Shaping our future at Chevron Phillips Chemical involves creating a culture that puts the health and safety of our employees, contractors, customers, neighbors and the environment at the forefront of everything we do.

We consistently deliver top-quartile industry results in personal and process safety. To continue our focus on safety, we introduced Our Journey to Zero, further enhanced our efforts toward Operational Excellence, expanded our Voluntary Protection Program involvement, and explored new ways to safely execute major projects, including turnarounds.
Our Journey to Zero

Chevron Phillips Chemical has had a strong record of improving environmental health and safety performance since the company’s inception in 2000.

Over the years, our company has put core concepts and programs in place to help shape the safety and operating culture of Chevron Phillips Chemical, including our Guiding Principles, Tenets of Operation, Operational Hierarchy, Operational Excellence System, Stop Work Authority and Life Saving Rules.

Compared to the industry, our personal and process safety outcomes are excellent and the mechanisms we use to get there work, but we want our results to be outstanding.

With this goal in mind, our EHS Strategy — Our Journey to Zero — was born. Our Journey to Zero is a blueprint to achieve what is already a clear objective for our company: to eliminate events that could inflict serious injuries to employees or contractors, or result in severe process safety events.

To help us achieve zero, employees are expected to:
- Understand and follow established procedures
- Reduce their own risk
- Speak up
- Keep learning

Operational Excellence

Striving for Operational Excellence

Our company utilizes a risk management process we refer to as our Operational Excellence (OE) System. The OE System is a global framework, that promotes continual improvement in certain focus areas, including personal and process safety, pollution prevention, product safety, security, distribution, and community outreach and awareness. The Chevron Phillips Chemical OE System is further enhanced by welcomed input from our employees and contractors, regulatory agencies, communities, customers and other stakeholders. Our OE System is structured to meet requirements established by the American Chemistry Council’s (ACC) Responsible Care® Management System. Adherence to codes and management practices are certified through third-party audits sanctioned by ACC.

Recognizing Continuous Improvement

At Chevron Phillips Chemical, continuous improvement in OE performance is expected every year. While the effort can be challenging, the company annually recognizes the best of its global facilities with the President’s OE Awards. These awards celebrate exceptional performance in personal and process safety, environmental awareness, product stewardship, reliability and security. Winners of the 2016 awards featured throughout this report are denoted by the gear icon.

SPCo Safely Completes Company’s Largest Turnaround

With 8,000 employees and contractors involved, and a budget of approximately $126 million, the effort to conduct the largest-ever turnaround at Saudi Polymers Company (SPCo) was no small undertaking.

The goal from the beginning was to simplify this engineering challenge into something that could be safely and effectively managed. This was achieved by dividing the site into two areas. Each area had a separate access gate, including turnstiles and badge scanners, as well as separate satellite warehouses, hydro-jetting pads and teams.

Nearly 3.7 million work-hours were required to complete the complex project which comprised utilities, five production units, transfer bagging and logistics.

During the execution of the turnaround, approximately 60 safety coaches were present in the field to mentor and encourage the large number of employees and contractors to keep safety top-of-mind while performing their tasks. Leaders and subject matter experts from the Petrochemical Conversion Company (PCC), S-Chem, and Chevron Phillips Chemical also had a tremendous field presence, which aided in setting a successful tone for the entire turnaround.
Facilities Recognized by American Fuel & Petrochemical Manufacturers

Chevron Phillips Chemical’s facility in Borger, TX received the Elite Silver Safety Award from the American Fuel & Petrochemical Manufacturers (AFPM) at the organization’s annual Safety Awards dinner in New Orleans. The Borger plant is the first Chevron Phillips Chemical facility to receive this award and did so in back to back years for both its 2015 and 2016 performance.

The AFPM Elite Silver Safety Award recognizes the top five percent of safety performers in the fuels and petrochemical manufacturing industry. Recipients are chosen by a selection committee made up of members of the AFPM Safety & Health Committee.

At the event, the Borger facility also received AFPM’s Meritorious Safety Performance and Safety Achievement awards for exceeding award expectations for its employee total recordable incident rate and working more than 1 million hours without a lost employee workday due to injury. The plant recently observed three years without a recordable injury/illness.

Four other Chevron Phillips Chemical sites were also recognized by AFPM for their performance in employee and process safety, including Bartlesville, Oklahoma, and three facilities in Texas—Conroe, Port Arthur and Sweeny.

Building a Sustainable Management of Change Process

In 2014, employees at our Research & Technology facilities identified a need to improve Management of Change (MOC) processes within their laboratory operations. With this in mind, a cross-functional team from the Kingwood Research and Technology Center, Bartlesville Technology Center and the Environmental, Health, Safety & Security (EHS&S) group was established.

Together they sought to develop a streamlined change management system, eliminate paper forms and improve workflow efficiency by utilizing a custom-built software application, which was designed in partnership with personnel from the corporate IT department.

