

Tank and Petroleum Use Mishaps

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<http://groups.yahoo.com/group/DangerousGoods/>

USA, N.C, KINGS MOUNTAIN

JANUARY 23 2013.

OFFICIALS: 69-YEAR-OLD KILLED WHEN DIESEL FUEL TANK EXPLODES

A plant owner was killed in an explosion inside a Kings Mountain Business.

Fire officials said the 69-year-old man was working on a diesel fuel tank when it exploded.

Neighbors and family said he owned the shop for more than 30 years.

Eyewitness News was told that there is another employee who works at the business, but he wasn't there when the explosion happened.

There were a few other people around the shop, but they were not injured.

Gerald Sheppard, 69, had been in business since the '70s.

Sheppard has worked at his shop for more than 35 years and is well-known in the community.

"He was fine, outstanding fella. You couldn't ask for a better guy than what he was," said neighbor and friend Buddy Collins.

The fire marshal said that Sheppard was grinding a diesel tank when it exploded, killing him and causing flames and smoke to fill his welding shop.

His daughters are shocked by the accident and said that he was always very careful with his work.

"I never thought that would happen. He was always an avid fisherman, so we worried about him when he went out on the lake fishing, but this totally shocked me," said Sandy Surber.

Surber lives just behind the shop but was at work when the explosion happened.

Her neighbor witnessed the terrible flames.

"I heard the big bang, and I come to the door and looked out, and the smoke was boiling out of the welding shop," said Collins.

Sheppard's daughters rushed to the shop as soon as they heard about the accident.

"I found out when I got here," said White.

White described her father as a great man.

"Dad, he was a great father. A great grandfather. We knew he was there if we needed anything. He was just a phone call away," said White.

White's sister said she had just talked to him right before leaving for work.

They said "I love you" to each other.

Investigators have ruled the explosion accidental.

<http://www.wsocvtv.com/news/news/local/deputies-1-dead-explosion-welding-business-kings-m/nT3f4/>

USA, LA, RAYVILLE

JANUARY 29 2013.

FARMERS ADVISED ON EPA FUEL TANK RULES

Louisiana rice farmers heard Tuesday, Jan. 22, that federal regulations for large fuel storage tanks on farms and ranches will go into effect May 15 unless Congress can be convinced to delay the measures for another year.

Speaking at a meeting for northeast Louisiana rice farmers called by the LSU AgCenter to prepare for the upcoming crop, Louisiana Department of Agriculture and Forestry Commissioner Mike Strain said the U.S. Environmental Protection Agency had considered allowing states to enforce the rules, but the EPA has decided not to delegate

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enforcement. Seven EPA inspectors are being assigned to 22 states. Strain said he will go to Washington, D.C., to try to convince federal lawmakers to enact a one-year delay on the rules. The rules include a requirement that most fuel tanks will need to be encircled by a levee system to prevent spills from spreading. Strain said it was previously believed that tanks that were mobile would be exempt, but the rule apparently has been revised to include those vessels.

http://www.lsuagcenter.com/en/communications/news/headline_news/Farmers-advised-on-EPA-fuel-tank-rules-.htm

USA, TX, VAN ZANDT COUNTY

JANUARY 30 2013.

2 INJURED IN OIL FACILITY EXPLOSION NORTH OF VAN

2 WERE SMOKING ON TOP OF OIL STORAGE TANK

Marcus Moore

A man and a woman were injured Tuesday morning in Van Zandt County when an oil storage tank exploded while the pair were smoking on top of it.

The explosion occurred just before 3 a.m. at an oil storage facility on State Highway 110 north of Van.

The victims, who are both 24, have been moved to Parkland Hospital in Dallas. The female is on life support and the male has burns to the face, arms, and chest.

"It sounded like a big bomb went off, it was pretty loud," said James Oliver, who was woken up by the explosion.

There are five major storage tanks on the property, two of which exploded. Firefighters were using a foam blanket to prevent the other tanks from catching fire and exploding. Van Zandt County Fire Marshal said he thought the victims may have smoked a cigarette nearby.

"I don't think they had any idea of what they were actually exposing themselves to when they decided to climb up there and light a cigarette," Allen said.

Because of the intense flames, crews allowed much of the fire to burn itself out.

