

FRACKING - Caused Animal Deaths and Illness/Includes Aquatic Life and Land

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
1	2	Smitsky	5 Goats Dead
2	4	Haney	Dogs and Goat Dead
3	8	Greenwood	10 Cows Dead
	9	Johnson	Stillborn Calves
	11	Smith	5 Cows, 3 Dogs Dead 12 Chickens, 4 Cats Dead
5	17	Green	Chicken Dead Goat gave birth to a head
	18	Voyles	Farm Animals and Dogs Dead Dogs - Aborted Pregnancies Dogs - Stillborn Offspring
8	27	McIntyre	Animal throwing up blood, Diarrhea, then Death
	29	Rogers	Asphyxiated Goats and Chickens
10	34	Chappel	Cat Death
11	39	French	Cows with Lesions
12	42	Mobaldi	2 Dogs with Tumors
	43	Stroud	(Unknown - Not listed)
13	47	Blancett	Cows Dead - Toxic Oil and Gas Waste
16	58	Bracken	Animal Widespread Death
	61	Gulla	Dead Fish

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
18	67	Burgess	Dead Horses, Neurological Defect Blind in Both Eyes
19	73	Roles	Stillborn goats, horses became sterile
20	77 78	Meeks Moten	Two horses dead Two-year old dog fell over dead
22	86	Williams	17 cows dead
26	102	Beadle	Goats swelling, three goats and two kids died, and llama death
32	208	Headley	Horses - nosebleeds, sores on the bottom of their hooves
34	214	Kane	Pet bird - feather loss, diarrhea
36	239	Dixon	Goats - none kidded in a year, cat seizures
39	251	Grosser	Goats gave birth to deformed kids
	253	Bledsoe	Animals refused to drink water, stung their eyes and had odor
41	303	Morse	Water rendered undrinkable for cattle - frack fluid blowout
	304	Burnett	Loss of all fish and aquatic life in contaminated pond

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
42	305	Matsko	Birds and moles - abnormal numbers found dead
44	314	Shanlay	Cows refused to drink water
46	323	Kelly	Rabbits refused to drink water
48	336	Monson	Waterway pollution dumping grounds, metals and carcinogenic hydrocarbons in the soil from million gallon spill - Wiped out the creek's fish, turtles, and other life
49	340	Wilson	Cats have half-dollar sized blisters that look like burns
50	342	DeTurck	Squirrels - their tails had fallen off
	344	Lisak	Dogs - cancel, stillborn litter
52	352	Knoll	Dog -rare form of cancer
54	361	Thornton	Death of 70 chickens, eight or nine goats and 15 rabbits
56	523	Barto	Increase in wildlife death
58	534	Feil	Parrot developed cough/asthma
	535	Beckett	Endangered ocelot - habitat loss
59	562	Dunzik	Cow death
	564	Klotz	Dogs - lethargic, seizures

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
59	565	Lauff	Deer, raccoon and fox found dead near their stream
62	578	Justiss	Cattle will not graze near pump station because of vibration or smell on the grass
	579	Bohlander	Cows refuse to drink water - methane, oil - water
63	581	Blow	Death - two parakeets and a dog
71	690	Solloway	Horses refused to drink the water, dogs sick, two horses so sick they had to be euthanized
74	749 750	Fallon Wilfong	Cows, Goats -sick 17 cows dead (trees and plants dead and dying)
75	752	Kelleher	Flooding - pipeline obstructed drainage, farm animals unable to reach higher ground, drowned by the dozens, dog fell into sinkhole
78	766	Clark	Chickens died
81	784	Thompson	Wildlife and livestock deaths
87	820	Maye	Cats losing fur and projectile vomiting, horse losing hair
95	900	Williams Jr.	Seventeen cows - death

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
97	1105	McAllen	Exotic animals ill
98	1109	Starrh	Groundwater so contaminated with frack wastewater, it killed every tree in the orchard after a single irrigation while rendering hundreds of acres barren and unable to sustain life
	1110	Hopkins	Cherry orchard is dying because of high levels of toxic chloride in his groundwater
101	1130	Mills	Cattle started falling sick and dying
109	1236	Corsentino	Abnormally high death rates in cow herd, cows consumed too much sodium from the water
111	1371	Boyd	pollution of creek, sick wildlife
114	1384	Porterfield	Illegal dumping of brine waste and other waste contaminated pond and land
125	1736	Hughes	Dead fish
128	1761	Jensen	Land is no longer usable for planting

