

From:

Kell, Scott <Scott.Kell@dnr.state.oh.us>

Sent:

Wednesday, June 25, 2014 1:24 PM

To:

Shimp, Frederick; Simmers, Richard

Subject:

**Enviro Tank Clean incident** 

DOGRM District Manager Dan Goins has confirmed that the incident that occurred yesterday near Belpre at the Enviro Tank Clean facility is <u>not</u> under our jurisdiction. Ohio EPA, the State Fire Marshall, and OSHA are appropriately conducting the investigation.

From:

Dan Goins <goins\_dan@icloud.com>

Sent:

Wednesday, June 25, 2014 10:23 AM

To:

Kell, Scott; Claus, David; Simmers, Richard; Arthur, Blake

Subject:

**Enviro Tank** 

Attachments:

photo.JPG; ATT00001.txt



From:

Dan Goins <goins\_dan@icloud.com>

Sent:

Wednesday, June 25, 2014 10:30 AM

To:

Kell, Scott; Claus, David; Simmers, Richard; Arthur, Blake

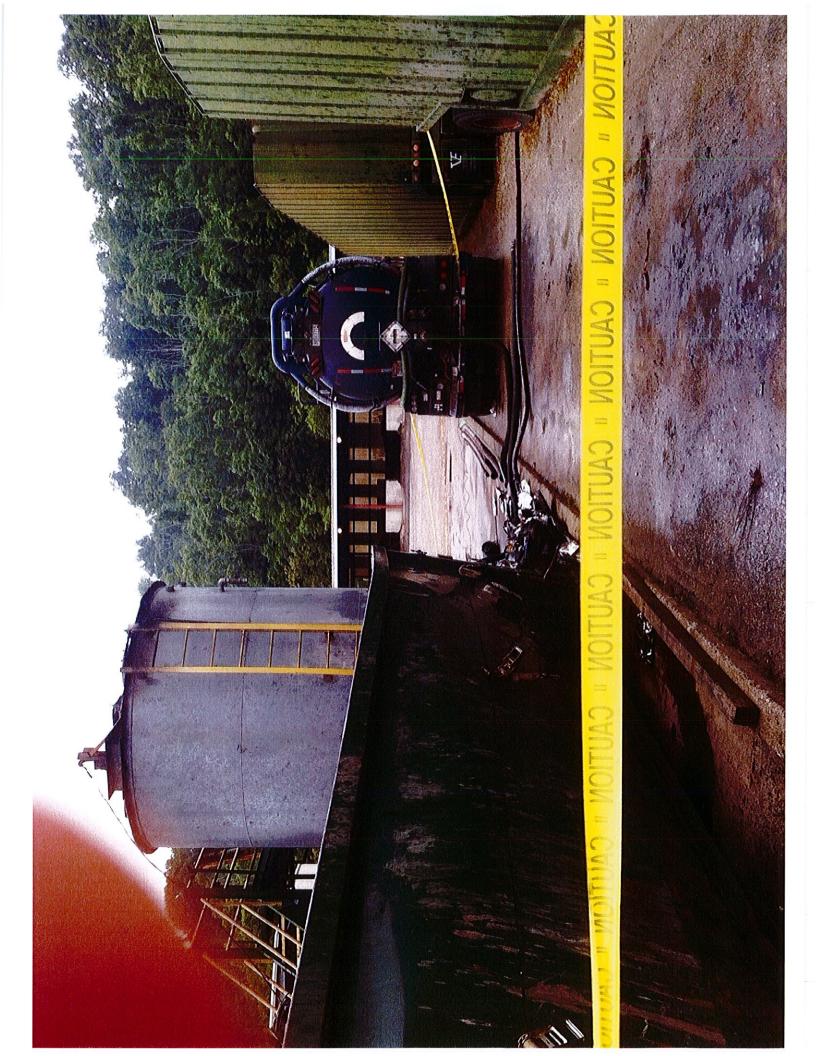
Subject:

**Enviro Tank** 

**Attachments:** 

photo.JPG; ATT00001.txt

Transferring gasoline and water from a gas station into a holding tank, not sure of the source at this time feel vapors may have found its way to the boilers stored in building beside holding tank.



