the Florida Department of Environmental Protection to issue a draft PSD Air Permit and is on scheduled to go before the Power Plant Siting Board in September 2003.

Sam Rosania is a graduate of the University of Florida, with a Bachelor of Science Degree from the College of Agriculture. Mr. Rosania is an Associate with Malcolm Pirnie, with his office located in Ybor City, Florida. He currently works on a variety of resource recovery and recycling projects for municipal clients. Additionally, Mr. Rosania has 25 years experience in both the public and private sectors and is accomplished in project administration and coordination, contracts management, environmental health services, environmental permitting, solid waste management, and contamination and remediation activities. Mr. Rosania has developed, implemented, and administered a diverse range of environmental programs related to municipal solid waste management, recycling, special waste management, resource recovery, petroleum contamination assessment / remediation, composting, and wastewater residuals management services.