It's unclear which company owns the storage facility. The victims, who have not been identified, are not believed to be employees, however.

It will likely take several days to clean up the area. Allen said the work would include trying to ensure that the area is environmentally safe. There is no threat of contaminating the drinking water.

<http://www.wfaa.com/news/local/2-injured-in-oil-facility-explosion-north-of-Van-188823731.html>

USA, CA, RICHMOND

JANUARY 31 2013.

CALOSHA SLAPS CHEVRON WITH LARGEST FINE IN AGENCY'S HISTORY

Heather Ishimaru

Cal/OSHA has now finished its investigation into the massive fire at the Chevron refinery on Aug. 6, 2012 and that report is slamming the company with the largest penalty in the agency's history.

Cal/OSHA says Chevron had repeated warnings over the period of a decade that it needed to replace the pipe, but ignored those warnings. Then when it did rupture, it allowed workers to be inside the danger zone without the proper protective gear.

Cal/OSHA says Chevron had every opportunity to prevent the August pipe rupture and fire, but ignored repeated warnings from its own inspectors putting workers and the community at risk of injury and death.

"We certainly hope that the citations, the seriousness of them, the classification of them, is a wake-up call," said Ellen Widess, the Cal/OSHA chief.

There are a total of 25 citations including 11 in the most serious category or "willful serious". Those include not following its own policies to replace the corroded pipe, not implementing its own emergency procedures, and pervasive violations in leak repair procedures.

The fines total about \$1 million. The worst in Cal/OSHA history, but only pocket change to the oil giant. Still, attorney John Burriss represents more than 10,000 people who say they were hurt by the fire is pleased with the severity of the Cal/OSHA citations.

"That's terrific because the conduct that occurred here was outrageous, and it was conduct that was entirely preventable," said Burriss.

Burriss set up an office in Richmond the day of the fire. Sherry Edwards is one of his clients. She lives in Point Richmond in the shadow of the refinery. Her pre-existing asthma is worse since the fire. She's been in the hospital seven times since, each time for a four-day stay.

When asked what she thought Chevron should do for her, Edwards said, "I think Chevron should do, just not

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for me, but for the public in general. I think that they should accommodate them in some kind of way because it wasn't 24 hours before they made their money back!"

Chevron issued a statement on Wednesday saying, "Although we acknowledge that we failed to live up to our own expectations in this incident, we do not agree with several of the Cal/OSHA findings and its characterization of some of the alleged violations as "willful." Chevron intends to appeal."

Here is Chevron's full response to us:

We are in the process of reviewing the citations issued by Cal/OSHA and are continuing to cooperate with local, state, and federal agencies investigating the August 6, 2012 incident at the Richmond refinery.

Chevron takes our commitment to safe operations seriously. Although we acknowledge that we failed to live up to our own expectations in this incident, we do not agree with several of the Cal/OSHA findings and its characterization of some of the alleged violations as "willful." Chevron intends to appeal.

Separately, on January 28, 2013, we submitted an update to our 30-Day Report to Contra Costa Health Services on the status of our ongoing internal investigation and the corrective actions we have begun to develop and implement. These corrective actions will strengthen process safety, mechanical integrity, and management oversight.

Specifically, the company is:

- Enhancing inspections of piping components potentially susceptible to sulfidation corrosion since carbon steel components with low-silicon content can corrode at an accelerated rate. This inspection program is being applied throughout our refinery system worldwide.
- Strengthening reliability programs for piping and equipment, and enhancing competency requirements for leaders, inspectors and engineers.
- Strengthening leak response protocols and reinforcing the authority that everyone has to shut down equipment.
- Creating more management oversight and accountability for process safety and re-emphasizing focus on process safety.

Chevron is committed to implementing these changes promptly and on a sustained basis at Richmond and across our manufacturing network as appropriate. You can find more details on these changes here at: richmond.chevron.com

http://abclocal.go.com/kgo/story?section=news/local/east_bay&id=8974763

BRAZIL, OURINHOS

FEBRUARY 4 2013.

ALCOHOL IN TANK FIRE AT POWER PLANT IN OURINHOS HAS LASTED 30 HOURS

The major fire that hit a fuel tank at a plant in Ourinhos (SP), in the early afternoon on Sunday (6), was still being controlled by the late afternoon of Monday (7), after about 30 hours. According to the Fire Department had already been used more than ten million gallons of water to make cooling and containment of the fire.

