Natural Disaster Planning in PCAC Plants

Short Presentation posted on Members page of www.pasadenacac.org

Speakers from Harris County, City of Pasadena, and Pasadena Industry participated in a panel discussion about planning for natural disasters at the plant, county, and city level. Panelists were David Wade, Operations Section Supervisor, HCOHSEM; Azell Carter, Emergency Management Coordinator for Pasadena OEM; Mark Staes, Operations Manager LyondellBasell Houston Refinery; Scott Eady, Environment Health and Safety Director for Kinder Morgan. PCAC Facilitator Emily Morris moderated.

Wade described the county's role as a coordinating hub between weather intelligence, government agencies, and industry partners. He emphasized the importance of "leaning forward" by anticipating impacts early and ensuring that all partners are planning from the same information through conference calls with the partners. Wade said that Harris County continuously monitors weather using multiple sources, including inhouse meteorologists and private forecasting services. He also said the county prioritizes access and egress for critical infrastructure and first responders during and after an emergency.

Carter discussed the city's role in communicating disaster information clearly and consistently to residents and industry partners. He noted that lessons from Hurricane Harvey, recent freeze events, and a tornado have driven Pasadena's focus on redundant communication. Carter also described post-disaster responsibilities, including distributing water, food, ice, and charging stations, coordinating with nonprofits for sheltering, and supporting long-term recovery for residents. Carter told attendees that they can receive City of Pasadena text and email messages regarding emergencies by texting the message "PTXREADY" to number 77295 in their cell phones. Alternatively, people can visit https://www.pasadenatx.gov/902/ReadyPasadena-Alert-System to set up the alerts. Carter explained that recent disasters prompted Pasadena to invest $1.3 million to upgrade and expand its outdoor warning siren system by adding 15 new sirens.

Eady explained how Kinder Morgan's role as critical logistics infrastructure drives early and structured disaster preparedness. He said planning typically begins about 72 hours before an anticipated event and includes customer coordination, early identification of essential personnel, and facility stabilization.

Eady discussed operational measures such as securing equipment, ensuring tanks are properly weighted to prevent floating during floods, and using centralized and remote-control rooms. He noted that ride-out crews are supported with housing, meals, and hotel accommodations when needed.

He emphasized that employee support has become increasingly important, noting that employees cannot focus on safe operations if they are worried about their families or homes. Kinder Morgan has expanded programs to support employees and their families, including providing generators, resources, and time for recovery.

Staes described refinery-specific disaster preparedness and said that while many practices align with terminal operations, the complexity of refinery systems requires a phased, safety-driven approach that begins with pre-season readiness (housekeeping, inspections), 96-hour and 72-hour triggers based on storm intensity and forecasted conditions, and operational decisions guided by safety thresholds (e.g., sustained winds). Staes described the use of volunteer ride-out crews, emphasizing that participation is voluntary, so employees are not forced to remain onsite if they need to be with their families. He concluded that recent freeze events have reinforced the need to err on the side of caution and to continually refine procedures based on lessons learned.

Other points the panelists made during the panel discussion include:

Key Challenges Identified

- Extended power outages and access limitations
- Workforce mobility during curfews or flooded areas
- Long-term recovery demands following major events
- Increasing frequency of **freeze and winter weather events** compared to hurricanes since 2017

Lessons Learned & Improvements

- Improved **information flow** and forecasting accuracy (narrower hurricane cones, better inundation mapping)
- Expanded preparation for **ice, snow, and freeze events**
- Investments in alerting systems and infrastructure hardening
- Greater focus on **employee and family support** to ensure safe operations
- Emphasis on **early, conservative decision-making** to minimize risk