A natural gas producer located in West Virginia used our FQE® Pyrophoric product to deactivate pyrophoric iron scale from a set of raw inlet gas filters.

The raw inlet gas filters removed entrained solids present in the incoming feedstock natural gas and typically required change-outs on a monthly basis. The filters were typically contaminated with pyrophoric iron sulfide and had smoldering issues resulting from the reaction of the iron sulfide with oxygen in the air.

Previously, the client had soaked the filters in water for disposal; resulting in increased disposal costs due to the volume of waste. Filters that dried up often posed a potential fire risk. The goal of the application was to inhibit the oxidation reaction process from taking place using a safe and environmentally friendly product.

To deactivate the iron sulphide deposits, the filters were submerged in the FQE Pyrophoric product for 30 minutes. The application is done at ambient temperature conditions and the filters were then left to dry prior to disposal. Upon completion of the job scope, the filters were disposed in traditional waste disposal containers without the risk of a pyrophoric fire.

The pyrophoric iron management program allows the facility to fully mitigate the risk of pyrophoric fires while using a personnel safe, and environmentally friendly product.
Improve efficiency and financial performance

At FQE Chemicals, we help our clients improve the efficiency, safety, and financial performance of their assets by creating innovative and unique chemistries that provide superior value and performance. Our award-winning chemistries are distributed globally.