

EASTERN SHORE GAS COMPANY » Ocean City, MD

The Eastern Shore Gas Company (ESGC) is an Ocean City, Maryland-based supplier of propane throughout Worcester County, Maryland, and is regulated by the Maryland Public Service Commission (PSC). ESGC distributes propane both by tank truck to specific client sites as well as by underground pipeline to customers in six separate service areas located throughout the County, as shown on the adjacent map. The underground gas service lines are of particular interest to Maryland's PSC. Under PSC regulations, ESGC is required to provide service area infrastructure maps to the PSC as well as leak detection reports that are carried out annually for commercial service areas and triennially for residential service areas.

Over fifty years ago ESGC began its distribution of propane by pipeline; it was one of the few utilities on the east coast that built such a system. Until recently, ESGC maintained its system maps in a hard copy format, using a variety of base maps that were publicly available for its various service areas, as the background for their system feature drawings. The paper system drawings were maintained manually by a contractor who performed periodic updates as required.

Worcester County contracted with Spatial Systems Associates, Inc. (SSA) to complete a 911 mapping project in 2005 that involved the development of many data layers from a variety of sources for use in the County's computer aided dispatch system. The County's Emergency Services Department recognized that information on propane gas pipeline locations could be of value to first responders in the event of fires or gas leaks in propane service areas. After receiving assurance from the County that access to this commercial confidential information would be limited to first responders, ESGC provided system maps to SSA for conversion to a GIS feature layer.



SSA used the ESGC data to develop a propane gas pipeline distribution layer that included pipes, and key valves along with attributes such as pipe material, diameter and date of installation. The system features were converted from the paper source drawings that, in general, did not have a spatial reference to the Maryland State Plane Coordinate System used in the County's GIS. SSA's technicians developed the features over the then available one foot orthophotography for the County. SSA provided draft map sheets to ESGC for correction. After correction, the propane distribution layer was loaded for use in the County's Enterprise GIS by SSA, which also had been tasked with maintaining the GIS system for the Emergency Services Department.

After seeing SSA's work product for the County, ESGC recognized the business benefits of having access to their system data in a GIS format as well.

The company contracted with SSA to maintain their system data in a GIS format using the work done for the County as a baseline.

SSA now maintains ESGC's system data in an Esri geodatabase at our Columbia location. ESGC provides system updates on paper mark ups and SSA then updates the geodatabase. In turn, the new data is made available to ESGC both in digital and paper formats depending on the needs of the company. The paper maps are still used for field work by company staff in maintenance tasks as well as for leak detection project tracking, while digital data continues to be provided to the County as system changes are implemented.

SSA also produces paper maps for ESGC to distribute to the Maryland PSC and local governments for regulatory review purposes. Having system data available in a GIS means that ESGC can maintain, manage, and map the location of distribution infrastructure more efficiently than was possible in the past. Another benefit of having the data available in the GIS is that the system information is now always current, readily available, and archived in PDF format and stored in multiple locations, ensuring that vital data is not threatened with loss, which was a risk as long as system data was maintained only in paper format.