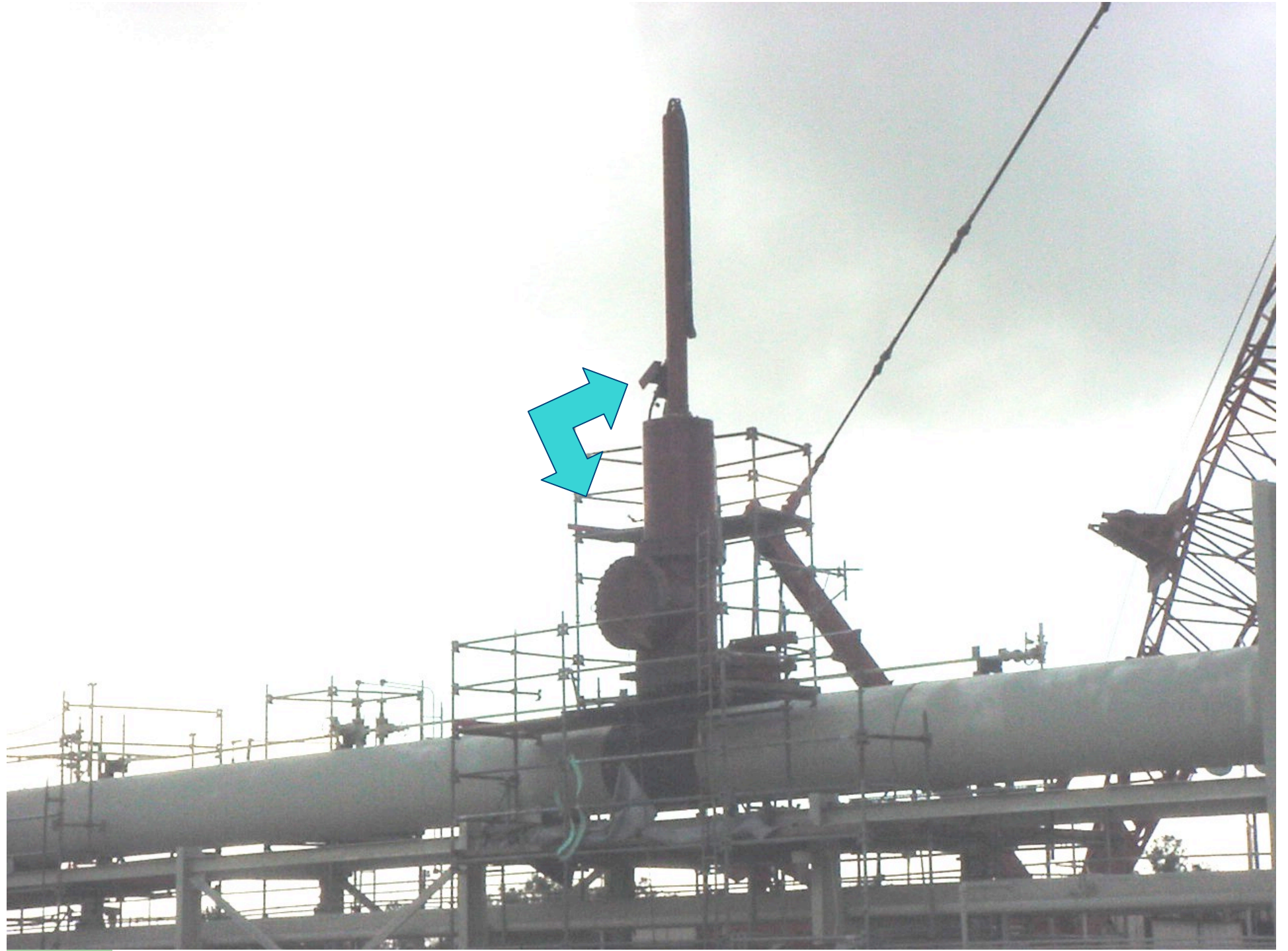


What's That Thang?