According to officials of the plant, which produces ethanol and sugar, the fire was caused by a spark from electrical discharge of lightning that fell into place. About five million liters of alcohol were consumed by fire.

With the explosion, the gas cap was thrown more than 15 meters. The flames and smoke could be seen from miles away. No one was injured.

<http://g1.globo.com/sp/bauru-marilia/noticia/2013/01/incendio-em-tanque-de-alcool-em-usina-em-ourinhos-continua-apos-24h.html>

USA, TX, VAN ZANDT CO, VAN

FEBRUARY 7 2013.

WARRANTS ISSUED FOR 3 PEOPLE AFTER OIL FACILITY EXPLOSION

Marcus Moore

The Van Zandt County Fire Marshal's Office issued warrants for three individuals in the explosion and fire at an oil storage facility late last month near Van, Texas.

A man and woman were injured in the explosion, which occurred just before 3 a.m. on January 29 while the pair were reportedly smoking on top of a storage tank.

The warrant, issued for H.R. Price, 24, Heather Wolfe, 25, and Brandy Wolfe, 24, are for Criminal Mischief - Over \$200,000, a First-Degree Felony, and Criminal Trespass of a Critical Infrastructure, a Class-A Misdemeanor.

According to a release from the Van Zandt County Fire Marshal's Office, both victims in the explosion received treatment at Parkland Hospital after the incident and have since been released.

Anyone with information on the whereabouts of the three individuals is asked to contact the Van Zandt

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County Crimestoppers at (903) 567-7867.

<http://www.khou.com/news/texas-news?fid=190035841&fPath=/news/local/&fDomain=10247>

USA, CA, MODESTO

FEBRUARY 8 2013.

LEAKING ARCO TANK IN MODESTO PART OF STATE LAWSUIT

Garth Stapley

Underground gasoline tanks at more than 780 Arco stations throughout California, including some in Stanislaus and Merced counties, could harm the environment, state and local prosecutors charge in a civil lawsuit against oil company BP.

In some cases, operators disabled leak detection devices, didn't fix leaks, failed to test overspill systems and improperly disposed of hazardous waste in incidents since 2006, the lawsuit says.

The problems amount to "procedural violations" and none hurt people, a BP spokesman told The Associated Press.

Targeted is a Modesto Arco station at the southwest corner of Tully Road and Bowen Avenue, according to the Stanislaus County Department of Environmental Resources.

A case against a Coffee Road station formerly owned by the company was closed when its tanks were removed in 2002, records say.

Leaky tanks can pollute groundwater as contaminants seep down.

"It's important to safeguard our natural resources and ensure that our groundwater is protected for future generations," Stanislaus County District Attorney Birgit Fladager said in a statement.

She and Larry Morse II, district attorney of Merced County, joined California Attorney General Kamala Harris and prosecutors from six other counties in the lawsuit. It's similar to one last month brought against ConocoPhillips and Phillips 66.

Merced stations at 1625 McSwain Road and 3100 G St. are among 41 throughout California specifically noted in the lawsuit, all operated by BP subsidiaries BP West Coast Products, BP Products North America and Atlantic Richfield Co.

For example, the G Street station had faulty pipe sensors and problems with a spill container and overfill prevention system, among several others from 2009 to 2011, the lawsuit says. The McSwain Road station didn't file an operator certificate as required and had an overfill mechanism problem, the document says.

Violations at the Modesto station were not specified in the lawsuit, which follows a statewide investigation led by Harris' office that found problems in 37 of the state's 58 counties.

"We must be concerned for basic human health" and agribusiness, Fladager said.

"Leakage from underground storage tanks poses a significant risk of harm and we have a duty to the public to make sure that companies are following the law and meeting their obligations."

<http://www.modbee.com/2013/02/07/2568614/leaking-arco-station-gas-tanks.html>

USA, MO, ST. JOSEPH

FEBRUARY 9 2013.

TANK FIRE CONTROLLED AT ST. JOSEPH BIODIESEL PLANT, NO INJURIES

William Seay and Bridget Blevins

It happened at Blue Sun on Stockyards Expressway when biodiesel levels fluctuated in equipment on the property, sparking a fire.

