

UV Application for Selective Destruction of Emissions Constituents in the Oil and Gas Industry

Sean Reilly, Talisman Energy Inc.
GL 907651

Evaluate the use of Ultra-Violet (UV) technology in Oil and Gas applications to selectively eliminate air emissions constituents. UV technology is used widely in sewage treatment facilities, agricultural odour control in livestock barns and in hospitals for eliminating pathogens in the air.

Determine how UV technology will perform on tank vent gas, odour applications, glycol dehydration, and as a potential replacement for incinerators.

CAPP Policy Alignment Statement

If proven a reliable emissions control tool, at a minimum, UV technology would offer a new option for operators to eliminate various emission streams that can be problematic under existing controls; for example benzene emissions from glycol dehydrators, sour tanks vapours, etc. The broader potential for UV technology (i.e. destruction of H₂S and/or CO₂, etc...) is unknown at this point but bears investigation.