

8.0 SITE AND PLANT DESIGN ALTERNATIVES

According to FDEP's Application Instruction Guide, Chapter 8.0 of the SCA is optional. This optional

chapter will not be provided as part of this SCA for GREC.

Nevertheless, it should be noted that throughout the planning efforts for GREC, GREC LLC and the City of Gainesville have analyzed numerous alternatives and selected designs, systems, and equipment to avoid or minimize environmental impacts due to the construction and operation of GREC. These environmentally protective designs are described in detail in other sections of this SCA. The decisions and designs that will avoid or minimize potential environmental impacts include the following:

- The Gainesville City Commission decided to pursue renewable energy resources to meet the City's future generating needs, after conducting detailed analyses of other supply-side alternatives, such as coal, petroleum coke, and natural gas technologies.
- The City decided to reduce GHG emissions by using renewable biomass energy.
- GREC LLC incorporated state-of-the-art BACT air emissions control systems into GREC, including SCR, rather than less costly alternatives.
- GREC LLC designed the site layout to avoid wetland impacts to the greatest extent practicable and to minimize unavoidable wetland impacts.
- GREC LLC decided to use a ZLD system to eliminate industrial wastewater discharges and minimize water use by maximizing the recycling and reuse of water.
- GREC LLC and GRU agreed to strict standards for the biomass fuel procurement program, which promote forest stewardship programs and the sustainability of the regional forests.