

Tank and Petroleum Use Mishaps

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By learning about the misfortunes of others, it is STI's hope to educate the public by creating a greater awareness of the hazards with storage and use of petroleum and chemicals. Please refer to the many industry standards and to the fire and building codes for further guidance on the safe operating practices with hazardous liquids. Thanks and credit for content are given to Dangerous Goods-Hazmat Group Network.

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

USA, CO, BOULDER CO

SEPTEMBER 16 2013.

BOULDER COUNTY ACTIVISTS CONCERNED ABOUT FLOODED OIL, GAS WELLS

OFFICIALS: DRILLING SITES WILL BE INSPECTED ONCE IMMEDIATE DANGER PASSES

Erica Meltzer

Inundated along with roads, bridges, houses and farms are thousands of oil and gas wells and associated condensate tanks and ponds in northeast Boulder County and southwest Weld County.

Anti-fracking activists say the industry needs to account for what types of chemicals may be contaminating soil and groundwater in the area around these wells.

The concentration of oil and gas wells in flood-prone areas speaks to one more risk of what they see as a dangerous industry.

Regulators say they agree these well sites could pose a contamination risk, and they will get out to assess the damage as soon as it's feasible.

An Encana Oil and Gas representative said many wells were "shut in" in anticipation of the flood to minimize the risk.

Lafayette-based anti-fracking activist Cliff Willmeng said he spent two days "zig-zagging" across Weld and Boulder counties documenting flooded drilling sites, mostly along the drainageway of the St. Vrain River. He observed "hundreds" of wells that were inundated. He also saw many condensate tanks that hold waste material from fracking at odd angles or even overturned.

"It's clear that the density of the oil and gas activity there did not respect where the water would go," Willmeng said. "What we immediately need to know is what is leaking and we need a full detailed report of what that is. This is washing across agricultural land and into the waterways. Now we have to discuss what type of exposure the human population is going to have to suffer through."

Colorado Oil and Gas Association President Tisha Schuller said in an email that the industry prepares and drills for these types of natural disasters and opened 24-hour incident command centers to monitor wells and mitigate potential hazards.

"We are working around the clock to monitor, prevent, and address the effects of flooding," she said. "In cases where personnel could be freed up, they have been made available to communities for flood rescue and relief efforts."

A spokesman for the Colorado Oil and Gas Conservation Commission said the agency is aware of the potential for contamination from flooded drilling sites, but there simply is no way to get to those sites while flooding is ongoing and while resources are concentrated on saving lives.

"COGCC will be working with state and local authorities to assess risks and, where necessary,

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provide environmental response and remediation," said Todd Hartman, a spokesman for the Department of Natural Resources.

Hartman said many operators have added security to tanks, like chains to make sure they don't float away, though aerial photographs have shown floating and drifting tanks in some flooded areas.

Also, many operators "shut in" or closed down well operations in anticipation of flooding.

Wendy Wiedenbeck, a spokeswoman for Encana, a major gas driller in the region, said in a news release that the company shut-in production at wells throughout the affected areas and has remote monitoring to stop production at additional wells if they are affected by flooding.

Crews are conducting site-by-site visits as it becomes safe to do so, she said.

Willmeng said shutting-in does not isolate all the hydrocarbons in case of flooding. He's also concerned that there simply aren't enough inspectors to deal with all the wells.

Andrew Barth, a city spokesman working with the Boulder Office of Emergency Management during the disaster, said local officials are well aware of potential problems from drilling wells, as well as from flooded gas stations and industrial sites. However, inspections and assessment will have to wait until the immediate threat to life and safety has passed.

"We've seen those same pictures, and we are concerned," he said. "We are going to go out and look at those as once we're out of the immediate search and rescue phase."

http://www.dailycamera.com/news/boulder/ci_24102154/boulder-county-activists-concerned-about-flooded-oil-gas

USA, CO, CRAIG

SEPTEMBER 17 2013.

REGULATORS TO RULE IN TANK EXPLOSION DEATH

Colorado oil and gas regulators are being asked to find Axia Energy in violation of rules for the company's operations of a wastewater tank at the site of a fatal accident outside Craig in January.

Jon Herod, an employee of Herod Industries, died Jan. 3 when a 300-barrel storage tank exploded at an Axia oil and gas development site north of Craig. The explosion occurred when workers used a propane torch to thaw valves while trying to transfer wastewater from a hydraulic fracturing operation.

Denver-based Axia and Herod Industries have agreed to pay a total of \$16,800 in fines under settlements with the Occupational Safety and Health Administration in connection with the death, the Grand Junction Daily Sentinel reported Monday.

The Colorado Oil and Gas Conservation Commission is being asked to decide whether Axia violated several of the agency's rules in its pit operations.

Agency staff members had inspected the pit and an associated well in December 2012 and conducted another inspection after the explosion and fire.

Axia and commission staff members differed on whether a hose was placed on the liner in violation of a condition of approval, causing the liner breach, and whether the pit had been properly fenced to protect wildlife.

Axia paid fines for safety violations in the incident. OSHA determined it exposed workers to danger by failing to make sure the tank being used to transfer wastewater was marked to indicate it contained flammable liquids or gases.