From:

Belmont Co EMA <emergency.management@co.belmont.oh.us>

Sent:

Wednesday, June 25, 2014 11:09 AM

To:

Belmont Co EMA

Subject:

EMA news clips - June 25

**Attachments:** 

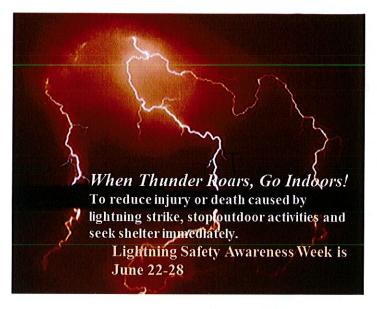
EMA news clips 06-25-14.pdf

- Pg 2 Ohio weather
- Pg 3 Lightning Awareness Week
- Pg 5 Heavy rains cause flooding across NE Ohio
- Pg 6 Overnight downpours renew high-water worries
- Pg 8 Holmes County, Ohio recovers from severe flooding, plans clean-up
- Pg 9 Flooding remains concern in NE Ohio with showers, thunderstorms in forecast
- Pg 10 Brunswick, OH Tornado: Why there was no tornado warning
- Pg 13 Brunswick tornado reminds not all Ohio twisters will come with weather warnings
- Pg 15 Brunswick residents encouraged to sign up for CodeRED Emergency Communication Network alerts
- Pg 16 Licking County: Decontamination trailer finds new home
- Pg 17 Lucas County EMS dispatch gets \$6.6M upgrade
- Pg 18 Washington County: Ravenswood man injured in Ohio explosion (hazmat)
- Pg 19 Officials start cleanup of two Trumbull gas and oil spills (hazmat)
- Pg 20 Toxic algae, now in East Fork Lake, will be part of Ohio's future, expert says
- Pg 22 Clermont County: Dark skies rest black bear hunt in Miami Township neighborhood

Xelli D. Blackwell

Publications Editor Ohio Emergency Management Agency 614.799.3694





http://www.weathersafety.ohio.gov/Documents/pdfs/Thunderstorm\_Lightning\_Safety\_2014.pdf



# Ohio EMA News Clips

Wednesday, June 25, 2014

#### Click here for current weather map:

http://www.weathersafety.ohio.gov/CurrentWeather.aspx. Scroll down to view Ohio.

#### Click here for current Ohio Weather Warnings, Watches, Advisories (NWS):

http://alerts.weather.gov/cap/oh.php?x=1



#### Scattered Showers And Cooler Weather Wednesday

Your Doppler 10 Forecast

This Morning Scattered showers ending.

This Afternoon Mostly cloudy and drying out. Low 80s Winds shift to NW.

Tonight: Partly cloudy & cooler. 63 NW 5-10 mph

Tomorrow: Mostly sunny and seasonable. Less humid. 84 NW 5-10 mph

Friday: Partly cloudy skies. 85

#### Special Information:

Showers will gradually taper off today behind a cold front pushing to the east. Behind the front, winds will shift to the northwest, allowing less humid air to move in. High pressure will bring clearing skies and dry conditions into Friday. There's a warm-up on tap for the weekend as well as the chance for scattered showers or storms. The early part of next week looks unseasonably warm.

ALERTS: SPC has A Slight Risk for Severe Storms over parts of WY, MT,, SD, NE & CO. Flood Advisories in central and North Central Ohio.

Inconvenient WX/Plan Your Day: Still standing water out there this morning. Some roads are closed. Big headache. Next few days look much improved. A few scattered showers or storms return for the weekend.



### FORECAST | Rain/storms ending later today

Today: Rain showers and storms, then drier by the afternoon. Cooler. Upper 70s

Thursday: Partly cloudy. Upper 70s Friday: Mostly sunny. Near 80

Saturday: Partly cloudy. Warmer! Mid/upper 80s

Sunday: Partly cloudy with isolated rain and storms. Upper 80s Monday: Partly cloudy with isolated rain and storms. Near 87

Tuesday: Partly cloudy with scattered rain and storms. Mid/Upper 80s



#### Storms move out, pleasant temps move in

#### Cool front passing to our south

Partly sunny skies return today after a cloudy/foggy start and the chance for rain is on the decrease. A cool front that dropped showers and storms yesterday has moved on to our south. Slightly less humid air has arrived but dew points are still in the 60s.