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
131	2479	Hedstrup	Cattle in North Dakota have begun to die from dust pneumonia, cattle reject the dust-laden feed
132	2481	Artz	Pipeline released saltwater, barley samples showed severely stunted growth
	2482	Anonymous	Several attempts at planting crops on the contaminated land failed
	2483	Hermanson	One million gallons of saltwater spilled, caused fish to die, turtles and plants. Brine flooded a stock pond and a beaver dam.
135	2506	Mesker	Calf died after falling in a waste pit
142	4913	Anonymous	Goats deceased
154	5601	Lyssy	Six dogs suffered mysterious, agonizing deaths, five died within a few days of one another vomiting, scratching their heads bloody and whining for no apparent reason
156	6011	Kohlhase	Dog placed on Prozac due to agitation from noise
157	6019	Brown	Six of her dogs died within months, five of the deaths, she says, were related to the

<u>Page #.</u>	<u>Line #</u>	<u>Owner</u>	<u>Animals</u>
157	6019	Brown	wells - neurological disorder death, death from kidney failure
159	6064	Knowlden	168 rabbit deaths
162	6086	25 Families	Fish killed in Possum Creek
165	6133	Fisher	Cat has a lung condition
168	6154	Beegle	Cow deaths

(Adding property damage, human injury, and deaths across our Nation)

March 19, 2014 News & Opinion » Eco Watch

How Fracking Causes Earthquakes

A new study connects wastewater injection wells, which have expanded rapidly during the fracking boom, to a ten-fold increase in quakes in some parts of the nation.



- California already has 1,553 active and new wastewater injection wells.

To date, **the most serious environmental impacts related to fracking have been groundwater contamination and air pollution.** Indeed, for many environmentalists, water and air pollution are **reasons enough to oppose fracking and push for a ban on the oil- and natural gas-extraction method in California and throughout the nation.** But there's an emerging body of evidence that fracking, and a **similar process known as acidizing, pose yet another serious threat to the earth** — especially in California. They're increasingly being linked to earthquakes.

A **environmental study** released last week, titled "On Shaky Ground: Fracking, Acidizing, and Increased Earthquake Risk in California,"

concluded that if the state rapidly expands fracking and acidizing in order to extract oil and natural gas from the massive Monterey shale deposit in Central and Southern California, the results could be catastrophic. California, after all, is already one of the most seismically active regions in the world. "And the San Andreas Fault runs right down the middle of the Monterey Shale," said Shaye Wolf, who co-authored the study and is the climate science director for the Center for Biological Diversity, which produced the report, along with the environmental groups Earthworks and Clean Water Action.

The earthquake threats posed by fracking and acidizing stem from the massive amounts of toxic wastewater created by the drilling methods and what oil and natural gas companies do with that water. Hydraulic fracturing involves shooting huge amounts of water and chemicals (water, chemicals, and hydrochloric acid in acidizing) deep into the earth under extremely high pressure. This so-called well-stimulation process breaks up underground shale and rock and releases trapped fossil fuels that can then be pumped out of the ground.

However, a substantial amount of highly polluted water also travels back up the fracking wells to the surface. This wastewater — known as flowback and produced water — is extremely toxic, so it's very difficult to clean up and recycle through wastewater treatment facilities. Flowback and produced water contain heavy metals, contaminants like benzene and toluene, and radioactive materials. Some oil and gas companies funnel this polluted water into open pits or ponds. But then the toxic substances evaporate and cause air pollution.

So, instead, oil and gas companies typically drill other wells deep into the ground — even deeper than the fracking wells, sometimes up to 10,000 feet. Then they shoot the toxic water under high pressure into the wells. And it's this process that has been strongly linked to earthquakes. In fact, states such as Oklahoma that historically have not been seismically active are now suddenly becoming earthquake centers as the amount of fracking — and

wastewater — has grown quickly in recent years. Scientists increasingly are convinced that wastewater injection wells are to blame.

