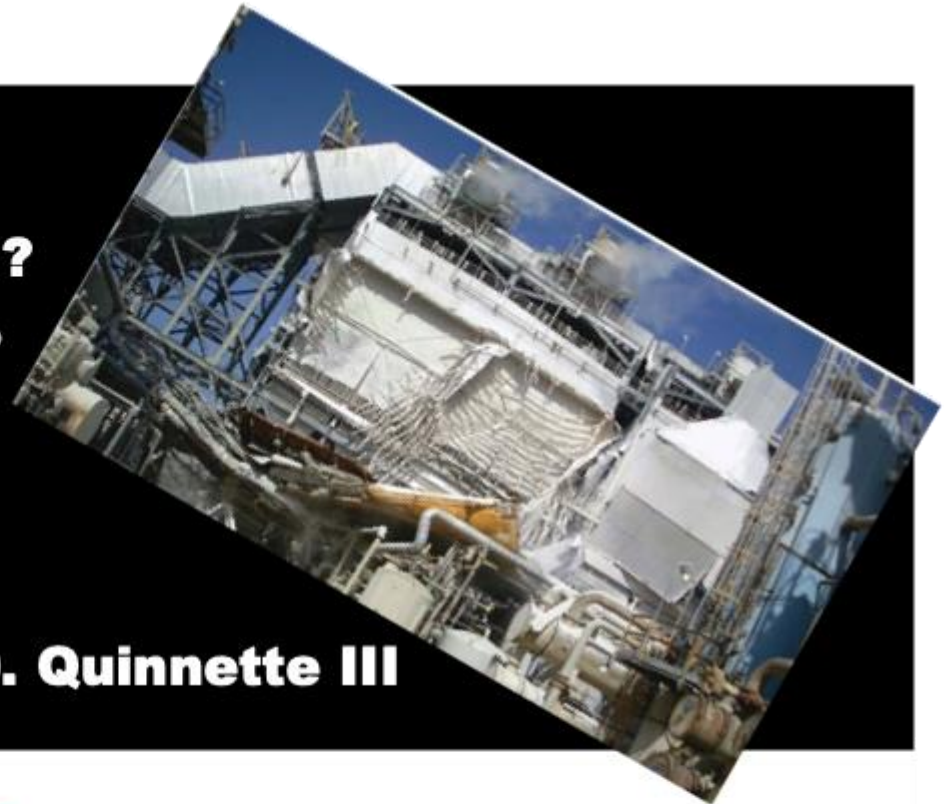


**It's a FCC -
What Could Go Wrong?
What Could Go Right?**



Facilitator: Richard O. Quinnette III

REFCOMM[®] Galveston 2019

Training April 29-30, Conference and Exhibition May 1-3

What is the Biggest Problem Area in your FCC?

- 1) Catalyst issues
- 2) Regenerator/Power Recovery Train Issues
- 3) Gas Plant Issues
- 4) Amount & Quality of Products or Feed Quality
- 5) Something else



Who am I? Richard Quinnette



- Refinery Process Engineer for Sunoco, Inc. in Marcus Hook & Phila!
- BS Chemical Engineering & MBA from Drexel
- Also Process Engineer for HollyFrontier -Tulsa
- Also worked in Business Planning and Environmental on Consent Decrees
- Also worked In Upstream, Mid-Stream & Petrochem.
- Lives in Broken Arrow, OK
- Volunteered to be a Facilitator



Expanded Categories of Problem Areas

- 1) Catalyst Circulation/ Catalyst Loss /Flow Reversal
- 2) Coking/Fouling
- 3) High Regeneration temperature
- 4) Afterburn/ Hot Gas Expander
- 5) Hydrogen Blistering in the Gas Plant
- 6) Amount and Quality of Products or Quality of Feed
- 7) Something else

Taken from Reza Sadeghbeigi's book "Fluid Catalytic Cracking Handbook"

Two Examples of What went Wrong

- Yellow Cloud over South Phila.
 - Stuck slide valve
 - Phone call “That was Pretty”
- Coke found in Main Frac Line on TA at Refinery that was not mine
 - Reported through channels
 - Not sure it was reported to owner

Eagle Point Video?

<http://www.youtube.com/watch?v=bMLLLFc56JI>

What can Go Right?