Under an agreement between OSHA and Herod, Herod is paying \$11,200 for four violations, one deemed serious.

OSHA says the violations involved issues including failing to mark tanks to indicate the presence of flammable substances, a failure in training and failure to an control open flame.

<http://durangoherald.com/article/20130916/NEWS02/130919607/-1/News01/Colo-regulators-to-rule-in-tank-explosion-death-#sthash.TvT8oxhL.dpuf>

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USA, CO, DENVER

SEPTEMBER 20 2013.

OIL SPILL DUMPS OVER 5K GALLONS OF CRUDE ACROSS FLOODDRENCHED COLORADO

More than 5,250 gallons of crude oil have spilled into a river in Colorado, contaminating much of the same region that was ravaged days earlier by a monumental flood that left no fewer than eight residents dead.

The Denver Post reported on Wednesday evening that the Colorado Department of Natural Resources was alerted of the spill that afternoon by Anadarko Petroleum, a Texas-based oil and gas exploration company.

"To date, we are aware of two tank batteries that were damaged by flood waters, and have associated light-oil releases," Anadarko acknowledged in a press release.

The crude reportedly emptied out of damaged tanks south of the town of Milliken where the St. Vrain and South Platte Rivers meet near Boulder, the county's most populous city with almost 100,000 residents.

Todd Hartman, a spokesperson for the Colorado DNR, told the Post that state authorities are unsure of when the Anadarko spill happened, and stressed that it was only the first incident that was confirmed to his office after reports of widespread damage following last week's floods.

"You have operations that are entirely underwater," Hartman explained to National Geographic this week.

Days before Anadarko alerted officials of the spill, Hartman's office issued a statement warning residents that "many contaminants, such as raw sewage, as well as potential releases of chemicals from homes, businesses and industry, may be contained in the floodwaters" that displaced hundreds of people and cost upwards of \$2 billion in property damages, according to some early estimates.

Already, though, other companies are confirming that flood waters have damaged their tanks and wells, leaking other contaminants from its containers into the already ravaged region.

Representatives with another large natural resource company, Noble Energy Inc., said late Wednesday that they have also alerted the Colorado Oil and Gas Conservation Commission that one of its wells "appears to be releasing a limited amount of natural gas."

The Post reported that multiple state and federal offices have been alerted of the Anadarko spill, including the United States Environmental Protection Agency and the Colorado Department of Public Health and Environment. By Thursday morning, the paper was reporting that industry crews and state officials had already reached the scene near Milliken and had placed absorbent booms in an attempt to begin a clean-up mission.

Practically 1,900 oil and gas wells in the region were already shut down as a precaution due to high waters, and the Colorado Oil and Gas Association said crews totaling roughly 600 industry personnel are inspecting and repairing sites, conducting aerial and ground surveillance and identifying and determining locations of possible impairments.

In all, the region of Colorado impacted by the storm contains around 19,000 active wells, CBS News reported this week.

Anadarko and Noble have each shut-down around 10 percent of their respective operations, and another company — Encana Oil & Gas — shuttered hundreds of its 1,241 area wells when the section of the start started to go under water last week. Andarko has also closed down around 20 miles of pipeline, the Post reported.

"This State of Colorado and the US Environmental Protection Agency must force Anadarko to clean it up -- no matter the cost -- and make reparations to the public, including paying fines and enforcing the Clean Water Act which may include civil and criminal penalties," Gary Wockner of Clean Water Action said in a statement on Wednesday.

<http://rt.com/usa/colorad-flood-oil-spill-086/>

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USA, CO, DENVER

SEPTEMBER 24 2013.

OIL AND GAS SPILL REPORT FOR SEPT. 23

The following spills were reported to the Colorado Oil and Gas Conservation Commission in the past two weeks.

Information is based on Form 19 that operators must fill out detailing the leakage/spill events.

Any spill or release that may impact waters of the state must be reported as soon as practical.

Any spill of more than 20 barrels must be reported within 24 hours, and all spills of more than five barrels must be reported within 10 days of the event, according to COGCC rules.

Spills and leaks are typically found during routine maintenance on existing wells, though some actual "spills" do occur among the 19,000-plus wells in the county.

Sept. 12, Kerr-McGee Oil and Gas Onshore LP reported that on Aug. 29, a gasket on a truck failed while an oil hauler was being loaded northeast of Fort Lupton. About 1.6 barrels of oil were released; none were recovered. The driver shut the pumps down and released the pressure. A bucket was placed to catch leaking oil. Contaminated soil will be excavated. Soil sample tests will determine further remediation efforts. The cause of the spill was determined to be equipment failure.

Sept. 13, Bonanza Creek Energy Operating Company LLC reported that on Sep. 3, a tank equalizing valve was shut between two oil tanks east of Evans. This prevented oil from running over to the second tank as the first filled. About 100 barrels of oil were released, and 97 recovered with a vacuum truck. The equalizer valve was opened. The tank battery will be dismantled and soil tested. The cause of the spill was determined to be human error.

