

HEALTH AND SAFETY



The foundation of Noble Energy’s approach to health and safety is a culture of individual responsibility for the safety of oneself, coworkers and the community. We refer to this culture as “NO HARM.” It emphasizes a common set of principles to align safe behaviors with the values of Noble Energy.

In 2014, we strengthened this culture in measurable ways and reinforced critical elements of our health and safety management systems, including process safety, chemical risk analysis, and emergency preparedness. We also reached out in new ways to share our safety commitment and expertise with our industry and communities.

2014 Safety Milestones

Safety performance highlights in 2014 included:

- A TRIR of zero for 365 days on the Atwood Advantage, a new deepwater drillship with new crews working exclusively for Noble Energy in the U.S. Gulf of Mexico.
- A successful regulatory transfer from Anadarko of the Neptune spar in the Gulf of Mexico. The handover integrated Noble Energy’s management processes to ensure no lapse in the environmental, health, safety, and regulatory performance of the platform.
- Zero recordable injuries in our Nicaragua operations during 2014, encompassing nearly 100,000 man-hours of work.
- More than 500,000 hours without a recordable incident at the Israel Ashdod Offshore Terminal compression construction project.

ADVANCING A NO HARM CULTURE

The first internal workshops to introduce the NO HARM principles were held in 2013. By the end of 2014, 1,734 employees had participated in full-day “Leading NO HARM” classes, the majority of which were voluntary. The workshop experience is reinforced by pocket guides and ongoing communications.

As the NO HARM culture spread throughout the organization, the shift was reflected in a statistically significant drop in the company’s total recordable incident rate (TRIR). Our employee TRIR dropped from .37 to .09, reflecting just three recordable incidents during the year.

A visible and sustainable safety culture magnifies the impact of our Global Environmental, Health and Safety Management System (GMS). This system provides the framework and expectations for managing environmental, health and safety risk throughout our operations.

CHEMICALS STEWARDSHIP

We developed a risk screening process that improves our ability to evaluate the chemicals used in our operations. The process incorporates aspects of the assessment approach used by both the U.S. Environmental Protection Agency and the European Chemicals Agency. It examines human and ecological hazards, bioaccumulation, persistence in the environment and if there is potential exposure to the chemical during normal use.

ROAD SAFETY

We recognize that temporary community disturbances, such as increased truck traffic, are inherent in shale development. To ensure that these temporary disturbances are minimized and effectively managed, Noble Energy implements specific road-use strategies. These efforts include blackout hours, which keep large trucks off the road during school bus-route hours, and the use of pipeline transportation systems to reduce truck traffic.



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Enhancing Process Safety

New process safety initiatives in 2014 were designed to enhance our ability to prevent major incidents in two ways - improving our systems and reinforcing employee awareness. These initiatives included:

- We developed a set of key performance indicators (KPIs) for process safety.
- We hosted an offshore summit that brought together 60 representatives from across our offshore business units to share best practices. Discussion focused on the key performance indicators for process safety, and participants identified KPIs specific to each business unit.
- We launched process safety workshops for both technical staff and front-line employees. These “Keep It in the Pipe” workshops focus on providing a common language and a tool for mapping prevention controls related to loss-of-control issues and acting before the risk of an incident increases.

PROMOTING INDUSTRY SAFETY

We share our safety culture and expectations with our contractors and other industry partners. Throughout our operations we encourage our contractors to attend “Leading NO HARM” workshops.

In Israel, for example, during 2014 we hosted a conference for local contractors to promote oil and natural gas safety standards in Israel. More than 50 company leaders and safety managers participated and committed to promote, encourage and comply with Noble Energy’s environment, health, safety and regulatory standards.

In the Marcellus Shale, we hosted spring and fall contractor safety summits focused on “Building Partnerships with an Incident-Free Culture.” The sessions detailed Noble Energy’s safety expectations and outlined tools and procedures for improving contractor performance, emphasizing the importance of safety in Noble Energy’s contractor selection process.

IMPROVING EMERGENCY PREPAREDNESS

We continually maintain our readiness to respond to a potential incident or emergency. This preparedness includes collaborative planning with partners, peers, contractors and communities, as well as training exercises that test the readiness of all who would be involved in responding to an incident.

In the Republic of Cyprus during 2014, we joined with agencies and contractors from Cyprus, Greece, Israel and the United States to conduct the largest offshore incident response exercise in the history of Cyprus. The full-scale response exercise, which took more than a year to plan, tested Cyprus’ ability to respond to a terrorist assault on an offshore facility. The exercise simulated military action to regain control of the rig, search and rescue efforts, and response to an oil spill, including simulated mobilization of a well capping stack. The exercise strengthened Noble Energy’s capability to respond to a major emergency and advanced international coordination between participating countries, various government agencies and the private sector.

In Israel, we conducted a drill to test the Noble Energy Israel Incident Management Team’s ability to deploy shoreline protection resources in case of an unintentional release of hydrocarbons. Five Israeli government officials from the Ministry of Environmental Protection and Ministry of Energy and Water Resources were present as observer/evaluators for this exercise, which included field activities on the Israeli coast and in Herzliya. Through the seven-hour exercise, the team effectively employed all available resources to deal with the simulated emergency.

Extending NO HARM Beyond Our Business

Reflecting our culture of NO HARM, we go beyond the essentials to support the safety of our employees, their families and communities. Some examples in 2014 include:

- Feedback from "Leading NO HARM" workshops in Equatorial Guinea prompted us to launch a program to share fire prevention and emergency planning with employees and families. About 270 participants learned the basics of fire extinguishers, electrical safety and residential emergency planning in multiple sessions led by Noble Energy safety professionals.
- In Houston, we hosted multiple sessions of American Red Cross training in CPR and first aid for our employees. A total of 140 employees participated in CPR training and 73 employees participated in first aid training.



Also, in conjunction with the Eastern Mediterranean environmental sensitivity mapping project (page 8), we conducted shoreline cleanup assessment technique (SCAT) training. This further strengthens our capabilities to respond to spills.

In the DJ Basin, we held a successful drill in Greeley, in which the Incident Management Team responded to a simulated large-scale incident. A medical evacuation operator and two local volunteer fire departments carried out live operations simulating a fire, search and rescue, and medical evacuation of an injured party.

Also in Colorado, we joined with other operators to initiate the formation of the Front Range Emergency Response Consortium to improve information sharing between operators and enable mutual support in managing an incident. The consortium is also working to strengthen community first responders' capabilities by providing oil-field awareness training and sponsoring scholarships for advanced response training.



In the Marcellus Shale, we joined with local volunteer fire departments to provide seminars and awareness programs and hosted the crews at our locations to familiarize them with our operations. We donated funds to the Marshall County Office of Emergency Management to assist with the purchase of an Incident Command Trailer. These trailers can help responders disseminate information to the public quickly in areas with limited facilities. We also donated funds for three foam fire suppressant trailers and foam to fire departments in our operating area.

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READINESS