

# OIL AND GAS SOLUTIONS FOR THE BUFFALO COMPRESSOR STATION



Engine Resonator Install

The Buffalo Compressor Station is located in Washington County, PA. The site is operated by National Fuel Gas Supply Corporation (NFG). The site has two 2,370 bhp natural gas compressors powered by Caterpillar G3608 reciprocating lean burn engines.

*Universal AET's solution  
meets all federal and state  
acoustic and emissions  
requirements while fitting into  
the station's available space.*

– Gary Goplen, Senior  
Customer Engineer

## The Challenge

Universal AET sought to achieve the extremely challenging acoustic performance within the overall space constraints. Additionally, emissions after-treatment for the engines was necessary for this Pennsylvania facility due to local attainment zone requirements. The Federal Energy Regulatory Commission (FERC) also imposes strict limits on both emissions and acoustic energy given off by the equipment located at compressor stations.



Engine Exhaust Silencer



Exhaust Stack Install

# BUFFALO COMPRESSOR STATION EXHAUST SOLUTIONS

## Solution

Universal AET engineers developed a custom exhaust silencer system with an integrated catalyst and packaged it with a resonator to treat the emissions and acoustic energy created by the reciprocating engines. Universal AET provided unique vertical combination units that meet exceedingly strict acoustic requirements.

In addition to the two engine exhaust systems, Universal AET provided complete turbine exhaust systems for two Caterpillar natural gas powered compressor turbines at the site. These units are each rated at 10,280 HP. This compression station allows NFG to transport natural gas from the

Marcellus Shale region to markets in the northeastern United States. Gas is extracted from the shale, and then processed and piped to

customers. In order to process the extracted gas, compressor stations such as the Buffalo station move the gas to plants downstream.



Turbine Ducting Systems

## About Universal AET

Universal AET delivers on one simple yet powerful promise – to provide the highest quality, complete air management solutions. With more than a half-century of industrial and power generation experience, we engineer solutions to our customers' unique needs and back them with unparalleled support, across the entire energy generation lifecycle. Your comprehensive single-sourced solution not only meets environmental, regulatory and operational requirements, but helps you reduce costs, improve the efficiency of your equipment and eliminate safety and compliance risk. We put our expertise to work solving problems for your specific needs. The result: Your world. Clean. Quiet. Safe.

NORTH AMERICA ■ LATIN AMERICA ■ EUROPE ■ ASIA PACIFIC ■ INDIA

**UNIVERSALAET**

888.300.4272  
[solutions@universalaet.com](mailto:solutions@universalaet.com)  
[www.universalaet.com](http://www.universalaet.com)