Refinery Equipment



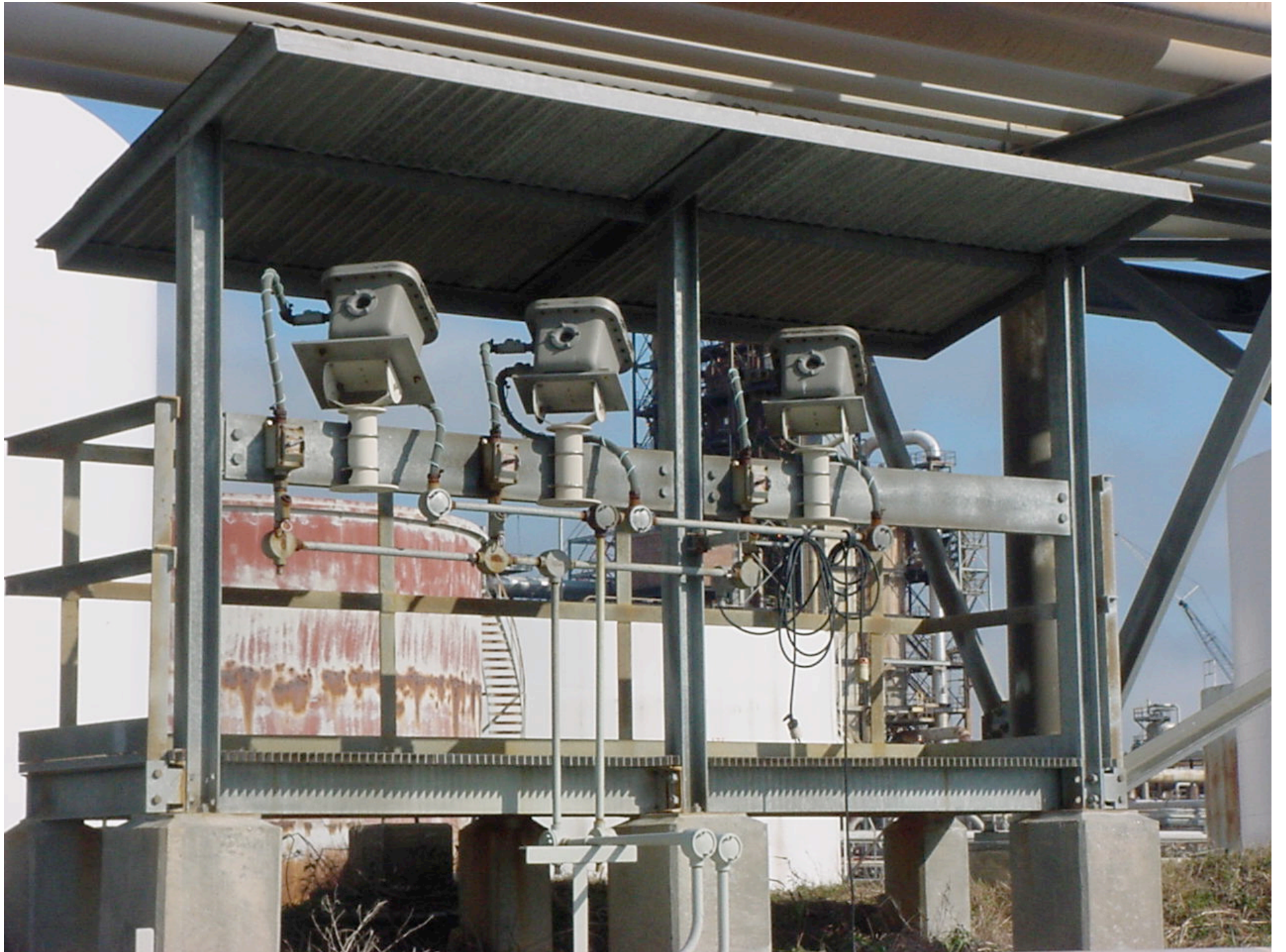
Arlene Brooks
Louisiana Department of
Environmental Quality
Surveillance Division





Stopples

- Various applications
- Hot tap into pipeline
- Insert plug
- Vent line
- Complete repairs
- Remove stopple, seal flange