Sept. 13, Kerr-McGee Oil and Gas Onshore LP reported that on Sept. 4, an operator who was draining water from the oil tank to the water tank south of Platteville left the site without closing the drain valve. The water tank overflowed, releasing about 22 barrels of oil, none of which were recovered. Groundwater was impacted. Some contaminated water was disposed of, and MicroBlaze was applied to what remained. A new battery will be constructed with a geosynthetic liner. The cause of the spill was determined to be human error.

Sept. 13, Kerr-McGee Oil and Gas Onshore LP reported that on Sept. 6, an operator discovered oil staining on the ground during a daily site inspection southwest of Johnstown. The poly pipe came apart on the oil dumphine. It is unknown how much oil was released, and none has been recovered. Groundwater was impacted. Impacted soil was excavated. Ten gallons of MicroBlaze was applied to the water, and groundwater monitoring wells will be installed to determine the extent of the contamination. The cause of the spill was determined to be equipment failure.

Sept. 13, Encana Oil and Gas (USA) reported that on Sept. 6, a seal failed on a discharge line. The crew nearby shut off the mud drilling flow quickly. The spill area was scraped and the remaining drilling mud was removed using a vacuum truck. No further remediation is required. The cause of the spill was determined to be equipment failure.

Sept. 17, Bill Barrett Corporation reported that on Sept. 6, a hose from a mud pit to a pumping unit failed, causing a release of about five barrels of drilling mud, all of which were recovered. Soil samples will be collected, and if they are compliant with allowable levels of contaminants, no further remediation will be required. The cause of the spill was determined to be equipment failure.

Sept. 17, Noble Energy Inc. reported that on Sept. 11, about two barrels of water released from a filling frac tank during line blow down process northeast of Eaton. One barrel was recovered. The area will be excavated and soil samples collected. The cause of the spill was determined to be equipment failure.

<http://www.greeleytribune.com/news/local/8213911-113/oil-sept-spill-reported>

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USA, AL, BRIDGEPORT

SEPTEMBER 26 2013.

FIRE MARSHAL: BIODIESEL PLANT MUST MEET CODE BEFORE REOPENING

Stephen McLam

A Jackson County biodiesel plant shut down after two fires moves closer to re-opening, thanks to an agreement worked out between the state fire marshal and the plant owner.

The state fire marshal said the facility must become code compliant before re-opening. Alabama Biodiesel and the state fire marshal's office reached the agreement with the blessings of the court Wednesday morning. Plant officials were asking a judge to allow them to reopen the facility located in Bridgeport.

The state issued a cease-and-desist order Aug. 20 after two fires prompted evacuations of the area, due to hazardous chemicals found on site that were not known by local first responders. Plant officials said they would suffer serious and irreparable harm if they were not allowed to reopen.

The fire marshal said they are still working on the particulars as to what needs to be completed before the plant can become operational once again, and that should be determined in the next few days. <http://www.waff.com/story/23530039/fire-marshal-biodiesel-plant-must-meet-code-before-reopening>

FRANCE, PARIS

SEPTEMBER 27 2013.

AT LEAST THREE KILLED IN FUEL TANK EXPLOSION AT PARIS WORK SITE

At least three people were killed and one seriously injured in an explosion in the centre of the French capital Paris on Friday.

Another person has been reported missing, believed to be trapped under the rubble.

The apparently accidental explosion took place at around 3.45pm in the car park of a building in the city's tenth arrondissement, where construction work was taking place, police told FRANCE 24.

The force of the blast caused surrounding structures to shake, while a building across from the site of the explosion was evacuated and the fire brigade was reinforcing its foundations to avoid collapse, a fireman told Reuters.

Workers were carrying out repairs on a fuel tank at the time of the explosion late on Friday afternoon, the AFP news agency reported, and preliminary findings suggest oil vapours that had accumulated at the bottom of the tank may have ignited.

An investigation has been launched to determine the exact cause of the blast, said Paris Mayor Bertrand Delanoë.

"The circumstances of this tragedy are not yet determined and the investigation will shed light on this terrible accident," he said in a statement.

A medical post was set up near the building, located on the Rue d'Enghien, while rescuers used dogs to search for the missing person.

French Interior Minister Manuel Valls arrived on the scene shortly after 5pm, but declined to make a statement.

<http://www.france24.com/en/20130927-least-one-killed-paris-explosion-france>

SOUTH AFRICA, BOKSBURG

OCTOBER 3 2013

WORKER DIES IN PETROL TANK INCIDENT

Investigators are currently on the scene of a freak accident where one person died and another is in a critical condition after carrying out work inside an underground fuel tank at a petrol station in Boksburg, east of Johannesburg.

It's understood the two were cleaning the diesel tank at the central service station.

Emergency Services spokesperson William Ntladi says, "Two people have been trapped underneath

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the diesel tank, one is unconscious. These people were cleaning the tanks underground without personal protective gear and were overcome by diesel fumes."

<http://ewn.co.za/2013/10/03/Man-killed-after-falling-into-a-petrol-tank>

USA, CO, DENVER

OCTOBER 4 2013.

COLORADO FUEL TANK LEAKS 5,000 GALLONS OF OIL INTO SOUTH PLATTE RIVER

Colorado officials are responding to a damaged fuel tank owned by Anadarko Petroleum that has spilled more than 5,000 gallons of crude oil into the South Platte River.

