On December 3rd, 2012, a maintenance employee at an oil refinery was fatally injured when a rotameter failed and a mixture of propane and hydrofluoric acid (HF) was released. The rotameter was part of a temporary installation on a pump seal flush line to determine flow to the pump seal.

A temporary line was run from the flush line header to a flare header. A pressure gauge was placed in the line to determine flow. A rotameter was also added for a visual reference. The rotameter was rated for 200 psi but the flush line had an operating pressure of between 260 and 280 psi. The rotameter also had a glass face, which is not compatible with HF service.

No Management of Change (MOC) was conducted prior to the development of this plan or this installation being put into service.

- For any Process Safety (29 CFR 1910.119) covered facility, prior to any change that is not in kind, you must conduct a Management of Change (MOC)
- If you are unsure of the need for a MOC, refer to your facility’s written plan and 29 CFR 1910.119 (l).
- Be sure to address the following considerations:
  - The technical basis for the proposed change
  - Impact of change on safety and health
  - Modifications to operating procedures
  - Necessary time period for the change
  - Authorization requirements for the proposed change
- Employees must be effectively trained in all elements of the Process Safety standard.