"The issue is that you inject underground ... and that underground injection can increase pressure on rock formations," Wolf said. "And if you're near a fault ... it can trigger an earthquake." That's especially true if the fault is poised to rupture or slip.

According to the study, some regions of the nation "have experienced a ten-fold increase in earthquake activity" in recent years. The worst-hit states — Oklahoma, Texas, Colorado, New Mexico, Arkansas, Ohio, and West Virginia — also have been among those that have embraced fracking and acidizing the quickest, and have experienced a rapid growth in the amount of toxic liquid injected into wastewater injection wells. In Texas, the amount of wastewater injected into disposal wells swelled from 1.9 billion gallons in 2005 to nearly 147 billion gallons in 2011.

Oklahoma, however, has been ground zero for human-made earthquakes during the fracking boom. Since 2009, the state has averaged about forty quakes a year of magnitude 3.0 or larger. By contrast, the state only averaged between one and three quakes of that size annually between 1975 and 2008. Two scientific studies also have linked wastewater injection wells with a magnitude 5.0 earthquake in Prague, near Oklahoma City, in 2011. That quake then triggered an even bigger one — 5.7 — soon after in the same area.

A major problem is that many states do not have comprehensive maps of underground fault zones. In addition, there's a lack of quality data about faults that may be considered inactive. As a result, oil and gas companies may be drilling right into fault zones and shooting flowback and produced water into unstable rock formations without realizing it.

And while California also lacks comprehensive mapping of underground faults, one fact is clear: Much of the Monterey Shale, which oil and gas companies are planning to exploit heavily, resides within the state's most

active and potentially most dangerous fault zone: the San Andreas. It was the San Andreas that ripped the magnitude 8.9 monster quake that left San Francisco in ruins 108 years ago next month.

Last fall, Governor Jerry Brown signed legislation, SB 4, that promises to greatly expand fracking and acidizing, and thus, wastewater injection, in California. Ever since, the governor has been dogged by environmental activists who have decried his actions and have called for a ban on fracking and acidizing in the state. Last weekend, about 3,000 anti-fracking activists held a massive rally in the state capital.

The stakes are huge. The Monterey Shale contains an estimated 13.7 billion barrels of oil. And unleashing that fossil fuel through fracking or acidizing is going to require incredible amounts of water. It's also going to produce massive amounts of flowback and produced water — about 8.6 trillion gallons' worth, according to the report. That's enough wastewater to fill nearly 13 million Olympic-sized swimming pools. Most if not all of that water would then be shot back deep into the earth, where it not only would be lost forever, but also could trigger the next Big One.

In fact, it could happen now. According to the report, California already has 1,553 active and new wastewater injection wells, and 54 percent of them are within 10 miles of a known active fault. Of those, 23 percent are within 5 miles of a known active fault, and 6 percent are within a mile. According to a map accompanying the report, a substantial number of those injection wells run along the western side of San Joaquin Valley, next to the San Andreas Fault.

How Fracking Disposal Wells Can Cause Earthquakes

The culprit of earthquakes near fracking sites is not believed to be the act of drilling and fracturing the shale itself, but rather the **disposal wells**. Disposal wells are the final resting place for used drilling fluid. These waste wells are located **thousands of feet underground**, encased in layers of concrete. They usually store the waste from several different wells. There are more than 50,000 disposal wells in Texas servicing more than 216,000 active drilling wells, **according the Railroad Commission**. Each well uses about 4.5 million gallons of chemical-laced water, according to **hydrolicfracturing.com**.

“The model I use is called the air hockey table model,” says Cliff Frohlich, a research scientist at the **Institute for Geophysics** at the University of Texas at Austin. “You have an air hockey table, suppose you tilt it, if there’s no air on, the puck will just sit there. Gravity wants it to move but it doesn’t because there friction [with the table surface].”

But if you turn the air on for the air hockey table, the puck slips.

EARTHQUAKES

Evacuations

Assumption Parish, LA
o/a 2012

150 Residents

Feared radioactivity
and gas explosion

Arkansas

5 Families

Physical damage to homes

and commercial real estate, loss in the fair market value of the property, economic loss due to temporary stoppage of business operations, and emotional distress.

