



# MIDLAND AVENUE REGIONAL TREATMENT FACILITY AND CONVEYANCES

**Project Description:** In January 1989, Onondaga County (County) entered into a Judgment of Consent with the State of New York and the Atlantic States Legal Foundation in settlement litigation initiated in connection with alleged violations of state and federal water pollution control laws. In response to the Judgment of Consent, the County developed a plan for upgrading the Metropolitan Syracuse Sewage Treatment Plant (METRO) and providing treatment of combined sewer overflows (CSOs). Subsequent negotiations resulted in the execution of an Amended Consent Judgment (ACJ) which was executed in January 20, 1998. The ACJ requires the County to implement multiple CSO abatement projects within the Metropolitan Syracuse combined sewer service area and in accordance with an ACJ CSO milestone compliance schedule.



**144-inch Conveyance Pipeline**

The Midland Avenue CSO Regional Treatment Facility (RTF) and Conveyances project is separated into three phases.

- Phase One: Construction of approximately 900 linear feet (lf) of 54-inch and 84-inch conveyance pipeline (construction was completed in December 2000 to achieve ACJ minor milestone date compliance).
- Phase Two: Construction of a 213 million gallon per day (mgd) USEPA swirl concentrator Midland Avenue RTF, plus approximately 1,200 lf of 144-inch conveyance pipeline. The principal components of the Midland Avenue RTF include the following:
  - Upstream 2.5 million gallon (MG) underground storage tank with automated flushing gates;
  - influent coarse screening and grit removal facilities;
  - three 110 mgd mixed flow influent pumps;

- two 42-foot-diameter vortex solids separators (USEPA swirl concentrators);
- two 3,700 gallon per minute (gpm) underflow control/dewatering pumps;
- liquid sodium hypochlorite/sodium meta bisulfite storage and feed facilities;
- a 1.0 MG underground high-rate disinfection tank; and
- a 116,000 cfm activated-carbon odor control system.
- Phase Three: Construction of approximately 7,700 lf of 42-inch through 144-inch conveyance pipeline.

**Location:** The Midland Avenue CSO service area is located in the City of Syracuse and encompasses approximately 2,300 acres of urban residential and commercial areas. There are 21 active CSOs within the Midland Avenue CSO service area. Eleven of these CSOs will be eliminated through sewer separation. The remaining ten CSOs will be abated through conveyance, storage, and high-rate treatment up to the 1-year design storm event prior to discharge to Onondaga Creek, with seven of these ten CSOs to be permanently closed.

**Project Sponsor:** This project includes State and Federal funding as well as a local contribution.



**Roof Liner on Underground Storage Tank**

**Current Status:** The Phase One Project was completed in 2000. The Phase Two Project began construction in August 2004 and is scheduled for completion in January 2008. The Phase Three Project is scheduled to start construction in September 2007, with a scheduled construction completion date of September 2010. Total estimated construction cost for the entire project is \$90 million.