Houston Chronicle

Houston Chronicle exclusive: Drilling boom, deadly legacy

Despite hundreds of oil field fatalities, federal government does little to monitor or safeguard onshore workers

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Tina Saiz, the widow of a Felipe Saiz who was killed in a drilling rig accident that occurred at Heart Land Drilling Rig 11 in June 2013, is shown with her late husband's hard hat and the boots he was wearing on the day he was killed.

The last thing Felipe Saiz saw from behind his trademark mirrored sunglasses was the vast sunbleached vista of the Permian Basin where he'd grown up, with its scrub trees and white caliche rock. He was standing on a platform near the top of Rig 11 at a West Texas drill site one morning in June when, hundreds of feet below, a drilling pipe got stuck and a rig superintendent increased drill power beyond normal operating limits, court documents say.

It took only seconds. The surge toppled the aging rig's mast, with Saiz held fast to it by a red nylon safety strap. The crumpled tower crashed inches from a hut where the superintendent still sat at the controls.

Saiz's son-in-law, Frankie Reyes, a rig hand, found Saiz's body under a debris pile that took two cranes to clear away.

"I never went back after that day," said Reyes, one of at least three crew members who quit after the June 19, 2013, accident.

The boom that has brought prosperity to Texas has left a trail of death and devastation for many of the more than 100,000 workers in oil and gas exploration-related jobs. The death toll peaked at 65 in 2012 - a 10-year high and nearly 60 percent more than in 2011. Nationwide, 663 workers in oil field-related industries were reported killed in the drilling and fracking boom from 2007 to 2012, according to the U.S. Bureau of Labor Statistics. About 40 percent died in Texas.

But what sets apart the accident that claimed Saiz's life from thousands of other incidents reported by Texas oil field workers since 2008 is that any government official looked into it at all.

As part of a yearlong investigation, the Houston Chronicle analyzed 18,000 injury and illness claims and reviewed OSHA data and public records on hundreds of oil field accidents since 2007.

Among the investigation's findings:

- * The federal government has failed for 22 years to implement safety standards and procedures for onshore oil and gas drilling, even as offshore accidents such as the 2010 Deepwater Horizon oil spill in the Gulf of Mexico prompted officials to improve already stringent regulations governing offshore drilling.
- * At onshore oil and gas drilling sites, the Occupational Safety and Health Administration is required to investigate only those accidents that kill workers or that cause three or more to be

hospitalized. That translated to only about 150 of 18,000 work-related injuries and illnesses in the last six years in Texas.

* When OSHA did investigate, it found safety violations in 78 percent of Texas accidents, finding that many could have been prevented with safer procedures or equipment.

Work in Texas' oil and gas fields involves long hours, extreme weather and physical contact with dangerous machinery under the best of circumstances. But the dearth of safety standards, the lack of government inspections, and shoddy practices followed by many oil and gas companies have left a toll of badly injured workers.

In 2012, 79 lost limbs, 82 were crushed, 92 suffered burns and 675 broke bones in work-related accidents reported to insurance carriers.

"It's like the Wild West out there," said Joseph Melugin, a Houston attorney who has represented workers disabled in oil field accidents and the families of the dead. "Some well service companies go to great lengths to appear to have strong safety programs. Others don't bother."

Rules don't cover drilling

In 1992, industry and government officials developed detailed safety rules under the so-called "process safety management" program that was launched after a series of disasters at refineries and chemical plants, including a 1989 explosion in Pasadena that claimed 23 lives. Fatalities subsequently dropped, and more information is gathered and exchanged to help prevent accidents.

But OSHA officials deliberately excluded oil and gas drilling, promising instead to issue a "separate standard" to fit the industry's "uniqueness." That promise came in the final months of the administration of President George H.W. Bush, after which the players changed and the initiative stalled.

Billy's story: Injured oil worker tells his ordeal after experiencing an on-the-job accident

Drilling and well service industry leaders generally have opposed reforms in U.S. onshore operations. They insist that their mostly mobile work sites are fundamentally different from refineries, though their workers also handle hazardous substances and operate 24 hours a day.

Response to the 2010 Deepwater Horizon drilling disaster illustrates a double standard in U.S. offshore and onshore drilling oversight.

Nearly six times as many oil patch workers were killed in Texas in 2012 than died when the Deepwater Horizon rig exploded, killing 11 and spewing almost 5 million barrels of oil into the Gulf.

Offshore, federal law requires the Coast Guard to investigate offshore deaths and transportationrelated accidents while the Interior Department's Bureau of Safety and Environmental Enforcement sends specialized inspectors to investigate all injury-related accidents, as well as fires, explosions and spills involving oil rigs and platforms. Accident reports and safety recommendations have long been available on the Internet.

