



## **A.M. Best**

### **On-Site Wastewater Treatment & Recycling Facility**

#### **Location**

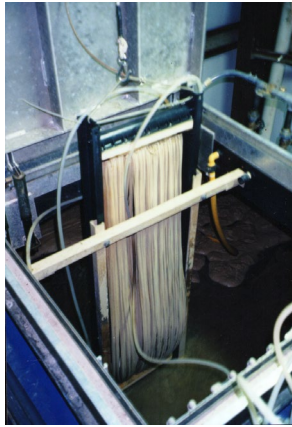
Oldwick, New Jersey

#### **Client**

Turner Construction Co.

#### **Market Sector**

Real Estate



#### **The Opportunity**

The AM Best Company had plans to double the size of its office complex at its headquarters in Oldwick, NJ to 250,000 sf and hired PS&S to provide architectural design and related services for the office expansion. The additional employees for the expanded facility would result in additional water usage and sewage generation at the office complex, requiring upgrades to the infrastructure.

#### **The Challenge**

AM Best had been operating an on-site sewage treatment plant that discharged to a Category 1 – trout production stream under an NJDEP NJ Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) permit. Due to the sensitivity of the stream, NJDEP would not allow an increase in flow under the permit. The AM Best Company needed to find a way to dispose of the anticipated increased wastewater flow quantities. On-site exceptional resource value wetland and corresponding buffer zone, due to the Category 1 stream classification, provided major siting constraints for any discharge to groundwater option.

#### **The PS&S Solution**

PS&S provided evaluation, design, permitting, and construction phase services for the implementation of a new on-site wastewater treatment and recycling facility with a groundwater discharge. The treated wastewater is beneficially reused as flushwater in toilets and urinals within the office complex, resulting in a substantial reduction in water usage and wastewater disposal quantities. The treatment plant was designed to handle an average flow of 12,740 gallons per day (gpd) and discharge only 3,825 gpd.

PS&S performed all design services for the wastewater treatment system, including hydrogeologic investigations to find a suitable location for the underground infiltration field, and obtained all required NJDEP Wastewater Management Plan Amendment, NJPDES and Treatment Works Approval (TWA) permits. By implementing this water stewardship project, the AM Best Company significantly reduced pollutant discharges into the local water environment.

