

IPS Composting System: Goldsboro, North Carolina

Economics, year-round program control, and Neuse River nutrient sensitivity resulted in the City of Goldsboro selecting the IPS Composting System as their best biosolids management alternative. The land application alternative was problematic due to inaccessibility to fields during extensively rainy periods and also for the potential of environmental liability.

As another means to reduce nutrient discharge into the Neuse River, Goldsboro created a 40-acre wetlands area for "polishing" nutrients from advanced treated wastewater prior to river discharge. An additional nutrient reduction project was the construction of a reclaimed water (treated wastewater) irrigation system for use on the municipal golf course and some farmlands.

ARCADIS G&M, Inc., consulting engineer, assisted Goldsboro in the biosolids study. Siemens' IPS Composting System was selected because it met the City's goals and united two municipal programs. Composting combined woodchips from the yardwaste collection program with biosolids from the Water Reclamation Facility.



As a Class A, Exceptional Quality (EQ) end product, compost could be distributed year round without restriction. Compost characteristics help to control erosion, establish and maintain turf, and improve soil chemistry and structure. Goldsboro markets the compost to landscapers and nurseries and uses the product on the City's golf course and in its parks.

The Goldsboro Biosolids Composting Facility project team included ARCADIS G&M, Inc., who handled engineering and project management for both the wastewater treatment and biosolids composting projects, and Engineered Construction Company, general contractor, who constructed the facility.

Goldsboro, North Carolina

Owner: City of Goldsboro

On Line: December 2002

Engineers: ARCADIS G&M, Inc.

Capacity: 250 cubic yards per day

Processing: Biosolids with yardwaste

Facility Size: 35-acre site; 8 bays, each (feet) 10 wide x 7 high x 235 long; 40,000 SF enclosed composting building, MCC and office; 5,000 SF amendment shelter with 15 days storage; 12,000 SF compost curing shelter with 30 days storage; 46,800 SF paved product storage

Odor Control: Odor Control: 15,000 SF biofilter

IPS-GNCdr-CS-0707