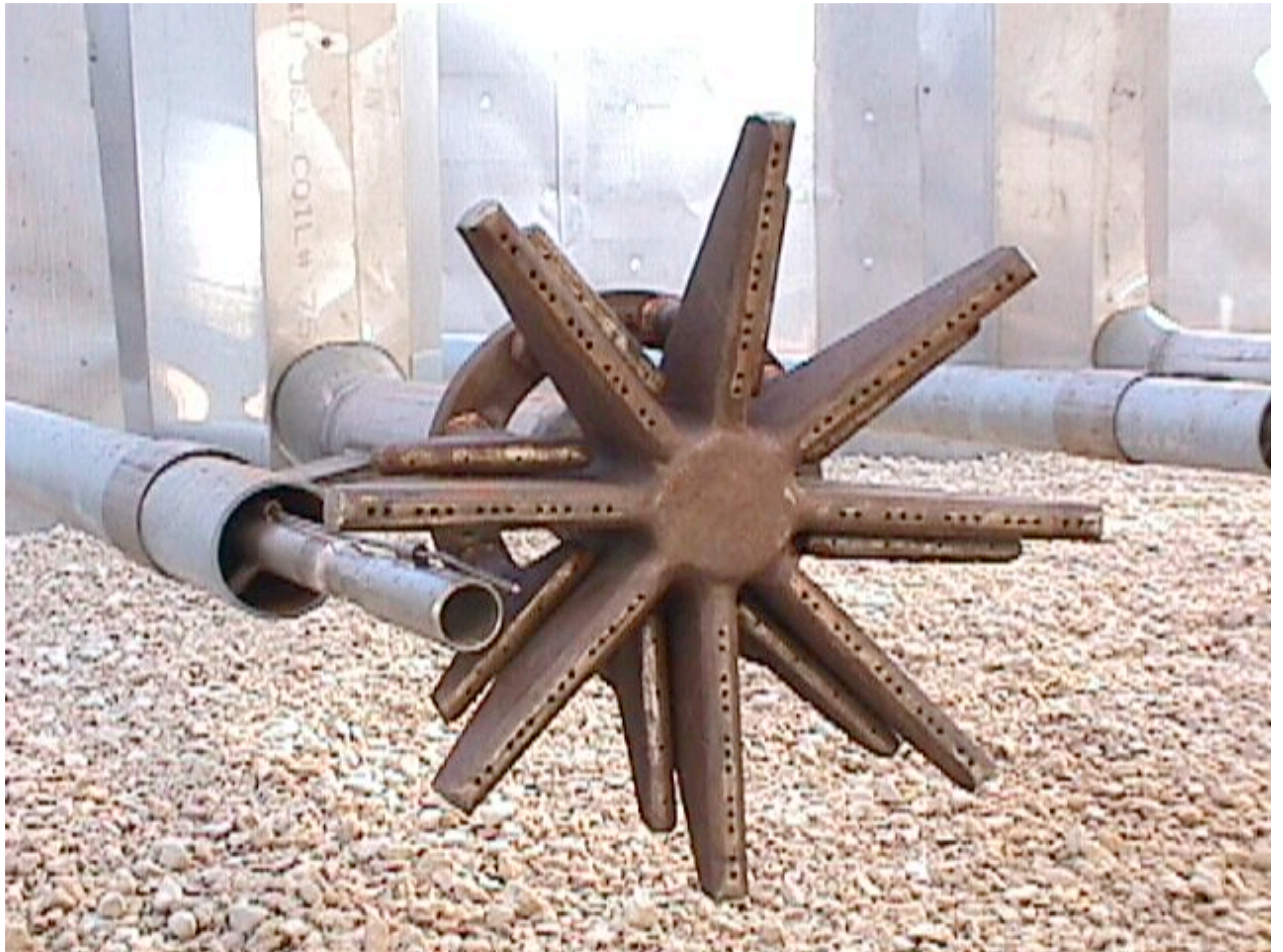


Infrared (IR) Sensor

- Used to detect a flame
- Alternative option to thermocouples (qualifies as an equivalent device to meet NSPS regulations)
- Some facilities use both to ensure coverage
- Continuous feed to data capture system







Enclosed Ground Flare

- 95 Ft Tall
- 45 Ft Diameter
- Five rings of 12 burners
- Multiple pilots at each stage
- Steam assist at low pressure
- Reduction of rumbling/lighting up sky



Flare Igniter

- Continuous spark assures flare stays lit
- Seen at remote unattended facilities
- Can become worn due to weather
- “Clicking” sound does not mean flare is lit...
- **SO....**



Infrared Non-contact Thermometer

- Can be used to detect presence of a flame
- Range -25° to 1400° F
- For targets above 73° F, accurate $\pm 1\%$ of reading or $\pm 2^{\circ}$ F, whichever is greater
- Response time = 500 mSec
- Data logging capability
- Intrinsically safe



Truline



HM-1



AM-1



TR-100/FR-100

MAR 28 2007

Circular Chart Recorder

- Multiple applications
- Provides record of continuous monitoring of parameters
- Records temperature, pressure, flow
- Monitors various time periods (24 hours/7 days/31 days on one chart)
- Visual and/or audible alarms

QUESTIONS??