Sparks, OK

Unknown

Photos show property

damage to home. USGS geophysicist Elizabeth Cochran described the pressure increase from injections as similar to blowing more air in a balloon, weakening the skin of the balloon.

Parker

and

Tarrant counties, TX

Persons
Unknown

Cracked foundations
20 Quakes

Sink holes, concerns over shifting propane tanks, the cost of earthquake insurance and what the quakes could mean for groundwater quality. Reno, Texas City Hall damaged. A resident said she sleeps in her clothes for fear that she'll have to run outside in the middle of the night during a quake.

Johnson County, TX

Specht Family

Seismic Activity from
Fracking

House is in shambles. Walls are cracking, the concrete floor in his bedroom is broken 32 feet across. The house moans and groans.

The earth is moving beneath Johnson County.

Ed Specht says his house is in shambles. He is convinced that the damage is due to the dozen hydraulic fracturing wells **under his property**, pulling valuable shale gas out of the ground.

But proving a connection between the damage to his property and the wells that pepper Johnson County, south of Fort Worth, is no simple matter.

Yet that is precisely what Specht and his wife, Norma, and another Alvarado couple, Jan and Dan Finn, are determined to do. In July, the two families filed suit in Johnson County District Court for damage to their homes and property caused by “earthquakes, subsidence and other seismic activity.” They named EOG Resources, Enterprise Crude Oil, and subsidiaries of Royal Dutch Shell and Sunoco Logistics as defendants.

“This is a question of what’s fair and just,” says their lawyer, Christopher Cowan of the Cowan Law Firm in Dallas. “It’s about the industry being good neighbors.”

Lawyers for Sunoco and EOG would not comment. Shell says it has not operated in Johnson County since 2007 and has never drilled a well there. Enterprise also says it has no operations in Johnson County. In papers filed with the court, the defendants have denied all allegations.

“When you put the words ‘fracking’ and ‘earthquakes’ together in the same sentence, it sounds huge,” says veteran defense lawyer Jim Vines of King & Spalding in Washington, D.C. “But I doubt it has any legal weight.”

The Johnson County suit is one of dozens of anti-fracking lawsuits across the country. But allegations that fracking or related activities cause earth shifting and property damage are a new phenomenon. A handful of suits first popped up in Arkansas in 2011 and are slowly working their way through that state’s court system.

Now this latest flashpoint in the fracking debate has come to the Barnett Shale, a formation stretching under no fewer than 18 North Texas counties that some say contains the largest reserves of onshore natural gas in the United States.

But lawsuits have their limits in solving wider societal problems. In this case, the state may have an important role to play.

Earthquakes have become a frequent occurrence in North Texas in recent years. Johnson County, Parker County and an area near Dallas/Fort Worth International Airport have been particularly hard hit.

The real seismic concern, scientists say, is wastewater injection, the process of disposing of the used, chemical-laden fracking fluid into wells thousands of feet below the surface. The wells are sanctioned by the Environmental Protection Agency and designed to prevent the fluid from contaminating groundwater aquifers. But most experts agree that the process increases the risk of more frequent and severe quakes.

U.S. Geological Survey geophysicist William Ellsworth concluded in a study released this summer that several of the largest quakes in the central U.S. in 2011 and 2012 were probably triggered by nearby injection wells, notably a magnitude-5.6 quake in Oklahoma that destroyed 14 homes and injured two people.

Johnson County, TX

Jan and Dan Finn

Seismic Activity from Fracking

Damage to home, the floors of house are 5 inches lower on one side.

*See Above for Ed Specht and Family. Jan and Dan Finn are also a part of the same lawsuit.

AK

Susan Frey

Seismic Activity from Fracking

Fractures in foundation slab, damaged beyond repair.

*Susan Frey's direction with this issue is unknown.

Parker County, TX

David and
Meredith Hull

300 Quakes

The trailer on his property has cracks, bows, and movement in various parts of the home, splintered a window, cracked an outside wall and fractured all three toilets.

Parker County, TX Lynda Stokes 300 Quakes

House has been repeatedly shaken by tremors, sometimes twice a day.

Prague, OK 14 Families Injection Wells

Earthquake near Prague, injured two people, damaged 14 homes and was felt for hundreds of miles. Earthquake was likely man-made.