Anadarko, the second-largest operator in the operator in the Denver-Julesburg Basin, has shut down about 10 per cent of its operations, including 250 tank batteries and 670 wells.

In a statement, Anadarko said: "To date, we are aware of two tank batteries that were damaged by flood waters, and have associated light-oil releases. The releases occurred in flood waters associated with the South Platte River and the St. Vrain River, and we have reported them to the Colorado Oil and Gas Conservation Commission, the National Response Center, the U.S. Environmental Protection Agency and the Colorado Department of Public Health and Environment.

"We are actively working under the oversight of these agencies to contain and clean up the releases to the greatest extent possible. We will continue to provide additional information as appropriate," the company added.

<http://www.hazmatmag.com/news/colorado-fuel-tank-leaks-5-000-gallons-of-oil-into-south-platte-river/1002633988/>

OMAN, Muscat

OCTOBER 11, 2013

FOUR WORKERS KILLED IN OMAN OILFIELD ACCIDENT

Four workers, employed by the Oman Construction Company, died in an accident at Safah Oil field, about 370-km north-west of Muscat, near Ibri on Thursday evening.

A source from Occidental Oman told Oman News Agency that an investigation is under way to find the cause of the accident.

The exact nature of the accident was not known but sources indicated that two Bangladeshi nationals, one Indian and one Omani were likely fatalities.

No details were available about the nature of the accident. It was also not known if the accident occurred at the oil or gasfield.

Oil was found at Safah in 1983 and brought on stream in 1984. Safah also produces natural gas.

<http://gulfnews.com/news/gulf/oman/four-workers-killed-in-oman-oilfield-accident-1.1242012>

USA, N.D, TIOGA

OCTOBER 11 2013.

OVER 865,200 GALLONS OF FRACKED OIL SPILL IN ND, PUBLIC IN DARK FOR DAYS DUE TO GOVERNMENT SHUTDOWN

Over 20,600 barrels of oil fracked from the Bakken Shale has spilled from a Tesoro Logistics pipeline in Tioga, North Dakota in one of the biggest onshore oil spills in recent U.S. history.

Though the spill occurred on September 29, the U.S. National Response Center - tasked with responding to chemical and oil spills - did not make the report available until October 8 due to the ongoing government shutdown.

"The center generally makes such reports available on its website within 24 hours of their filing, but services were interrupted last week because of the U.S. government shutdown," explained Reuters.

The "Incident Summaries" portion of the National Response Center's website is currently down, and the homepage notes, "Due to [the] government shutdown, some services may not be available."

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At more than 20,600 barrels - equivalent to 865,200 gallons - the spill was bigger than the April 2013 ExxonMobil Pegasus pipeline spill, which spewed 5,000-7,000 barrels of tar sands bitumen into a residential neighborhood in Mayflower, Arkansas.

So far, only 1,285 barrels have been recovered in North Dakota, and the oil is spread out over a 7.3 acre land mass.

Kris Roberts, environmental geologist for the North Dakota Department of Health Division of Water Quality told the Williston Herald, "the leak was caused by a hole that deteriorated in the side of the pipe."

"No water, surface water or ground water was impacted," he said. "They installed monitoring wells to ensure there is no impact now or that there is going to be one."

Roberts also told the Herald he was impressed with Tesoro's handling of the cleanup.

"They've responded aggressively and quickly," Roberts commented, also noting that the cleanup will cost upward of \$4 million. "Sometimes we've had to ask companies to do what they did right off the mark. They're going at this aggressively and they know they have a problem and they know what they need to do about it."

Tesoro Logistics Chairman and CEO Greg Goff also weighed in on the spill.

"Protection and care of the environment are fundamental to our core values, and we deeply regret any impact to the landowner," said Goff in a press release. "We will continue to work tirelessly to fully remediate the release area."

PIPELINE TO ALBANY REFINERY, BARGING ON THE HUDSON

Tesoro's six-inch pipeline was carrying oil obtained via the controversial hydraulic fracturing ("fracking") process to the Stampede, ND rail facility. From Stampede, Canadian Pacific's freight trains take the oil piped from Tesoro's pipeline and ship it to an Albany, NY holding facility by Global Partners located along the Hudson River.

"Over five years, the equivalent of roughly 91 million barrels of oil will be transported via CP's rail network from a loading facility in Stampede, N.D., to a Global terminal in Albany," explained a September story appearing in the Financial Post.

Albany's holding facility received its first Canadian Pacific shipment from the Bakken Shale in December 2011, according to Bloomberg, with 1.4 million barrels of storage capacity. The facility receives 149,000-157,000 barrels of Bakken crude per day from Canadian Pacific.

Once shipped to Global's Albany holding facility, much of the oil is barged to market on tankers along the Hudson from the Port of Albany.

"As much as a quarter of the shale oil being produced in North Dakota could soon be headed by rail to the Port of Albany," explained an April 2012 article appearing in the Albany Times-Union. "The crude oil...will be loaded onto barges to be shipped down the Hudson River to refineries along the East Coast."

