



ENVIRONMENTALLY FRIENDLY DRILLING SYSTEMS PROGRAM

24/7

Building a Culture of Environmental Awareness

The **Environmentally Friendly Drilling (EFD)** program, managed by the Houston Advanced Research Center (HARC), integrates advanced technologies into systems that significantly reduce the footprint of petroleum drilling and production in environmentally sensitive areas. The objective is to identify, develop and transfer critical, cost effective, new technologies that can provide policy makers and industry with the ability to develop reserves in a safe and environmentally friendly manner.

The program continues to add participants from environmental organizations, academia, state and federal agencies, government laboratories, and industry. Currently over 100 organizations support this effort including financial assistance. The partnership identifies new technologies and transfers them to areas that must incorporate new practices to address environmental concerns. Regional partners optimize technologies to fit the needs of their locale. Partners routinely come together to discuss progress with the sponsors/advisors. The program was honored with the Environmental Partnership Chairman's Stewardship Award from the Interstate Oil and Gas Compact Commission at their 2009 annual meeting.



24/7

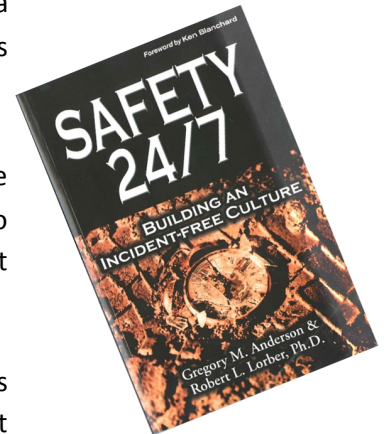
24/7 will be the sequel to **Safety 24/7—Building an Incident-Free Culture**, which is a fictional story of a manager in an organization plagued with injuries and fatalities who is given 120 days to create a culture of safety.

24/7 takes the fictional story to the next level by demonstrating many of the principles used to successfully change people's behavior toward safety are key to developing a culture of environmental responsibility and accountability. The target audience includes:

Executive Teams responsible for building a strong culture of environmental awareness throughout their organization. This book will assist leaders in recognizing that environmental awareness will only become a core value when they move it from their heads to their hearts.

Supervisory personnel whose success depends on their ability to create teams that are motivated to minimize environmental tradeoffs associated with their work.

Everyone who wants to understand how behavior impacts the environment and, more importantly, wants specific tools to reduce the likelihood of becoming involved in an environmental incident.



The Vision

One only has to look at today's headlines to know the time is right for **24/7**. Companies face environmental constraints, including regulations and laws that can limit or completely halt exploration and production in sensitive areas both in the United States and around the world. In the recent past more than 30 environmental policy and regulatory impediments to domestic natural gas production have been identified and documented.

Data collected in previously funded Environmentally Friendly Drilling (EFD) projects reveal, as the energy industry adopts more environmentally friendly approaches, the majority of citizens favor the relaxing, or in some cases even eliminating, current governmental regulations that limit exploration and production in sensitive areas.

24/7 will provide the guide to instilling environmental awareness throughout an entire organization. Some of the benefits to the sponsor of this unique book are as follow:

- 1000 Copies (English)
- Customized Foreword & Testimonials
- Internal/Contractor Training & Induction Processes
- External Marketing & Public Perception
- Increase Overall Industry Environmental Awareness
- Author Keynote Address

Testimonials for Safety 24/7:

"Whether in the energy sector, mining, engineering and construction Safety 24/7 provides the tool necessary for creating a great company."

Ken Blanchard - Co-author of *The One Minute Manager*.

"We have used the principals contained in Safety 24/7 to reduce our incident rates by over 50%."

Jon A. Marshall - President / CEO, GlobalSantaFe, Corp.

"Safety 24/7 clearly defines the commitment needed to improve the safety culture and drive to an incident free work environment."

Wilson Yancey - Director of Corporate Safety, Quanta Services.

"Safety 24/7 brings to life the philosophies we have successfully used to create a culture of safety within our organization."

Jud Riggs - President / CEO, Teichert, Inc.

For more information about the EFD Program and **24/7 contact:**

Tom Williams twilliams@afsolutionsinc.com (713) 201-3866

Rich Haut rhaut@harc.edu (281) 364-6093

www.efdsystems.com

Environmentally Friendly Drilling Program

For 20 years, we have worked to reduce our environmental footprint. Remarkable progress has been made.

The program has shown we can **reduce the footprint more than 90%** with a further reduction in the impact on the environment if low impact technologies are combined in a system.

From the past...
(multiple well sites)



...to the present drill site pad
6 times smaller and able
to access multiple wells
from **ONE** location



System includes:

- Modular small footprint rigs with reduced emissions.
- Pad drilling of multiple wells from one site.
- New downhole logging and steering tools.
- Closed loop drilling fluid systems.

Managed by the Houston Advanced Research Center (HARC), Texas A & M University, Sam Houston State University and TerraPlatforms LLC.
www.ofdsystems.com

The project has been co-funded by the DOE National Energy Technology Laboratory, Research Partnership to Secure Energy for America (RPSEA), industry and environmental organizations.

SPONSORS



MANAGEMENT TEAM



ENVIRONMENTAL ORGANIZATIONS



COLLABORATORS



ALLIANCE MEMBERS



For further information about the EFD Program contact:

**Rich Haut
Houston Advanced Research Center
rhaut@harc.edu
(281) 364-6093**

**Tom Williams
twilliams@afsolutionsinc.com
(713) 201-3866**

**Dave Burnett
Texas A&M University
burnett@pe.tamu.edu
(979) 845-2274**

**Gene Theodori
Sam Houston State University
glt002@shsu.edu
(936) 294-4143**

www.efdsystems.com