No one was hurt, but the fire caused enough damage to the tank to put it out of service for now.

Battalion Chief Russell Moore, with the St. Joseph Fire Department, said they were fortunate no one was injured.

Firefighters, police and other emergency responders were all at the facility as precaution.

The Blue Sun St. Joseph Refinery produces biodiesel at the facility located at 5701 Stockyards Expressway.

http://stjoechoannel.com/fulltext?nxd_id=326052

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USA, PA, KINGSTON

FEBRUARY 9 2013.

D.E.P. INVESTIGATING SIGNIFICANT GASOLINE LEAK IN KINGSTON

SAYS 500-1,700 GALLONS OF GASOLINE LEAKS FROM UNDERGROUND STORAGE TANKS AND GROUNDWATER HAS BEEN CONTAMINATED

Bill Wadell

State environmental officials said hundreds of gallons of midgrade gasoline is unaccounted for and likely leaked from two storage tanks at a gas station in Luzerne County. A Department of Environmental Protection spokeswoman told Newswatch 16 that 500 to 1,700 gallons of fuel is suspected of leaking and likely contaminating groundwater underneath the Convenient Mart at the intersection of Wyoming Avenue and Pringle Street in Kingston.

According to the D.E.P., the gas station owner noticed that there was an issue after a recent fuel delivery.

Sarah Phillips lives near the gas station said she is worried about the possibility of contaminated ground water. "I know that there's work down there some times going on but I wasn't aware of a gas leak. That definitely concerns me," said Phillips. A D.E.P. spokesperson said the fuel leak has not reached any streams or public water sources.

<http://wnep.com/2013/02/08/d-e-p-investigating-significant-gasoline-leak-in-kingston/>

USA, CO, FORT COLLINGS

FEBRUARY 13 2013.

FORT COLLINS-AREA FRACKING FLUID LEAK STOPPED AFTER SPEWING FOR 30 HOURS

THE COMPANY DRILLING AT THE SITE NORTH OF WINDSOR HAS BEEN INVOLVED IN 32 SPILLS IN COLORADO DURING THE PAST YEAR.

Bobby Magill

Oil-laden fracking fluid gushed from an oil well near Fort Collins for nearly 30 hours before it was stopped Tuesday afternoon.

A hydraulic failure around 9:30 a.m. Monday caused a piece of equipment to fall onto a valve and break it at the drilling site 4 miles east of Fort Collins. A horizontal stream of green-tinted fluid flowed from the valve for nearly a day and half before crews gained control of it.

The workers had the flow stopped shortly after 4 p.m. Tuesday. The well operator, PDC Energy, planned to bring in a crew from Texas to stop the gushing liquid, which company officials say was contained by an earthen berm.

There were no injuries and no threat of an explosion, state oil and gas regulators said.

The well, called "Ochsner 50-441," was initially drilled in December. It is about a half mile south of what becomes Harmony Road in Fort Collins and 4 miles east of Interstate 25 in Weld County, southeast of the intersection of Weld County Roads 74 and 15. The nearest home is about 1,500 feet away from the drilling site.

"This was not a blowout," Colorado Oil and Gas Conservation Commission spokesman Todd Hartman said Tuesday afternoon, adding that the incident occurred during the "flowback" stage of drilling.

"The liquid is 'frac' water, with some residual oil, and there is an odor associated with the spill," Hartman said. "Crews are taking air tests every half hour to ensure no explosive potential."

Flowback is oil-laden hydraulic fracturing fluid that returns to the surface after being injected into an oil well, according to the U.S. Environmental Protection Agency.

Bart Brookman, PDC Energy's senior vice president of operations, said the liquid is contained and no environmental problems would result from the incident.

The company dug trenches around the spill perimeter to collect the fluid, Hartman said. Another company was working to plug the well, and a vacuum truck was on scene Tuesday to clean up some of the liquid.

Hartman said he has no estimate for the volume of fracking fluid spilled.

PDC Energy has been involved in seven other oil and gas-related spills and incidents so far in 2013 in Colorado — two of them within the last week, state records show.

