

PCA PRELIMINARY DERIDDER MILL INCIDENT ALERT

The PCA DeRidder Mill operates two containerboard machines with the pulp being supplied by a Kraft pulping process and OCC/DLK recycle operation. Vapors from the Kraft pulping process are condensed and drain to a decanter where the turpentine and water separate into two liquid phases and overflow from the top and bottom respectively. This water, (foul condensate) is then collected in a foul condensate collection tank which is approximately 24 feet in diameter and 30 feet tall, for subsequent environmental treatment prior to its re-introduction as usable clean condensates in the process.

On February 8, 2017, during the mill's annual maintenance outage, a welding contractor was performing hot work on a clean condensate pipeline located on a pipe bridge above the foul condensate collection tank. This line was locked out, opened to atmosphere, and tested free of flammable vapors at the time. The clean condensate line was not connected to the foul condensate tank during the hot work, nor were the welders working directly on the foul condensate tank. At approximately 11:05 a.m., an explosion occurred in the foul condensate tank, likely from combustion of vapors inside the foul condensate tank, which landed approximately 375 feet from its original location. This explosion resulted in three contractor fatalities.

PCA is continuing to investigate the incident, including potential ignition sources that may have led to combustion in the foul condensate tank. Preliminary analysis indicates that the hot work activities conducted in the area above the foul condensate tank were likely the ignition source for the vapors present.

Recommendations:

Based on this incident, PCA mill operators with similar operations should meet with their contract business partners to evaluate effective hot work procedures on or near non-condensable gas systems and foul condensate storage, including a focus on:

- ***Handling of hot work equipment;***
- ***Hazard assessment;***
- ***Use of appropriate guards; and***
- ***Flammable vapor / potential sources of air.***

