

WELL, WELL.... IN THE COMMUNITY

ConocoPhillips Partners with SAFE 2 SAVE to Combat Distracted Driving

Distracted driving is an epidemic. On September 1, 2017, using handheld technology while driving became illegal across Texas, and yet we continue to hear reports of crashes due to distracted driving. With one in five crashes involving distracted driving, a ratio that has not changed in the past four years, ConocoPhillips aims to raise awareness and educate drivers about the dangers associated with distracted driving and encourage them to put away their cell phones while behind the wheel. ConocoPhillips has partnered with SAFE 2 SAVE, a mobile app that helps combat distracted driving. So how does the app work? After you download the app,

it automatically starts in the background any time you drive faster than 10 mph. For every minute you go without touching your phone, you receive 2 points. Points can be redeemed at your favorite local businesses including the Cuero Pecan House, 5D Grill & Lounge and Pizza Hut, to name a few. **Download the mobile app today and enter the code COP to receive 500 bonus points!** If you have a business that would like to partner with SAFE 2 SAVE, contact development@safe2save.org. We hope you join ConocoPhillips in this important endeavor to discourage distracted driving in your community.



SAFE 2 SAVE
Save Money. Save Lives.

Don't Trash Our Town

Amount of roadside trash pick-up in Karnes and DeWitt counties.



Contacts

If you have a question or concern about our operations in the community, contact our stakeholder relations team at StakeholderRelations@cop.com.

For inquiries related to your specific ownership interests, contact the Owner Relations Unit.

If your last name or company name begins with:

A-F

Please call
918.661.0903
a-foru@cop.com

G-N

Please call
918.661.0904
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O-Z

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918.661.0905
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Want to check your payment information online? Use Oildex!

This secure site offers payment information and contains specific details regarding address changes, 1099 form information, questions and answers, and contact information for the Owner Relations Unit.

If you have not registered with Oildex, but would like to use this free web-based resource offered to our interest owners, visit <https://connect.oildex.com/cop/>.

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TECHNOLOGY SPOTLIGHT:

Testing Drone Technology to Detect and Quantify Emissions

Operating in a manner that protects air quality and reduces emissions is a key aspect of our Global Well Management Principles. Quickly detecting and repairing leaks is also an important element as we work to achieve our greenhouse gas (GHG) emissions intensity reduction target. Drones are the latest technology being piloted in our arsenal of leak detection and repair (LDAR) tools, providing real-time identification of leaks and accurate quantification of leaks and process equipment emissions. Drone-based methane monitoring programs have the potential to help our entire industry reduce emissions by providing a better understanding of where leaks occur and at what magnitude. This technology advancement quantifies emissions and allows us to benchmark sites and establish a baseline for reduction efforts.

"By using this technology, we are able to both better detect and quantify methane emission rates coming from individual oil and gas production sites for the first time. Understanding the quantity of methane, and not just the presence of the gas, helps direct more efficient and effective maintenance activities," said David Camille, Manager, Lower 48 HSE Innovation & Technology.

Drone-based methane monitoring programs have the potential to help our entire industry reduce emissions



The project is a collaboration with Scientific Aviation, a company well-known for their expertise in using manned aircraft to detect and quantify methane emissions. The effort began after ConocoPhillips expressed interest in improving the precision of emissions quantification rates coming from sites by scaling Scientific Aviation's manned aircraft technology to drones. Airplanes fly loops around the area being assessed but are limited to collecting data from a broad area. In dense fields with multiple potential emission sources, data from manned aircraft does not provide the granularity needed to easily identify emission sources or quantify emissions from an individual site. Airplanes can identify a leak source within a range of about 500 meters.

Texas's Eagle Ford was the first location to test the drone system technology at an operating well site. The area was selected because it is relatively flat and has steady wind conditions. Drones began collecting data in early 2019 and, for comparison purposes, tests were also conducted using a manned aircraft and optical gas imaging camera.

The drone system is outfitted with on-board gas analyzers and meteorological sensors, which provide data to the operator while being flown around well sites. By executing a flight pattern that creates a virtual plane downwind of equipment, the technology identifies the total amount of methane being emitted from a site. The system does this by detecting methane passing through the virtual plane and capturing wind vector in real time. These variables are then fed into sophisticated algorithms to quantify methane volumes.

Flying the drone closer to the equipment allows for isolation and confirmation of the source. Since the drones are much smaller than aircraft, they fly at much lower altitudes and are able to more precisely pinpoint the location of leaks by using the data collected paired with visual information from the on-board video feed.

"The ability to fly nearer to sources, combined with the wind and methane measurement, allows us to locate the source of a leak to within a few meters," Camille noted. Additionally, tests indicate that the drone system has the potential to detect smaller leaks that are difficult to detect by planes or on-the-ground methods.

The Port of Corpus Christi: Moving America's Industry

Staying true to ConocoPhillips' SPIRIT Values includes creating and maintaining inclusive, honest and mutually beneficial relationships with our stakeholders. In the Eagle Ford, we do this in part by establishing an open dialogue with communities through forums like the Citizens Advisory Committee (CAC).

The CAC is comprised of leaders from DeWitt, Karnes, Live Oak, and Bee counties. The committee meets regularly to discuss hot topics and industry matters. This month, the CAC visited the Port of Corpus Christi to learn how the port has become an economic engine for Texas and the nation.