Three of those incidents impacted groundwater. In 2012, the company was involved in 27 oil and gas spills and releases, 12 of which contaminated groundwater.

Weld County Emergency Management Director Roy Rudisill said if the well had been drilled closer than 1,500 feet from homes, it would have been a greater hazard to people.

"I don't think it's a high-hazard threat to residents or businesses because there's a far enough distance away from where this (well is) set," Rudisill said.

The incident occurred the same day Colorado oil and gas commissioners approved a new oil well buffer zone beginning Aug. 1, requiring a minimum of 500 feet between oil wells and homes or other buildings. The buffer, called a "setback," was expanded from 150 feet in rural areas.

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Ken Hall, an engineer and hay farmer whose property abuts the drilling site and whose house is about 2,000 feet away, said he worried about the fumes he was breathing around his house.

From his backyard on Tuesday morning, a strong odor of petroleum filled the air within 1,000 feet of the drilling site as the wind blew oil-laced mist toward houses along County Road 74.

Hall said he isn't against fracking, and the region needs both the jobs and energy the oil and gas industry generates. But, he said, "we need the facts" about fracking.

"This is the poster child for fracking gone wrong," he said.

<http://www.coloradoan.com/article/20130212/NEWS01/302120015/Fort-Collins-area-fracking-fluid-leak-stopped-after-spewing-for-30-hours?gcheck=1>

USA, WASHINGTON, DC

FEBRUARY 14, 2013.

US CSB - IN COOPERATION WITH CAL/OSHA, CSB RELEASES TECHNICAL REPORT ON CHEVRON 2012 PIPE RUPTURE AND FIRE; EXTENSIVE SULFIDATION CORROSION NOTED

The U.S. Chemical Safety and Hazard Investigation Board (CSB) and the California Division of Occupational Safety and Health (Cal/OSHA) today released a technical evaluation report on piping samples taken from the Chevron Refinery in Richmond, California, where a hydrocarbon release and massive fire occurred on August 6, 2012. Cal/OSHA participated in this technical evaluation as part of its enforcement investigation.

The report, prepared by Anamet, Inc., a metallurgical laboratory in Hayward, California, concludes that the 8-inch steel pipe, from a section designated as 4-sidecut which was installed in 1976, ruptured due to severe sulfidation corrosion, and that tested pipe samples showed a very low concentration of corrosion-inhibiting silicon.

CSB Chairperson Rafael Moure-Eraso said, "The report, resulting from a cooperative effort between the CSB, Cal/OSHA, the United Steelworkers (USW), and Chevron provides a solid, technical basis for the firm conclusion that the pipe corroded over time from sulfidation corrosion. We hope this report receives widespread attention throughout the petrochemical industry as a precaution to all refiners to carefully examine potential corrosion mechanisms and use the safest possible materials of construction to avoid failures. Refineries and other plants must incorporate strong mechanical integrity and inherently safer strategies in their process safety management programs."

Cal/OSHA Chief Ellen Widess added "This reports confirms what Chevron already knew— that the pipe was severely corroded and should have been replaced – but failed to act on before the August fire. This failure to act was included among the multiple Serious and Willful Serious citations issued to Chevron. Chevron's own metallurgists and pipe inspectors reached the same conclusion and recommended as far back as 2002 that Chevron take action to protect its workers, the community and the environment by replacing the pipe that finally ruptured in 2012."

The CSB determined that nineteen Chevron employees were engulfed in a vapor cloud formed by the hydrocarbon release. Eighteen employees escaped before the fire started and one employee escaped without injury after the fire ensued. The incident resulted in six minor injuries. Production at the crude unit has been suspended since the accident. More than 15,000 residents in the surrounding area sought treatment at area medical facilities as a result of the release and fire.

Dr. Moure-Eraso said, "Based on the CSB's investigation, the corroded pipe should have been replaced when opportunities arose years earlier. On the day of the accident, Chevron should have shut down the crude unit as soon as a leak was observed and removed workers to a safe location. Continuing to troubleshoot the problem and having firefighters remove insulation searching for a leak --while flammable hydrocarbons were flowing through the leaking piping -- was inconsistent with good safety practice."

The evaluation, performed by Anamet, Inc., was designed and overseen by the CSB, the California Division of Occupational Safety and Health Administration (Cal/OSHA), the United Steelworkers union, and Chevron. The evaluation was funded by the CSB.