NORTH DAKOTA PETROLEUM COUNCIL RESPONDS

North Dakota Petroleum Council's response to the largest fracked oil spill in U.S. history and one of the biggest onshore spills in U.S. history? Ho-hum.

"You know, this is an industrial business and sometimes things happen and the companies are certainly responsible to take care of these things when they happen," Petroleum Council President Ron Ness told KQCD.

John Berger, Manager of Tesoro's Mandan, ND, refinery, sits on the Petroleum Council's Board of Directors.

<http://www.hazmatmag.com/news/colorado-fuel-tank-leaks-5-000-gallons-of-oil-into-south-platte-river/1002633988/>

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**USA, N.D, TIOGA
OCTOBER 12 2013.**

OIL PIPELINE LEAK CLEANUP TO TAKE YEARS AND ABOUT \$4M

The farmer who discovered a pipeline break that spilled 20,600 barrels of Bakken crude said Thursday he hopes the industry learns from the incident and does a better job monitoring for leaks.

Steve Jensen said he's been told by Tesoro Logistics it will take at least two to three years to clean up his field where he noticed the oil spill while harvesting wheat Sept. 29.

"It starts to make a person sick," said Jensen, who owns both of his parents' homesteads northeast of Tioga in northwest North Dakota.

Tesoro Logistics estimates the cost of cleanup at about \$4 million.

North Dakota state officials have promoted pipelines as the safest and most efficient means of transporting crude oil to refineries.

Jensen, who lives in an area he describes as "spider webbed" with underground pipelines, said he began smelling oil a few days before he noticed the spill.

Tesoro Logistics said the leaking segment of the pipeline has been temporarily shut down and repairs are underway. No one was hurt and there are no known impacts to water, wildlife or the surrounding environment, the company said in a statement released Thursday.

The nearest home is about a half-mile away and Jensen lives about two miles away.

What caused the pipeline break and when it occurred will be part of an investigation, said Kris Roberts, environmental geologist with the North Dakota Department of Health Division of Water Quality.

Crews investigating the break found a hole in the pipe that was caused by some type of corrosion from the outside, Roberts said. They drilled a wooden peg into the hole and put a steel clamp around the whole area to secure it further, he said.

Often companies will remove a large section of pipe and send it to a forensics lab to determine what happened, Roberts said.

Eric Haugstad, director of contingency planning and emergency response for Tesoro Logistics who is on site, said crews are working around the clock to clean up the spill. Crews drilled monitoring wells to check groundwater and used a geoprobe to determine the extent of the contamination, which covers about 7.5 acres, Haugstad said.

A continuous layer of clay about 10 to 14 feet below the surface kept the oil isolated and protected drinking water sources, Haugstad said.

"It's unfortunate it happened but the location because of the clay underlayer and the topography actually mitigated the spread of the oil," said Haugstad, who assisted with cleanup of the BP Deepwater Horizon spill.

Crews dug trenches and are using vacuum trucks to recover the oil. As of Thursday afternoon, crews had recovered 1,545 barrels of oil and are nearing the end of the oil recovery phase, Haugstad said.

Tesoro is working with Antea Group, a St. Paul environmental consultant, to develop a plan for the saturated soil, Haugstad said. He said he couldn't speculate on how long that will take.

Initially, the spill was estimated to be 750 barrels of oil, Roberts said.

The company received permission to burn off the oil on the surface so they could work safely, Roberts said.

Crews discovered there was more oil below the surface on top of a layer of clay, Roberts said. This week, company representatives increased the estimate of the spill to 20,600 barrels, he said. That is the equivalent of 865,200 gallons of oil or about 29 tanker railcars.

Jensen said Tesoro has been professional with him and responded aggressively to clean it up and monitor drinking water sources.

"They jumped on that real hard and fast about keeping this from getting into our water," Jensen said. "That would be a disaster then."

However, Jensen questions why Tesoro didn't detect that more than 20,000 barrels had leaked and

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would like to see better monitoring systems put in place.

Tina Barbee, a Tesoro Logistics spokeswoman, said pipelines are monitored by a remote pipeline control center that monitors pressure and pumps. When asked if the monitoring center would have detected a leak, Barbee said that will be part of the company's investigation.

Tesoro Logistics also flies over pipelines to monitor them, Barbee said. She said she did not know the most recent aerial inspection of this pipeline.

"It is consistently monitored, on average, weekly," Barbee said.

Jensen, who is a pilot, said the spill likely would have been visible from the air.

"I think industry will learn from this," Jensen said.

Tesoro Logistics said it has been working closely with the landowner, the Pipeline and Hazardous Materials Safety Administration, the North Dakota Department of Health, and public safety and regulatory authorities during the response effort.

Gov. Jack Dalrymple said he initially heard about the sizable spill Wednesday evening and learned more details Thursday.

"It appears there is no immediate threat to public safety or to health. Those are the main things," Dalrymple said. "But there will be many questions to be answered about how it occurred and how was it detected and whether there was anything that could have been done that would have made a difference."

<http://www.prairiebizmag.com/event/article/id/16343/group/Transportation/#sthash.xUb40pvW.dpuf>

U.S. V.I, ST THOMAS, BOVONI

OCTOBER 13 2013.