The application was expanded over the course of 2016 to include an onboarding/personnel MOC module known as the Electronic Passport Program. The Electronic Passport is a web-based tool that tracks new employee requirements to become active and productive members of their local facility, meet their colleagues and reinforce the messages of Our Journey to Zero.

Today the improved tool provides more than 150 specific questions developed by R&T staff that are directly related to the types of hazards found in a laboratory environment. These tools were recognized as a best practice by OSHA VPP auditors at the Kingwood Research and Technology Center audit in early 2015, and again during the 2016 corporate OE Review.

S-Chem Supply Chain Meets Compliance Standards

In the Middle East, the Gulf Petrochemicals and Chemicals Association (GPCA) is an organization that serves 250 member companies of the downstream hydrocarbon industry in the region. In 2016, GPCA conducted a Sustainability and Quality Assurance Assessment (SQAS), with a focus on Logistics Service Providers (LSP) who transport and store chemicals on behalf of manufacturers. SQAS is an operational excellence program for the logistics industry, similar to American Chemistry Council’s Responsible Care® initiative in the chemical industry.

The comprehensive third-party assessment serves to both evaluate and improve EHSS&Q performance among LSP companies. In 2016, all S-Chem supply chain contractors completed their assessments. This marked a significant milestone, as the company’s in-kingdom supply chain is now fully SQAS and ISO 9001 compliant.
Sweeny Achieves VPP Star Status

In September 2016, the company celebrated its Sweeny, TX facility being designated by the Occupational Safety and Health Administration (OSHA) as a Voluntary Protection Program (VPP) Star site. With this achievement, all of the company’s U.S. manufacturing facilities now boast VPP Star status, the highest level of VPP certification.

The VPP Star award requires companies to go beyond minimal OSHA standards and provide the best feasible protection at the site via continuous improvement programs. OSHA first launched VPP in 1982 to promote effective worksite-based safety and health initiatives. VPP Star site recognition is OSHA’s top-tier designation for exemplary worksites with comprehensive and successful safety and health management systems. Companies in the Star Program have achieved injury and illness rates at or below the national average of their respective industries.

For the last two years in a row, 16 of our facilities have operated without an employee or contractor recordable injury or illness, with two of those facilities operating without a single employee or contractor recordable injury or illness since the company formed in 2000.

In 2016, Chevron Phillips Chemical created the VPP Coordinators Network Team to connect all domestic VPP coordinators and provide a forum for sharing best practices and lessons learned throughout the company.

Managing the Heat

Each year during the hot summer months of May through September, Chevron Phillips Chemical promotes its global “Summer of Safety” campaign to heighten employee and contractor awareness of heat-related injury prevention. The theme in 2016 of “It’s Personal” encouraged workers to:

- Be aware of how personal factors, such as medications, lack of sleep and physical activity outside of work can affect job performance.
- Learn how to manage individual factors that can contribute to heat-related injuries.

When compared to 2015 summer months, we saw a 27 percent reduction in the number of combined employee and contractor injuries at our facilities (excluding major capital projects) and employees as a singular group experienced a 57 percent reduction in the number of injuries as a result of the campaign.

Of course, our goal is always zero injuries and incidents.
Partnering with First Responders in Our Communities

Chevron Phillips Chemical values the partnerships it shares with government agencies and first responders in the communities where we operate. The following are just a few examples of those partnerships in 2016.

The Borger Complex Emergency Response Team is a combined service with members from Chevron Phillips Chemical, Phillips 66, and Solvay. In 2016, the team completed a multi-agency response drill with Omnitrax, Panhandle Northern Railroad, Borger Fire Department, and the Borger Office of Emergency Management. This was the first drill led by the Borger facility that involved multiple outside agencies. The exercise simulated a small railcar chemical release, just outside the facility’s property.

Multiple personnel from each group participated by responding in the field and the Emergency Operations Center (EOC). At the conclusion of the drill, the partnering agencies offered valuable, positive feedback as to how the Borger Complex Emergency Response Team and Emergency Operations Center performed during the exercise.

In Asia, personnel from Chevron Phillips Singapore Chemicals (CPSC), as well as other companies at the complex, participated in a multi-governmental agency security exercise in October. The drill included representatives from the Singapore Civil Defence Force, Singapore Police Forces and Jurong Town Corporation.

The security scenario involved two unidentified intruders who were in the complex for nefarious purposes. This exercise served to evaluate the coordination between the complex and first responder government agencies, as well as to validate CPSC’s Emergency Response Plan.

In Europe, employees at our facility in Tessenderlo, Belgium provided emergency response training to representatives from neighboring schools and institutes in November. Part of its annual Seveso Emergency Communication program, this effort helps keep the plant connected to its partners in the community.

