

Twin Sludge Lines Rehabilitation Alternatives Evaluation

Citizens Energy Group
Engineering Services



Drainage or Air Release Valve
Structure
on Concord Street

TRSL Pig Launching Station
Southport AWT Plant

TRSL Pig Retrieval Station
Belmont AWT Plant

Project Summary:

Citizens Energy Group engaged **Etica Group/PCS Engineers** in March 2013 to evaluate options for structurally rehabilitating or replacing all or portions of the existing Twin Transfer Sludge Lines (TRSL) located in Indianapolis, Indiana. The TRSL pipelines transport sludge from Southport AWT Plant to Belmont AWT Plant. The investigation of the viability and impact of each available rehabilitation or replacement alternative, construction cost and duration, and other parameters considered in the study to rehabilitate each of the two sludge lines, yielded recommendations for Citizens Energy Group to act on that are tailored to each line's specific characteristics, such as: the existing pipe and proposed pipe material selection and hydraulic performance requirements, monetary and societal costs of implementation, and material durability/design life.

Etica Group/PCS Engineers was selected to complete the design for the replacement of the TRSL pipelines within and between Southport AWT Plant and Belmont AWT Plant. Throughout the design phase, coordination between the multiple private and public entities along the proposed route was vital. Discussions with INDOT regarding their proposed I-69 Interchange located on the existing TRSL system, IP&L and R.H. Marlin regarding easement encroachment, and other entities regarding additional easement acquisition, safety, and other factors were vital to the success of the project. **Etica Group/PCS Engineers** also led the Construction Observation process during the construction phases of this project.

Key Elements:

- *Project Leadership and Management*
- *Unbiased Multi-Criteria Evaluation Process*
- *Pressure Pipe Rehabilitation System Research*
- *Pipeline Pigging Process*
- *Pressurized Pipeline Design*
- *Proposal Package Development*
- *Expected to Perform Future Construction Observation*