BOVONI GAS STATION DESTROYED IN EXPLOSION

Amanda Norris

The cause and origin of a massive fire that engulfed and destroyed the Gas Works independent gas station in Bovoni on Saturday night still is under investigation, according to Daryl George, the assistant director of the V.I. Fire Service.

A crew of investigators remained on the scene Sunday to sift through the rubble of the station, which was the only structure involved in the fire.

The Fire Service took an initial statement from one of the employees at the station when the blaze started, but she was in "a state of shock" and more follow-up interviews will be needed, George said.

There were no fatalities and only two people suffered injuries following a series of explosions that rocked the gas station, which was open at the time, and a massive fireball erupting from the first explosion. Firefighters responded to a 911 call at 8:34 p.m., after one of the main storage tanks at the facility had exploded, George said.

After two and a half hours, the fire was significantly contained, and at about 12:40 a.m., it was completely extinguished, according to George.

The Fire Service coordinated with VITEMA, the V.I. Police Department, private water truck haulers, EMS, the Public Works Department, the V.I. Port Authority and St. Thomas Rescue to close roads, evacuate residents of nearby homes in Nadir and to treat and supply the 34 firefighters while they fought the blaze.

The first phase of the fight involved a defensive strategy of cooling fuel tanks so they would not ignite and closing off the perimeter of the Bovoni dump to the fire to prevent the spread to the acres of waste material, George said.

Once on the scene, firefighters encountered several "after explosions," with about three explosions occurring in the back of the building.

However, no firefighters were injured, George said.

Once the Port Authority had brought its airplane crash units containing foam and once water companies had provided ample water to combat the blaze, the firefighters went on the offense, attacking and diminishing the fire with the full force of the gathered resources, George said.

"We have foam but for a fuel depot of this size, we needed a multitude of foam, which the Port

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Authority supplied from its crash trucks, because they would be used to fight jet fuel fires," George said. Foam is helpful in combatting fires feeding on oil or gasoline because it more effectively deprives the chemically-based fires of oxygen, according to George.

Two people were injured, both employees of the station, which was open when the fire ignited, according to Government House spokesman Jean Greaux Jr.

One employee suffered burns and one employee suffered scrapes, cuts and bruises when jumping a fence to help the first employee run from the blaze, Greaux said.

According to a press release from VITEMA, one of the injured persons suffered burns to 18 percent of his body and was transported to Schneider Hospital for treatment.

About 125 emergency services personnel responded in all, as did Gov. John deJongh Jr., Police Commissioner Rodney Querrard Sr. and Port Authority Executive Director Carlton Dowe.

George said the Arson and Prevention Unit would be working intensively to figure out the cause of the fire, but because of the size and complexity of the incident, he did not expect a conclusion any time soon.

George said the police department closed roads leading into the area from both directions.

Greaux said residents were given the all-clear to return to their homes at about 11:30 p.m.

George said the remaining fuel in the station's unignited tanks and trucks had been diluted with water, and does not pose a danger at this time.

According to George, the operation represented model levels of interagency coordination and it was because of the swift, combined efforts of all responders that the fire was contained to the gas station without further explosions. Had the dump ignited, he said, the fire could have raged indefinitely.

"What we did last night is we came together as a multi-agency task force, and we got the job done. The Fire Service has been practicing and initiating this policy of coordination for a long time," George said.

<http://virginislandsdailynews.com/news/bovoni-gas-station-destroyed-in-explosion-1.1552767>

NEW ZEALAND, WELLINGTON

OCTOBER 13 2013.

SPILL LEADS TO FUEL TANK USE REVIEW

Conservation Minister Nick Smith has ordered a review of the use of fuel tanks on National Park land following a spill at Turoa ski field.

Smith said the Turoa diesel spill had damaged the environment in New Zealand's oldest National Park, polluted the Makotuku River, a habitat for the endangered whio or blue duck, and severely disrupted the Raetihi water supply.

"Our National Parks are our most valued natural environments and I expect the highest standards for storing fuel in these areas. The spill at Turoa ski field was unacceptable and we need to do everything possible to prevent a re-occurrence anywhere else on public conservation land," Smith said.

"I have asked that DOC's review particularly focus on the 16 ski fields operating on public conservation land. There are additional risks for storing fuel in alpine environments and the areas are also more ecologically fragile.

"Skiing and snowboarding are wonderful recreational opportunities for people to enjoy in our alpine environments but they need to be managed in a way that avoids these sorts of serious environmental incidents from occurring.

The review would investigate standards for fuel storage and inspection regimes to ensure they complied with requirements to contain accidental spills.

It was separate to an investigation by Horizons Regional Council into the Turoa spill to decide if anyone should face prosecution.

Smith said the review could force changes to concessions to store fuel on public conservation land and DOC may also seek external expert advice.

He expected it to be completed and any recommendations implemented in time for next year's ski

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season.

Up to 15,000 litres of diesel, from a tank at the Ruapehu Alpine Lifts (RAL) ski field base, leached into the Makotuku stream - the primary tributary to the Raetihi town water supply.

Fresh water tanks, port-a-loos and portable showers had to be trucked into Raetihi after the town's water supply was cut till it could be decontaminated.