Lincoln County, OK Sandra Ladra Injection Wells

Walls suddenly shook and her chimney toppled, sending bricks tumbling down on her legs. Legs causing injuries. Ladra to sue energy companies.

FRACKING GAS CAUSED EVACUATIONS

Clark, Wyoming 25 homes Gas well blowout

Fort Union bedrock aquifer polluted, a gas well blowout resulted in a 10 million cubic foot plume of groundwater contamination, or more than 100 Olympic-size swimming pools worth.

Converse County, WY 50 homes Gas well blowout

The well vented the flammable gas for nearly three days. Investigators concluded a lockdown pin spring loose from its place on the equipment thereby opening a space for gas to vent into the air. The well vented up to 2 million cubic feet of gas and 31,500 gallons of oil-based drilling fluid.

Bradford County, PA 7 Homes Gas well blowout

Thousands of gallons of natural gas drilling waste fluids spilled onto a farm and streams for more than 12 hours after a driller in Bradford County lost control of a well. The families were asked to evacuate the area until the well could be brought back under control.

Wyoming County, PA 3 Homes Leaking Frack Fluid

Three families near a malfunctioning natural gas well were evacuated as thousands of gallons of fluid waste escaped from the well before crews could shut it down.

Caddo Parish, LA 200 Homes Methane Gas

Families evacuated from their homes as there were high levels of methane gas in the water in residents homes.

Mayflower, AK 40 Homes Spill of 84,000 gallons of

diluted Bitumen causing severe environmental and property damage.

Denton County, TX 4 Homes Gas Pipe Repair Necessary

A leaking pipeline at a gas well prompted evacuations. The gas pipe had separated from the well and fracking water and natural gas were rising into the air directly around the well. Four homes evacuated.

Wyoming County, PA 3 Homes Spill of 9,000 gallons of

frac fluid at a nearby natural gas well pad and forced families from their homes. The Department of Environmental Resources said a drill malfunction caused thousands of gallons of fracking fluid to shoot out, and for a while workers were worried there could be a natural gas explosion.

Logan County, OK 3 Homes Explosion at a natural gas

compressor prompted an evacuation. A pickup truck, a storage shed, and several trees were still burning from a fire after the natural gas vapors dissipated to a point that allowed crews to go in and attack the fire.

Washington Parish, LA 54 Homes Pipeline explosion

A major natural gas pipeline exploded destroying a mobile home and causing an evacuation of the area, but no injuries were reported. The siding melted off the mobile home.

Erie, IL 80 Homes Ruptured natural gas pipeline

A cornfield exploded. Underneath the cornfield, a natural gas pipeline carrying gas byproducts ethane and propane had ruptured, caught fire, and exploded, sending gouts of smoke into the air. Around 80 families within a one-mile radius of the blast were initially evacuated, though by Tuesday morning, all but two had returned to their homes.

The assistant fire chief in Erie, said that the operators of the pipeline had reduced the flow of natural gas by remotely closing a valve, and were letting the gas burn off. "It's not much of a fire now, but there's still some fuel left

in the pipe and they're going to let that burn off, because it's the safest way to handle it," he said.

The hydrocarbons that ignited, ethane and propane, are extracted along with methane in natural gas fields, but are often used for different petrochemical purposes. Propane is used for home heating and as fuel for grills, while ethane is usually used to make plastics. They can be transported more easily in liquid form than methane, the largest component of natural gas. All three are greenhouse gases, and when burned, heat-trapping carbon dioxide is created.

Newton County, TX 12 Homes Gas Line Explosion

A 12-foot long, 6-foot wide, 6-foot deep hole in the ground near the Jasper-Newton county line is the latest in almost \$32 million worth of property damage statewide from more than 100 pipeline failures this year.

The hole was created when an underground gas pipe 10 inches in diameter ruptured, spewing natural gas into the air.

No injuries were reported.

Deputies and firefighters were dispatched. Emergency responders evacuated about a dozen people from homes in the area as a precaution.

As of Monday afternoon, the line was shut off and had not been repaired. The line isn't one of the company's bigger ones, so there's a priority in determining the cause of the explosion.