The Port of Corpus Christi is the third largest port in the U.S. in total revenue tonnage and is instrumental in positioning the U.S. as the largest exporter of energy in the world. The port is currently strengthening its infrastructure and capabilities by building larger vessel docks, expanding the rail system and investing in the construction of a new high-clearance bridge. It is also deepening and widening the ship channel to a depth of 54 feet and width of 530 feet to accommodate safe passage of deep-draft vessels. With these improvements, the port will soon to be the widest and deepest in the entire U.S. Gulf, increasing opportunities for new business and export capacity for crude oil pipelines from the Permian and Eagle Ford basins.

Omar Garcia, Chief External Affairs Officer for the port, hosted the CAC's visit. "Productive partnerships are the lifeblood of our business at the Port of Corpus Christi, and we understand that transparency, consistency and good communication are the cornerstones of those relationships. It was a pleasure to share our work with members of the South Texas community and with ConocoPhillips," said Omar.



CAC members and elected officials with Port of Corpus Christi executives on tour of the port

Employee Spotlight: Roy Acosta

Originally from Odessa and now living in Beeville, Texas, meet Roy Acosta. As a Technical Safety Technician, Roy identifies challenges and process improvements for process safety and risk management.

Roy has worked at ConocoPhillips for more than 11 years – 8 of which have been in the Eagle Ford. He enjoys working at ConocoPhillips because the company strives for excellence in safety and encourages philanthropic activities in the community. His proudest career achievement was establishing internal guidelines which prevent exposure to potential hazards at and around various oil and gas facilities. He also established processes to keep the guidelines current.

In addition to his job, Roy also leads our Community Investment (CI) Committee. The CI Committee is a group of employees which lead volunteer events and award philanthropic donations to organizations dedicated to our Eagle Ford community. "There came a point in my career where I wanted to ensure we give back to the communities where we live and work. Being the CI Committee lead allows me to express my passion to obtain those goals successfully," said Roy.

In his free time, Roy likes to play golf, exercise and travel to sporting events. Roy is also a big fan of college football, especially the Texas Longhorns.

We are proud to have employees like Roy who are committed to the communities where we do business.

Roy can be reached by sending an email to Roy.G.Acosta@conocophillips.com



Emergency Response Tabletop Drill Strengthens Preparedness and Collaboration

In July, ConocoPhillips hosted an emergency response tabletop drill with first responders from Live Oak, Karnes and DeWitt counties. The goal of the drill was to further enhance collaboration, practice response actions and share best practices. Twelve county representatives and eleven ConocoPhillips employees participated. The session was moderated by the The Response Group, a leader in crisis management and emergency response.

The drill was built around an emergency scenario that would require response from both ConocoPhillips and county representatives. Each team developed a list of immediate response actions and response roles. This led to productive dialogue between entities that clarified roles and presented areas for improved preparedness.

As a result of the drill, we will identify staging areas for emergency crews near our major facilities. Also, conversation throughout the drill helped solidify evacuation radius zones and which party should take the lead on directing evacuations if necessary. Crisis communication activities were also streamlined by the end of the tabletop process.

"There was a lot of information sharing that led to more understanding of what each of our capabilities are. Above all, it was clear that we all share the notion that life safety is number one, and that is the way it should be," said Live Oak County Emergency Manager Bobby Stewart.

"Our county first responders are our partners in every sense of the word, especially in an emergency situation. This drill not only allowed us to work together face-to-face, but it also helped us understand each other's perspectives. This exercise strengthened our joint response tactics through collaborative learning," added Mainline Superintendent Tim Turner.



County emergency responders and ConocoPhillips employees work through an emergency scenario during the tabletop drill in Kenedy, Texas

Testing Drone Technology

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Once leaks are identified, they are fixed as soon as feasible, with many leaks repaired either the same day or within a few days of being detected. If additional time is required, we follow standard maintenance processes by adding the required repairs to our maintenance tracking system. After repairs are completed, inspections ensure that the repairs are successful. We implement engineered solutions and/or operational changes if we identify developing trends of systemic hardware problems.

"The vision is for a drone to automatically deploy, detect and quantify methane emissions. That data would be quickly analyzed and sent to personnel who can make informed decisions and take action, if necessary, based on the findings," Camille said. "We'll also be able to better understand emission profiles of different equipment and make strategic design decisions based on that information."

The current U.S. regulatory framework allows operators to use optical gas imaging cameras or point source air sampling to detect leaks from oil and gas operations. Quantification



normally relies on equipment counts and Environmental Protection Agency (EPA) equipment factors that estimate emissions for each piece of equipment. Early measurement results by the drone system suggest that facilities with gas-driven pneumatic controllers emit much less than what is currently reported under the EPA factors.

Use of unmanned aerial systems for emission detection generally has been limited due to regulatory frameworks, quantification techniques and big data capabilities. We see potential for change in several of these areas and are proactively evaluating and further developing various technologies. Data obtained by the drone system allows for benchmarking and continuous improvement, while supporting future regulatory conversations related to leak detection, repair and quantification.

We are continuing to test the drone technology in other areas of our operations to evaluate the consistency of findings across various operating conditions.