<http://www.stuff.co.nz/national/politics/9278305/Spill-leads-to-fuel-tank-use-review>

USA, PA, POCONO TWP

OCTOBER 14 2013.

SOME FJ HESS TANKS SHOW FUEL LEAKS

David Pierce

The state Department of Environmental Protection found no storage tank violations by FJ Hess and Sons at the owners' residence, but did find violations at two other FJ Hess facilities, DEP spokeswoman Colleen Connolly said.

Hess and Sons has been ordered to do a site characterization — a large-scale survey to determine if any fuel leaks contaminated soil — at the two sites.

No storage tanks regulated by the DEP were found at the 598 Fish Hill Road residence of Salvatore and Deirdre Furino, Connolly said, but the tanks may have been removed earlier.

"We believe there were some unregulated tanks on the property," Connolly said.

DEP is seeking information from the U.S. Environmental Protection Agency on whether federal regulators established a "shutdown date" for an unregulated storage tank there.

Jack and Brenda Klinger of Penny Wise Fuel, a local competitor of FJ Hess, downloaded what they said is a Google Earth aerial photo showing unregulated tanks that were removed before the DEP inspection. A copy of that image was forwarded to the DEP.

There are other tanks still at the Furino residence, according to the DEP inspection report.

"Located at the property are two 500-gallon (above-ground storage tanks) containing petroleum for non-commercial purposes," DEP inspector Paul Marmo wrote. "By definition, at this time, these tanks are exempt from the Storage Tank and Spill Prevention Act."

Two above-ground 1,000-gallon storage tanks — also exempt from the act — were inspected at FJ Hess' Pocono Township facility at 116 MCTA Drive. But a 500-gallon tank there that was never registered with regulators — used to store diesel to run fleet vehicles — is in violation and considered to be in substandard condition. The tank is now empty.

"It needs to be closed," Connolly said.

Some leakage was detected there, prompting DEP to order the company to survey the extent of the leakage and how much soil was impacted.

Another violation, a leaking aboveground pipe connection to an oil storage tank, was identified at the FJ Hess facility on Route 115 in Blakeslee. The company was ordered to do a site survey of the leakage and amount of soil impacted.

The Penny Wise Fuel operators said their personal investigation of FJ Hess Fuel properties began after a 2009 "anonymous tip" to the Monroe County Tax Assessment Office prompted a probe of an alleged untaxed structure at their Shine Hill Road facility.

The Klingers said they gave the county assessment officer permission to inspect the Penny Wise property for an alleged residential trailer not on the assessment roll. The inspector found there was no trailer, but the visit prompted the county to increase its total assessment for tax purposes, they said.

The Klingers appealed the higher assessment and examined the property tax records of FJ Hess and other local fuel suppliers as part of that appeal. This is when they discovered the Hess company fuel tanks and business activities that they contend violate local zoning and environmental regulations, they said.

<http://www.poconorecord.com/apps/pbcs.dll/article?AID=/20131014/NEWS/310140315>

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USA, CO, GRAND JUNCTION

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DISASTER LESSONS: PLENTY TO LEARN FROM OIL AND GAS FLOOD DAMAGE

Dennis Webb

After last month's Front Range flooding tore through oil and gas facilities, causing some tanks to leak and even become unmoored, employees with the energy producer Encana noticed an interesting trend.

Although Encana's tanks were damaged, the company didn't experience the kind of damage that some other companies did from trees falling on tanks or being swept into them.

As it happens, Encana spokesman Doug Hock said, the company typically fences in well pads where it operates in the flooded area because its operations there tend to be in more densely populated areas. While the fences weren't installed for flooding purposes, they ended up helping keep out debris.

"It was kind of an ah-ha, light-bulb moment to say, going forward we should do this because it helped protect those pads," Hock said.

As the energy industry continues cleaning up after the flooding and bringing wells back on line, companies, regulators and environmental advocates are all looking increasingly at what lessons can be learned from the disaster — what went wrong, what went right, and what can be done to reduce problems in the case of future flooding. Eventually, this consideration will likely turn to what possibly should be required of the industry in the future, including in terms of floodplain and riparian regulations.

"I'd like to see us get a stakeholder group together to evaluate and assess the floods and also see what worked, what didn't work, what we can make better" in terms of oil and gas operations, said state Rep. Diane Mitsch Bush, a Steamboat Springs Democrat who earlier this year got legislation passed tightening oil and gas spill reporting requirements.

Alan Gilbert, special assistant for flood response to state Department of Natural Resources Executive Director Mike King, said while it's still early, the department and Colorado Oil and Gas Conservation Commission staff are evaluating how things went during the flood and what can be improved in the future, including possibly through new regulations.

"We take that very seriously. We think that's true, we should do that and that's what we will do," he said.

INITIAL ALARM

Photos of floating tanks and reports of leaks alarmed Front Range residents concerned about oil and gas drilling there. U.S. Rep. Jared Polis, D-Boulder, who shares some residents' general concerns over drilling, called in late September for a congressional hearing on the flood-induced oil and gas damage.

"Congress must deal with this issue to ensure that natural disasters do not also become public health disasters," he said in announcing that request.