Marshall County, WV 11 Homes Pipeline Explosion

Marshall County agencies spent time on the pipeline explosion. It was a Williams Energy-owned pipeline that feeds into the Oak Grove facility, and was not a well fire or explosion. The fire was able to burn out which actually occurred fairly quickly, within the first couple hours of the incident. If it would have been a well site incident, then we would be looking at several days to a couple weeks in order for that to be extinguished. No injuries are reported.

Authorities believe the moving earth could have caused the rupture, but the investigation is still ongoing.

Six (6) homes were evacuated as a precaution, but most evacuated residents went to relatives' homes. The residents were subsequently given an all clear to return to their homes.

Hawthorne, CA

37 Homes

Methane Gas

Dozens of families returned to their homes in a Hawthorne neighborhood weeks after officials evacuated the area when dangerous levels of methane gas were emitted from a well. Tests on the retired well showed a cap had successfully plugged the leak.

Thirty-seven families living in the immediate vicinity of the well were evacuated as a precaution and have been living in hotels.

Residents were escorted back to their homes by members of safety teams who conducted surveys of the structures to make sure they could be occupied safely.

Lavaca County, TX

2 Homes

Oil Rig Fire, Explosion

An oil rig exploded in Lavaca County triggering a massive fire. Families were forced to evacuate as Marshall claimed that concrete did not have adequate time to dry.

Harper County, OK

4 Homes

Natural Gas Line
Explodes

A natural gas pipeline explosion in northwestern Oklahoma sparked a massive fire. According to the News, firefighters from Oklahoma and Kansas were called to the scene near the town of Rosston. Residents within two miles of the blast were ordered to evacuate. Highway 284 was shut down as a precaution.

Engineers were called in to cut off the natural gas flow to the pipeline, which is owned by Northern Natural Gas of Omaha, and brings gas from Texas to the Upper Midwest.

No injuries or deaths have been reported.

Ellis County, TX 700 Residents Massive Pipeline
Explosion

A gas line exploded in rural Ellis County, unleashing a giant plume of black smoke and triggering the evacuation of the town of Milford. Officials said that a crew punctured a 10-inch liquid petroleum gas line while excavating, sparking the blast. All personnel were accounted for, and the only damage was to work vehicles. Chevron is also monitoring a 14-inch gas line near the ruptured one.

Delaware County, NY Single Family Pipeline Accident

Millions of gallons of gas vented into the atmosphere. Family had to be evacuated.

Pettis County, MO 3 Homes Pipeline Explosion

Flames destroyed seven (7) outlying buildings on a nearby hog farm. Ashley Stark: "Then my house started shaking and rattling. Things were falling off the walls. Glass was vibrating. It sounded like the windows were going to burst they were shaking so badly."

Panhandle Eastern Pipe Line Co.'s 30-inch line ruptured about midnight. A company official said in a statement that the gas has been re-routed from the area so all customers have service.

Several residents said they thought a stealth bomber from nearby Whiteman Air Force Base had crashed, including Ashley Stark. She lives off McCubbin Road and a photo posted on KCTV5.com's home page showed her barn in the foreground.

Cathy Schneider lives 300 feet from the edge of the explosion. She too will never forget the roaring. "It sounded like a bomb going off. When the roaring never stopped, I'm like, "That's not thunder," she said. She couldn't believe what greeted her outside her home. "I was immediately hit with the heat. I couldn't tell you how many degrees it was. It felt like it was burning the side of my face," she said.

"We were getting hit with gravel and dirt and everything that was just flying up in the air and falling down on the house and the cars," she recalled. "Somebody upstairs was watching out for us. They had to be."

The pipeline company and the responsible federal and state regulatory agencies will conduct an investigation into what caused the rupture.

Oakland, CA

6 Families

Gas Line Erupts
into Flames

Flames shot through cracks in the road near the Oakland Zoo after a 4-inch natural gas pipeline erupted and caught fire for hours. About 25 Oakland firefighters and a hazmat team raced to the fire, and the Oakland Zoo. PG&E crews shut off the flow of gas and the flames died down by early afternoon as crews let the fire burn itself out.