The report cites wall thinning due to sulfidation corrosion as the cause of the piping failure. In crude oil distillation, the report notes, naturally occurring sulfur and sulfur compounds are available to react with steel components, particularly plain carbon steels. Corrosion rates vary according to the sulfur content of the oil being processed, temperature, and other factors, including silicon content and other materials in steel pipe.

The report concludes, "The reported service conditions of the #4 Crude Unit 4-sidecut piping, the composition of the carbon steel, presence of thick sulfide scale on the inside surfaces of the pipe, and generally uniform wall thinning indicate that sulfidation corrosion was the cause of the 8-inch 4-sidecut rupture."

The report noted that the failed pipe section was subjected to a higher corrosion rate than neighboring components due to low silicon content in the pipe. The report states that "Experience has shown that silicon in carbon steel is known to inhibit sulfidation" when the concentration is above a threshold value. Chemical analysis of the

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Chevron pipe showed the silicon concentration of the ruptured section to be far below this value, resulting in a significantly higher rate of sulfidation corrosion.

The report, which contains numerous photographs of the corrosion and pipe rupture, also notes the presence of an inward deformation toward the inside surface of the pipe. The CSB has determined this deformation was likely caused by a fire pike used during the plant's emergency response. A photograph depicts a tight fit between the fire pike tip and this inward deformation of the failed pipe.

The incident occurred when a combustible hydrocarbon liquid known as "gas oil" leaked from an 8-inch pipe connected to an atmospheric crude oil distillation column in the refinery's crude unit. Workers initially noted the leak and were in the process of attempting to diagnose the source of the leak in the still-operating crude unit when the pipe ruptured catastrophically. Due to the high temperature, in excess of 600 degrees Fahrenheit, and physical properties of the material in the equipment, the gas-oil immediately formed a large hydrocarbon vapor cloud.

The Anamet report provides the following conclusions:

1. Rupture of the 8-inch 4-sidecut resulted from wall thinning caused by sulfidation corrosion.
2. Post rupture corrosion destroyed fracture morphology that could have indicated the rupture initiation site. However, rupture likely originated in the thinnest region and initially followed a longitudinal path driven by the hoop stress. Consequently, an area of likely rupture initiation was identified.
3. The wall thickness of the ruptured section was less than all the other sections of the 8-inch 4-sidecut that were evaluated.
4. Chemical analysis showed the silicon concentration of the ruptured section was 0.01-wt%.
5. Six of twelve specimens (50%) from unique sections of the 8-inch 4-sidecut, 12-inch 4-sidecut, and 2011 12-inch samples were found by chemical analysis to have a silicon concentration of less than 0.1-wt%.
6. Deformation of a small region of the 8-inch 4-sidecut rupture edge was consistent with mechanical force applied from the outside surface of the pipe, possibly from a fire pike, such as samples E-099 and E-082-2, or other pointed object. This deformed region was located within the area of likely rupture initiation.

The CSB investigation to determine the root causes of the incident is ongoing. The CSB will release a report detailing its findings and recommendations to key stakeholders later this year. Cal/OSHA has already issued 25 citations and civil penalties of \$963,000. Chevron has announced it will appeal these citations. The CSB, Cal/OSHA, the USW, and Chevron are cooperating under an agreement to test 4-sidecut carbon steel piping from Chevron's refinery in El Segundo, California, south of Los Angeles.

www.csb.gov

USA, DE, ST GEORGES

FEBRUARY 15 2013.

1,600 GALLONS OF DIESEL FUEL SPILL IN DEL.; CLEANUP TO COST \$50,000

Michelle Provencher

Oil spill cleanup continues after about 1,600 gallons of diesel is leaked from a DeIDOT station in St. Georges. Vehicles were gassing up at the location for storm preparation over the weekend, which is when the leak started. DeIDOT says their investigation took shape Tuesday, when it was determined the leak was caused by a broken pipe connecting the tank to the fuel pump. Luckily, the diesel pooled in a retention pond, preventing contamination of a nearby stream. DeIDOT says environmental experts are confident most of the diesel can be recovered. A cleanup crew was on the scene within 30 minutes to begin containing the spill. It will cost about \$50,000 to mitigate the damage. DeIDOT is working with DNREC's Environmental Crimes Unit as the analysis continues.