We will start with clouds and some patchy fog today but will end with partly sunny skies and the slightest chance for a spotty thundershower. Most of us will remain dry. Highs will climb into the lower to middle 80s.

Partly cloudy to mostly fair skies tonight will make for a pleasant enough evening. Temperatures will hover near 80 degrees until sunset and fall to the middle 60s overnight.

Tomorrow will feature mostly sunny skies and highs in the middle 80s.

Right now, late day thunderstorms are possible for the weekend including Saturday evening for the Quaker State 400 at the Kentucky Speedway.

Make it a great Wednesday!



Cincinnati

#### **LIGHTNING AWARENESS WEEK:**

Summer is the season to be outside. Warm weather compels us to run, swim, hike and ride, and the long hours of sunlight provide ample time to enjoy this most active of seasons. Summer is also prime time for thunderstorms, which produce lightning, among other potentially dangerous hazards. Lightning occurs in ALL thunderstorms and it is estimated that over 100,000 thunderstorms occur each year in the United States.

Viewer Tip: In 2013, lightning accounted for 23 deaths in the U.S., down from 28 in 2012 and the 30-year average of 53. That number can be reduced even more by knowing how to avoid lightning and what to do if you are stuck outside during a thunderstorm. These helpful hints will help you stay safe:

• Pay attention to the forecast. When thunderstorm development is expected, meteorologists often issue a statement early in the day about when the chance for thunderstorms is highest. If your area has a high potential for thunderstorms, make plans to be inside during that time. Lightning can strike up to 10 miles away from a thunderstorm. If a severe thunderstorm watch or warning has been issued for your area, take cover immediately and wait for at least 30 minutes after the storm has passed to head back outside.

- If you must be outdoors, avoid activities that increase the risk of being struck by lightning, such as
  mountaintop hiking, swimming at beaches and outdoor pools, golfing and playing other sports in
  open fields.
- If you are caught outside during a thunderstorm and cannot reach a safe, indoor location, avoid open fields and the tops of hills or ridge tops. Stay away from tall, isolated trees and other tall objects. If you're in a forest, stay near a lower stand of trees. Stay away from water, wet items and metal objects like fences and poles.
- Learn more about lightning development, safety, and science at NOAA's Lightning Safety webpage.

#### Did you know?

- Lightning impacts the environment: Every year, lightning causes forest, grass and house fires across the United States. According to the National Fire Protection Association, lightning caused an average of 24,600 fires resulting in 407 million dollars in damages annually from 2004-2008. Wildfires started by lightning burn on average 5.5 million acres each year.
- The environment impacts thunderstorm development: Many big cities experience the urban heat island effect. Urban heat islands form when buildings, roads and other infrastructure absorb heat, making cities warmer than surrounding rural areas. In Atlanta, studies have shown that excess heat from the urban heat island plays a role in producing increased rainfall and thunderstorms over the city. Similarly, Houston (dubbed the "Lightning Capital of Texas") received more lightning than surrounding less-developed areas over a 12-year period. Data analysis suggests that Houston's urban heat island effect causes clouds and thunderstorms. Air pollution in Houston may also play a role small particles emitted by cars and power plants join up with other aerosols to form nuclei on which water condenses to form clouds.



#### Heavy rains cause flooding across Northeast Ohio

Video: http://www.wkyc.com/story/news/local/northeast-ohio/2014/06/24/northeast-ohio-flooding-june-24/11339743/

NORTHEAST OHIO -- Parts of Northeastern Ohio were hit hard by heavy rains Tuesday evening. Several counties were placed under a Flash Flood Warning, including Cuyahoga, Lorain and Holmes.

A severe storm during the afternoon hours brought trees down in Chesterland in Geauga County according to the National Weather Service and law enforcement.

The storms add insult to injury to parts of the region impacted by severe weather Monday. The National Weather Service confirmed late Monday that an EF1 tornado hit parts of the city of Brunswick where close to 45 homes sustained some sort of damage. The tornado had maximum winds of 110 m.p.h. and traveled 1.7 miles.