Bicycles Help Improve Conduct of Operations and Operational Discipline at the Borger Plant

In 2016, the Borger plant’s goal was to train 100 percent of its employees in Conduct of Operations and Operational Discipline (COO/OD) principles, so a curriculum was developed in-house which involved having employees assemble bicycles. The assembly instructions would represent COO principles, and the actual work of bolting all the parts together would be relevant to Operational Discipline.

The hands-on exercise was ultimately a big success for the plant and its employees. The course helped each participant recognize the importance of referring to policies and procedures before continuing in a work process. In fact, the classes were so successful that the training team was invited to the VPP Regional Conference to share the lesson with other leaders in the industry.

At the completion of the plant training, six assembled bicycles were donated and delivered to Women & Children First: The Center against Family Violence shelter in Little Rock, Arkansas.

Facility Security

Security at all Chevron Phillips Chemical facilities is a top priority, as the safety and security of our people, products and assets is an integral aspect of our business culture. As residents of the communities where we operate, we understand the importance of working closely with law enforcement, government representatives and emergency response professionals to prepare for, prevent and manage facility incidents.

Accordingly, Chevron Phillips Chemical is a member of the American Chemistry Council (ACC) and subscribes to the principles of ACC’s Responsible Care® program, which includes the Responsible Care Security Code. In addition, Chevron Phillips Chemical’s own Operational Excellence program has specific security related requirements for our facilities, including a requirement to conduct regular security risk assessments. Further, our individual petrochemical facilities are compliant with one or more additional security standards or regulations, as dictated by location, facility type, chemicals onsite, or products produced. The most typical are the Chemical Facility Anti-Terrorism Standards (CFATS), Maritime Transportation Security Act (MTSA), and DOT HM-232.

Chevron Phillips Chemical is also proud to partner with U.S. Customs and Border Protection (CBP) to better secure the international supply chain to the United States, and supports CBP’s homeland security mission. CBP validated Chevron Phillips Chemical in 2008, 2011, and 2015 as a Tier II participant in CBP’s Customs-Trade Partnership Against Terrorism (C-TPAT) program, a voluntary partnership between CBP and members of the trade community to safeguard the world's trade industry from terrorists.

While we manage our business with the goal of preventing incidents, we maintain world-class emergency response capabilities to minimize the potential impact of an event to our facilities and surrounding communities. Employee emergency response teams coordinate with local and regional experts to maintain operational readiness in case of an incident. This is accomplished through frequent emergency response training, briefings and drills that simulate potential events such as product spills, fires, explosions, natural disasters and security incidents.
Process Safety

Performance Pipe Achieves Record Safety Performance

The Performance Pipe division of Chevron Phillips Chemical achieved an especially remarkable safety milestone in 2016, with no recordable injuries throughout the division compared to the industry average for 2015 of 4.40, which equates to more than 4 in 100 workers going home with an injury or illness. Performance Pipe’s ability to send everyone home safely in 2016 was truly exceptional within its industry.

Facilities Honored by Texas Chemical Council

Several Chevron Phillips Chemical facilities were recently honored with awards from the Texas Chemical Council (TCC) for demonstrated commitment toward safe operations and exemplary results in 2016.

For the second consecutive year, the Pasadena Plastics Complex was awarded the Best in Texas and Distinguished Service awards. In 2016, the facility completed a major turnaround with no recordable injuries, conducted a successful health fair for employees and contractors, and logged nearly 8,000 volunteer hours in the community assisting with education in the schools, building a Habitat for Humanity home, cleaning a local veterans’ cemetery and participating in the city’s health and safety fair, among other activities. Additionally, the facility set new environmental records, achieving the lowest number of environmental recordable events (a 29 percent reduction from the previous year) and setting a record for the lowest number of Title V deviations, with a 43 percent reduction since 2013.

What Gets Measured Gets Managed

There’s a saying that “what gets measured, gets managed.” This is certainly true when it comes to manufacturing. In 2016, we began implementing Meridium, our new Computerized Maintenance Management System (CMMS), at each of our wholly-owned facilities.

Rather than spending time manually searching through multiple systems and databases, employees can now obtain meaningful data, and have the ability to analyze it, using convenient dashboards and queries.

First-ever Mechanical Integrity Summit

In 2016, Chevron Phillips Chemical hosted its first-ever Mechanical Integrity (MI) Summit, which brought together employees with varying years of experience from domestic and international facilities to discuss best practices in mechanical integrity. Together they discussed opportunities for improvement, with the overall goal of increasing alignment and standardization across our company and further enhancing performance.

Tier 1 and Tier 2 Process Safety Event Rate

Highlighting our performance via standard outputs of key metrics on a periodic basis will help us drive continuous improvement in important areas such as personnel safety, process safety, equipment integrity and reliability behaviors across the company.

For our efforts in developing clearly defined work processes and driving a successful enterprise implementation of the CMMS, we were honored with the Asset Performance Management Best Practice Award in 2016, Meridium’s highest customer achievement honor.