<http://www.wdel.com/story.php?id=49023>

USA, W.VA, FLEMINGTON

FEBRUARY 16 2013.

ONE DEAD IN EXPLOSION AT GAS WELL SITE

A spokeswoman for the U.S. Occupational Safety and Health Administration said her agency learned about the incident from the news media, and was launching an investigation.

EQT spokeswoman Linda Robertson said that the company's initial findings indicate the victim, a contractor for the company, was at the site to check fluid levels on water storage tanks.

"The safety and security of EQT employees and contractors is a core value and it's a sad day when we lose anyone within our community," Robertson said in a prepared statement. "Our sympathies go out to the families and friends of the deceased."

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Pittsburgh-based EQT is one of the largest exploration and production companies in the Appalachian shale-gas field, with drilling rights to more than 3.5 million acres in West Virginia, Pennsylvania, Kentucky and Virginia.

Drillers inject massive volumes of water, sand and chemicals to hydraulically fracture, or frack, the rock in which gas deposits are trapped. The gas then flows up for collection, as does the brine. The DEP says some of the chemicals in the brine could be flammable.

Worker safety is among the growing concerns in northern and north-central West Virginia as a boom in natural gas production continues in the state's Marcellus Shale gas fields.

In June 2010, seven workers were hurt outside of Moundsville when a crew drilling a natural gas well hit a pocket of methane in an abandoned coal mine. And in August 2012, three workers were injured in an explosion at a drilling operation in Harrison County.

DEP said there have been five fatal accidents since 2008. Three have involved well sites, while two involved access road activities.

A worker was killed Friday in an explosion at an EQT Corp. natural gas production site in Taylor County, officials said.

Cpl. C. Willis, a Harrison County 911 dispatcher, said an EQT employee originally reported an explosion at a well site near Flemington after finding a water truck driver at the site dead from apparent head trauma.

Kathy Cosco, a spokeswoman for the state Department of Environmental Protection, said the incident at an EQT natural gas well pad appeared to have occurred while an employee was attempting to transfer briny wastewater from an on-site tank to a truck.

"We are told it was a flash explosion that killed the employee, destroyed the tank and damaged the truck nearby," Cosco said. "Initial reports are that the tank contained brine and that the material in the tank spilled and there is likely hydraulic fluid from the truck on the ground, too."

Cosco said the source of the ignition was not immediately clear.

Mary K. Singleton, who lives about a mile away, said her house shook at 6:45 a.m.

"I heard an explosion, but didn't know what it was," Singleton said. "You never know around here."

"I got up and made sure the house was all right, but couldn't see anything," she said. "I didn't know what's going on. I asked my husband, 'You suppose it was a meteor?'"

The Flemington Volunteer Fire Department, Taylor County Sheriff's Department and Taylor County emergency crews were dispatched. Willis said the body of the victim was taken to Grafton City Hospital.

<http://wvgazette.com/News/201302150050>

USA, N.C, CHARLOTTE, FEBRUARY 17 2013. TANK FARM FIRE POSSIBLY CAUSED BY LIGHTNING STRIKE

diana rug

Fire investigators believe lightning may have sparked a fire that set an ethanol tank ablaze at the fuel tank farm near Paw Creek Saturday afternoon.

Flames shot 20 to 30 feet in the air above the 40,000 gallon tank at Eco Energy Corp. as firefighters arrived on scene just after 4:15 p.m.

The explosion shook homes up to two miles away. Owen Flowe said it rattled his windows.

"We were outside, and thought it was thunder from snow," said Flowe. "Then I saw the green municipal trucks going down the street and I said, 'Jesus, surely it's no airplane.'"

More than 70 firefighters got the flames under control in an hour and a half using water and foam. There were no injuries.

Heavy snow falling in the area at the time did not hamper firefighters' efforts, according to Charlotte Fire Dept.'s Capt. Mark Basnight.

Basnight said crews train for emergencies like this one at the tank farm.

Investigators are checking data from the National Weather Service to see if a lightning strike was the possible cause. Another possible cause is static discharge.

<http://www.wcnc.com/news/local/Fire--191549281.html>