Inspectors take a top-down approach - holding major oil and gas operators accountable for the safety of their own employees, as well as for contract workers at offshore sites.

In the aftermath of that accident, even more inspectors with specialized training were deployed. Existing oil and gas safety rules were tightened.

"But when 60 workers die one at a time, no one pays any attention," said R. Dean Wingo, who retired in January 2013 as an assistant regional administrator for OSHA based in Texas.

"The truth is, offshore drilling is a lot safer than onshore. We see things in land drilling that were eliminated years ago offshore," Wingo said. "A lot of outdated equipment is still being used ... and OSHA doesn't have any regulations specific to oil and gas at all."

Top OSHA officials told the Chronicle that responding to oil field fatalities is a high priority, and the agency has announced it will review the industry's exemption from process safety rules.

Meantime, OSHA has only 95 inspectors to oversee safety rules for all Texas work sites. Few have oil and gas-related experience or training and generally look for generic safety problems at many different job sites, from a fast-food restaurant to a construction site.

Warning signs ignored

For a month before Felipe Saiz was killed, there had been harbingers of disaster at the Rockhouse Road well site: failing pumps and an aging, poorly maintained oil derrick.

It's hard for his widow, Tina, and three daughters - Ashley, Marissa and Bethany - to understand now why no one had taken any action to protect him and the other workers.

Two weeks before Rig 11 collapsed near Saiz's hometown of Big Spring, OSHA inspectors had visited the site to investigate another death.

A 30-year-old floor hand, Raymond Fernandez, collapsed in triple-digit heat on June 5. A sheriff's deputy found him moaning in a shack on the rig floor. The company had hired Fernandez despite the fact he weighed more than 300 pounds and had a felony record.

After his first day on the job, he'd driven more than 100 miles home to the small town of Anson and arrived unable to breathe, his mother said.

"He said he was too hot, and they didn't furnish any water," Juanita "Janie" Fernandez said. "He went to work the next day and never came home."

OSHA officials cited Heart Land Drilling Inc. and said the company contributed to the "tragedy" by failing to protect workers from the heat. The agency proposed a \$6,900 fine. Inspectors missed other potentially lethal safety problems at the site, which they uncovered only after Saiz died two weeks later, according to their own citations.

Records from the investigation of Saiz's death show how government resources are inadequate to respond quickly - OSHA dispatched an independent consultant to handle the case. The area director responsible for that sector is based 350 miles away, in El Paso.

After Saiz died, OSHA found the company failed in its basic duty to protect workers from "recognized hazards that were causing or likely to cause death or serious physical harm" by using a poorly maintained derrick and by failing to move Saiz and others to safety before attempting an unusually dangerous drilling procedure, its citation shows. OSHA proposed a fine of more than \$41,000.

Heart Land Drilling is contesting violations in both deaths. In its response to the Saizes' lawsuit, the company said in court records that the family has no right to recover any damages. Heart Land Drilling officials and an attorney representing them in that lawsuit did not respond to requests for comment.

Federal inspectors limited

Even when OSHA inspectors uncover life-threatening working conditions after responding to fatalities or complaints, they cannot shut down a drilling rig or a well site.

The Texas Railroad Commission monitors oil field fires and blowouts, considered signs of lifethreatening accidents offshore. The commission can and does shut down such operations if it uncovers serious problems. But it doesn't coordinate with OSHA.

Worker safety is not part of the commission's mission, spokeswoman Ramona Nye said.

When OSHA gets complaints about problematic oil patch employers, inspectors sometimes can't find the companies they're supposed to investigate. "These are mobile work sites. When an accident happens at a rig site and the person's just injured - if you take into account whatever time that person takes to recover - that rig may be gone by the time the accident's reported," Wingo said. "So it's really hard for OSHA."

Barred from drill sites

Three companies have delayed safety investigations in Texas in the last three years by keeping OSHA inspectors from entering work sites without an inspection warrant, according to OSHA spokeswoman Diana Petterson. That list includes Nabors Drilling USA, a Houston-based giant, which has reported four fatal accidents in Texas since 2007.

Dennis Smith, a spokesman for Nabors, said it is not company policy to block OSHA inspectors entry from work sites without a warrant. He said the company has cooperated with OSHA investigations involving fatal accidents, but acknowledged that Nabors has required inspectors to get warrants at drilling sites in Texas and North Dakota in other circumstances.

Some Texas oil and gas employers have been cited for failing to report accidents or for falsifying safety logs. A few failed to summon OSHA even when more than three workers were hospitalized or someone died.