"We wanted to make sure natural gas wasn't migrating into homes, which could pose a greater safety risk," "It's like a pilot light. We want to make sure you know exactly where that natural gas is that it's burning off into the atmosphere."

Cass County, ND

2300 Residents

Explosion caused by
train derailment

The North Dakota city was evacuated after a two-train derailment caused several oil tankers to explode and burn, authorities said. A westbound train carrying grain jumped the tracks just west of Casselton, near Fargo, and crashed into an eastbound train hauling oil.

An estimated 10 cars of the 106-car oil train were on fire, and authorities said they would let them burn out. Train operators uncoupled about 80 cars and moved them away from the blaze.

After a partial, precautionary evacuation of about 300 residents, shifting winds early in the evening prompted the Cass County Sheriff's Office to recommend that the entire town of 2,400 people leave, along with anyone within a 5-mile radius, the Fargo-based *Inforum* newspaper **reported**. The sheriff's office said the National Weather Service was forecasting a shift in the weather that could increase the risk of potential health hazards.

"That's going to put the plume right over the top of Casselton," Cass County Sheriff Paul Laney said at a news briefing.

No injuries were reported among the train crews.

Perry County, MS

12 Families

Chemical Spill

Crude oil and methanol spill as a result of a train derailment. A dozen families in rural New Augusta were evacuated overnight.

LA Offshore

42 Workers

Out of Control Gulf
Gas and Fluid Flow

Forty-two workers were evacuated.

Other workers cut in half the flow of natural gas from an out-of-control well being drilled by Rowan Companies Plc (RDC) in the Gulf of Mexico off the coast of Louisiana, the U.S. Coast Guard said.

“Responders still continue to control the flow,” An estimate on the rate of gas and fluid flowing from the well was not provided.

The U.S. Bureau of Safety and Environmental Enforcement, which oversees offshore drilling, is monitoring the situation. Offshore oil and gas drilling work is under closer scrutiny after a blowout well in April 2010 killed 11 workers and set off an 87-day spill that fouled thousands of square miles and shut much of the Gulf to fishing.

There's been no fire, explosion or oil spill. "It's blowing gas and formation water," said Garrett. "We are circulating seawater to try to get it under control. We're very concerned about a fire and taking all the precautions we can to keep that from happening."

Three boats are on standby at the shallow-water well site 108 miles (173 kilometers) southwest of Lafayette, Louisiana, in case they're needed for additional evacuations, Garrett said.

Adair County, KY

150 Residents

Gas Line Explosion

The explosion spawned multiple woodland and structural fires. Three (3) homes were set ablaze, two of them were fully destroyed, as well as two barns and four cars. Two individuals were hospitalized and the community was evacuated.

Investigators are trying to determine what caused a massive natural gas line explosion that rocked a small south-central Kentucky town.

St. Landry Parish, LA Residents Gas Line Explosion

As a result of a gas line explosion where a pipe ruptured for an unknown reason, residents were advised to evacuate the area immediately.

Dodge County, NE 4 Farms Gas Line Explosion

Four farms in Dodge County were evacuated Friday morning after a natural gas line explosion. Firefighters then had to stand by for hours while the gas burned off.

Benton County, WA 400 Residents Gas Explosion

Explosion of storage tank, fumes, mushroom cloud of blank smoke, five workers injured. The blast shook nearby homes and led to the evacuation of about 400 residents. The company whose tank exploded has had troubles recently. In mid-March, Williams Northwest Pipeline lowered the pressure on one of the main pipelines serving the west side of Portland to compensate for malfunctioning equipment at a metering station. The malfunction caused several emergency releases of natural gas. The company continues to work on the problem.

Marshall County, WV 6 Families Gas Pipeline
Explosion

Local press reports earlier said a 36-inch gas line exploded but no fire was reported and area residents were being evacuated as a precaution.

A natural gas gathering pipeline ruptured in Marshall County, West Virginia, a spokesman confirmed on Friday. The affected pipeline was immediately shut down and the suspected area of the rupture was isolated. No injuries or property damage has been reported and the cause of the rupture is under investigation, he added.

Campbell County, VA 300 Residents Derailed Train
with Oil

explosions. Families were forced to evacuate because of the chemicals in the smoke, for breathing reasons one firefighter was treated for smoke inhalation.