More recently, though, state health officials reported no evidence of pollutants from oil and gas spills in rivers and streams affected by flooding, even as it found in some areas high levels of E. coli from sewage contamination. That contamination amounted to many millions of gallons, whereas as of Friday 47,106 gallons of oil and 28,149 gallons of produced water from drilling were reported spilled.

Gilbert voiced some relief over no single catastrophic release or cumulative collection of spilled oil or other contaminants being found so far.

"It's an emergency and a tragedy and a terrible situation but this aspect of it is on the side where we are grateful for less rather than more contamination and releases," he said.

Although the sheer volume of floodwaters heavily diluted what spills occurred, oil and gas activist Dave Devaney of Battlement Mesa said he shares the concerns of Front Range residents about what happened there.

"Any time you have volatile organic compounds and ... chemicals in the waterways, that's an issue. No matter how much it's diluted it's still there, and I think it's something that the oil and gas conservation commission should be taking a look at and ensuring that there's adequate protections for future oil and gas

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development at or near water sources.”

He noted last winter’s natural gas liquids leak from a pipeline leaving a Williams gas processing plant outside Parachute. Contamination reached Parachute Creek and threatened the Colorado River.

“We don’t want to see that happen again,” he said.

UNFINISHED BUSINESS

Devaney believes preventing such problems means having the oil and gas commission take up the issue of riparian setbacks, which were unfinished business from its comprehensive 2008 rules rewrite, except for setbacks it established to protect municipal water supplies.

“The events of the last few weeks on the Front Range demonstrate that it’s an important topic that needs to be addressed sooner rather than later,” Devaney said.

Pete Maysmith, executive director of Conservation Colorado, agrees.

“I mean, this is just an unfinished topic of conversation,” he said. “... If this isn’t a wake-up call to take a look at those issues I don’t know what would be.”

Noble Energy, which like Encana also has operations in western Colorado’s Piceance Basin, reported four floodwater-related releases totaling about 9,000 gallons. But it also points to several things it believes minimized flood-related damage, including proactive emergency response training of more than 150 workers on the Front Range, and automatic technology that let it shut in 85 percent of its wells remotely, with almost all the rest being manually shut in by the time the water reached flood level.

“Overall, our equipment held up amazingly well and was a testament to our engineering and facility design,” the company said in an emailed response to inquiries for this story.

“... We believe we can successfully operate in the flood plain, as proven by this event. We are in the process of evaluating our operations in and around flood plains, and we’re working with the state of Colorado and all stakeholders on how we can improve future preparedness. We will use lessons learned to create new best management practices in those areas.”

WELL DAMAGE SLIGHT

Gilbert said the industry’s proactive effort to shut in wells ahead of the flooding, oftentimes through automated means, was a significant action because it was designed to ensure fluids aren’t moving up wells if the wells are damaged.

Of note was that damage to wells in general was relatively slight compared to the more significant tank damage that occurred, he said. And like Encana, the state has noticed the extra protection that metal fences or berms seemed to provide to tanks and other infrastructure.

“We will take a look at that in more detail and talk to everybody to find what their experiences were as well with that,” he said.

He said something else of note applied to tank batteries in wetlands. State rules require them to be tied down, but companies do so in different ways, some “relatively flimsy,” he said.

“We have noticed some of those ways have held better than others,” he said.

The degree to which it will be left to companies to apply lessons learned as they see fit, as opposed to being required to do so by state rules, is likely to be one of the decisions oil and gas regulators will be left to make.

“Why wouldn’t we require best practices? Why shouldn’t we hold the oil and gas industry to the highest possible standard?” Conservation Colorado’s Maysmith said. “I think the answer is, we should.”

Maysmith also has been critical of the state for not requiring rather than requesting information from the industry pertaining to the status of facilities potentially impacted by flooding. But Gilbert said it hasn’t mattered whether the state asked or required: “The industry is giving us the information we’re asking for.”

WITHHOLDING JUDGMENT

Mitsch Bush, who sits on the House Agriculture, Livestock and Natural Resources Committee,

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credited both the oil and gas commission staff and the industry for their post-flooding responses, and said it's still too soon to know what regulatory or other changes should occur due to what the flooding has taught the state.

"I don't want to be jumping to any conclusions. ... Let's get all the input from all the sides on what happened and get some technical assessment from (the Colorado Department of Public Health and Environment) and COGCC and really understand the impacts," she said.

The flooding only added to the highly contentious debate over oil and gas development on the Front Range, but Encana's Hock believes a lot of the more strident voices critical of the industry as it pertains to flood impacts "are opposed to oil and gas whether there's a flood or not. So that really didn't change anything."

For Maysmith, things such as the flooding and the Parachute Creek contamination demonstrate the need to protect an important natural resource in the West.

"We've got to be asking ourselves, are we doing all we can to protect our water sources?" he said.

He worries when he sees well pads close to creeks, and knows tanks can be knocked over or other things can cause leaks and benzene and other toxic substances to reach waterways.

"That says we have a problem. That says we don't have this figured out," he said.

<http://www.gjsentinel.com/news/articles/disaster-lessons-plenty-to-learn-from-oil-and-gas/>