"How long can we tolerate an atmosphere in which oil field employees are being treated as if they were outdated cellphones that can be used up, discarded and replaced?" asked Mark Murray, a Houston attorney who represented a derrick man, Brady Foret, who was nearly killed in a rig collapse that sent four workers to the hospital, and that OSHA never investigated.

Foret was standing on a platform near Golden Meadow, La., around midnight on Jan. 11, 2009, when the newly repaired mobile drilling rig listed and collapsed.

Foret fell as the rig came crashing down, and three others were struck by debris, according to civil suits filed in Harris County and Louisiana.

Supervisors working for Houston-based Key Energy Services had kept drilling prior to the accident even though at least some workers noticed the rig lacked two of four locking pins required to secure its top - called a mast - to its base, according to allegations in court documents.

Death details locked away

Foret, 23, had been fit and active, earning \$53,000 a year and awaiting the birth of his first son. He awoke from a coma an altered man. He breathed with a ventilator, his jaw broken in two places, his brain and memory permanently damaged, his spine riddled with cracks.

In a related Harris County civil case, his wife, Megan, testified he'd been one of the "most lively people" she'd ever known. After the accident, he cried over things he could no longer do. He could hold his toddler for only a few minutes at a time. Nor could he bathe his child, fearing he'd forget the boy behind in the tub.

A Houston jury found both Key Energy and Stewart & Stevenson - the Texas firm that handled the rig repair - responsible and awarded Foret \$10.7 million.

Stewart & Stevenson, also based in Houston, later argued in an appeal to the First District Court of Appeals that the blame should have been shared by well operator Apache Corp. and its company man, but operator liability is limited under Texas law and the court upheld the judgment Aug. 15. The case settled in October for an undisclosed sum. Stewart & Stevenson has asked for the judgment to be vacated as part of that agreement.

OSHA has no record of the accident. Apache Corp. did its own probe, court records show. But it was the injured workers' employer's obligation to summon OSHA, said Bill Mintz, an Apache spokesman.

Key Energy Services declined comment on the accident, but emphasized federal regulations only require them to summon OSHA if three or more workers had been admitted to hospitals as inpatients.

Because OSHA investigates so few accidents, details of the vast majority of them - including information that could drive reforms - remain locked away in confidential company safety reports, insurance archives or remote courthouse files in lawsuits.

Texas-based oil executives told the Chronicle that high turnover and competing company safety standards contribute to potential dangers in an era of explosive growth.

Hiring practices vary. Some involved in recent oil field accidents employed felons or unscreened friends of friends and offered little training, records show. Others have elaborate preemployment reviews, including hair follicle drug screens and state-of-the-art training facilities.

Rookies get riskiest jobs

Andy Hendricks is chief executive officer of Texas-based Patterson-UTI, among the nation's largest drilling concerns. Hendricks said his company has focused on hiring war veterans and others without oil field experience to fill a demand for personnel and to improve the company's accident rate, which 10 years ago was one of the nation's worst. Fresh recruits participate in a boot camp and are evaluated on how they adapt before being assigned to crews.

"We do not accept fatal accidents as part of what we do," said Hendricks, who joined Patterson-UTI in 2012 after years at competitor Schlumberger. "These are absolute tragedies that we do not want to happen again. We don't want anybody to get hurt - not one person - and that's why we've spent so much time and money to improve."

Many companies say employees have "stop work" authority if they spot hazards that should be immediately addressed. To further empower workers, Patterson-UTI issues laminated "stop work licenses" that employees can carry in their wallets and are told they can present.

But industry hierarchy puts rookies and roustabouts - mostly 20- to 30-year-olds with the most dangerous and dirty jobs - at the bottom. Under Texas laws, there's little whistle-blower protection and no guaranteed workers' compensation coverage for the injured.

More than 300 oil patch employers provide workers' comp, records show. But it isn't required, and even some large employers that reported multiple fatalities in recent years do not provide it.

At the top of the oil field power structure are company men employed by well operators - often independent contractors with varying levels of experience - who sometimes emphasize speed over safety.

Mark Rankin, vice president of risk management for Texas-based Basic Energy Services, one of the nation's biggest and most diversified well service companies, said inexperienced company men, differences in employer safety standards, and pressure to work faster are factors that appear to be increasing potential oil field dangers.

Both he and Alan Krenek, chief financial officer for Basic Energy, said their employees are well-trained and authorized to "stop work" but can't avoid hazards if improperly informed by others at the same site.

Krenek told the Chronicle that two Basic Energy employees badly burned in a 2010 flash fire made no mistakes and were harmed because employees of other companies at the natural gas well site failed to follow safety procedures. The OSHA accident report confirms another company's employee opened a valve that let gases escape into an open pit and caused the fire on Aug. 19, 2010.

Two truck drivers for Basic Energy arrived at the well site near the West Texas town of Ackerly, and about 15 minutes later, heard a hiss as gases flowed into a pit, an OSHA accident report shows. One of the engines of their trucks was running. The consequences were horrific.

Two deaths, one citation

One driver immediately ran to turn off his engine. Abel Garcia, 38, was only a few feet from the pit when fumes from his pumper truck ignited, engulfing him and the other driver, Fernando Zamora, 28, in flames.

Others fled into a nearby cotton field as the two truck drivers, burning alive, screamed for help.

Garcia suffered second- and third-degree burns over half of his body and survived two months. Zamora, a father of three, received treatment for nearly two years before dying on June 16, 2012.

Basic Energy was cited for one safety violation because Garcia was not wearing a flame-retardant shirt, and the company paid a \$5,000 penalty. OSHA confirms no one warned the

drivers before another company employee allowed gases to escape. But OSHA oil field investigations often do not focus on the causes of accidents.

No other company was fined.

Pressure to reform

The needless deaths of men like Garcia and Zamora and so many others in the oil fields have not gone unnoticed and have begun to prompt calls for reform.

OSHA called for a safety "stand down" in 2013 and again this year - asking Texas oil and gas employers to cease operations in order to discuss fatal accidents and draw attention to safety risks.

The names of companies that participated are not public, though employers all over Texas and in other states voluntarily submitted information on hazards uncovered in the exercise last year.

OSHA has announced plans to review the process safety management standard and oil field safety rules nationwide in response to an order President Barack Obama issued after the massive fertilizer plant explosion last year in West, Texas, said Jordan Barab, deputy assistant secretary of labor for occupational safety and health. The review encompasses all work sites that handle hazardous substances, including oil and gas drilling sites.

In 2007, the U.S. Chemical Safety and Hazard Investigation Board, a government agency set up to investigate industrial disasters, probed a triple fatality in Mississippi and described onshore oil fields as one of America's most dangerous workplaces.

"I don't know that the picture has improved," said Daniel Horowitz, the board's managing director. "Obviously, the drilling boom has benefits for our country. But as drilling has expanded, there are potentially more new and inexperienced people coming in. Safety would always be a concern when less-experienced people are coming into a potentially dangerous sector."

Horowitz said expanding OSHA's process safety management program could help prevent many oil field accidents. That program already requires employers in refineries and chemical plants to develop and follow policies on hazard analysis, worker training, and standard operating and emergency response procedures. OSHA then can issue citations and require changes if

companies lack standards, do not meet industry minimums, or fail to document that they followed safety rules, such as requiring welders to obtain hot work permits to avoid fires.

William Reilly, a former Environmental Protection Agency administrator who co-chaired the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, found Texas' oil patch death toll of 65 in 2012 particularly disturbing. But since so few land-based oil field accidents are investigated, Reilly said it would be much harder to do the same kind of thorough evaluation he led of offshore accidents.

Caliche dust and dried blood

On the day Rig 11 collapsed, Tina Saiz got a cellphone call from her son-in-law, who'd been working at the same site. She immediately asked what had happened to her husband.

"They won't let us see. They won't tell us anything," Frankie Reyes responded.

She drove to a gate off Rockhouse Road that marked the entrance, only about a mile from her mother's house. Her mother and stepfather soon joined her vigil. No one from the company or from the sheriff's department emerged to give her any answers. She watched as a helicopter landed and guessed the worst when it took off without loading anyone.

She last saw her husband before dawn on the day he died, when she drove him, her son-in-law and co-workers in their silver Chevy Yukon to a 7-Eleven minutes from the rig site. Together, they completed the morning ritual of loading a cooler with drinks he brought to work since Heart Land didn't supply water even when temperatures topped 100 degrees.

Distracted by a passing friend, they did not exchange their ritual kiss goodbye. So she'd texted him that she loved him and had gotten no reply.

Tina Saiz does not know whether the blow to the head or the fall killed her high school sweetheart, her cheerful and muscular partner of 23 years, the father of her three children. He'd celebrated his 40th birthday only three days before. She prays the end came fast.

The undertaker refused to show her what remained of the jeans and T-shirt her husband died wearing and returned only a pair of leather work boots that had been nearly new.

The boots came back to her covered in a thick layer of caliche dust and deep red splotches of her husband's blood.

A few days later, her son-in-law retrieved a final gift from Felipe's work locker. In his cellphone, she found a text message he'd typed that had gone undelivered because of the vagaries of cellphone service in the oil fields.

"I love you too," it said.