On Tuesday, Cleveland Hopkins Airport received 3.54" of rain that set a new daily rainfall record for June 24th. The old record was 2.11" on June 24, 1873.

Meanwhile, the Akron-Canton Airport has now seen its second wettest June on record.



Flooding conditions at Rt. 322 in Chesterland - Erin M. Steinberg

# The Columbus Dispatch

### Overnight downpours renew high-water worries

By Jim WoodsThe Columbus Dispatch • Wednesday June 25, 2014

Motorists are urged to show caution this morning as several central Ohio roadways remain flooded after a series of downpours yesterday evening and overnight dumped several inches of rain.

Delaware County was particularly hard hit by a shower that passed through between 1 and 2 a.m.
Sections of Rts. 3, 61, 315 and 521 were closed due to high water early today, according to the Delaware County sheriff's office.

"ODOT and the county don't possess enough high-water

Eamon Queeney | DispatchJason Buescher, 14, plays in flooded Brandywine Drive in Upper Arlington on late Tuesday afternoon, June 24, 2014.

signs to cover all the flooded roadways," said Dan Hartman, a Delaware County sheriff's office dispatcher.

E. Wilson Bridge Road was closed between McCord Park and Worthington Galena Road, Worthington police said.

In Westerville, a tree near a stream in back of a house on Liberty Lane fell onto the house. The family living in the house was told to evacuate, a Westerville police and fire dispatcher said.

Park Meadow Road south of Schrock Road was closed due to flooding from Alum Creek, according to the Westerville dispatcher. In Gahanna, flooding from Big Walnut Creek has closed a section of Olde Ridenour Road near Mifflin Cemetery, as well as part of Pizzuro Park, Gahanna police said.

Flooding also affected the northeastern corner of Licking County, with sections of County Line Road, Homer Road and Rt. 661 closed due to high water, the Licking County sheriff's office said.

Earlier yesterday afternoon, a passing line of storms flooded several streets in Franklin County. In Columbus, roads around the intersections of Bethel and Kenny roads and Olentangy River

and Henderson roads, on the Northwest Side, were closed for several hours yesterday evening.

Roads around the train bridge on Rt. 161 by Huntley Road, west of I-71 on the North Side, were also closed for a time. Motorists during the evening commute had to negotiate high water on the I-270 westbound ramp to Rt. 23 southbound on the North Side, but the road remained open.

Columbus police said all roads that were closed due to high water had reopened to traffic early today. High water also affected Upper Arlington yesterday afternoon in the area around Mountview and McCoy roads and Thompson Park.



Barbara J. Perenic | Dispatch A cyclist and a driver discuss high water on Olentangy River Road on the Northwest Side.

Two to three inches of rain fell in sections of northern Franklin County yesterday, far more than what fell at Port Columbus, said Chris Bradley, chief meteorologist for WBNS-TV (Channel 10).



#### Holmes County, Ohio recovers from severe flooding, plans clean-up

#### Holmes County recovers from severe flooding

By BRANDON ZAFFINI Staff Writer Published: June 25, 2014 4:00AM

MILLERSBURG -- Flooding across the county was the upshot of heavy rainfall Monday night, prompting response measures from local officials and first responders as they prepare for more storms later in the week.

At 1 a.m. Tuesday, the Holmes County Sheriff's Office declared a Level 3 state of emergency, restricting travel to emergencies only, because of flooding.

A pocket of Glenmont was evacuated temporarily because of rising water, according to Sheriff Timothy Zimmerly, who also said he



Brandon Zaffini photos/www.buydrphotos.com One casualty of the rainfall Monday night was the Holmes County fairgrounds, which was almost entirely submerged. As in past years, the flooding was the result of an overflow at Sap's Run and Killbuck Creek. The grounds will require a major cleanup effort in preparation for the fair in early August.

responded to reports of "motorists stranded on the roads" and "residents facing water coming up to their homes in both Glenmont and Millersburg."

No injuries had been reported as of Tuesday afternoon.

By 4 a.m., the Sheriff's Office lifted the driving restriction, but many township, county and state roads remained closed, and some open roads still had spots covered in water.

The Holmes County Highway Department has been scrambling to clear debris off roads and out of waterways, and to put signs up as needed.

"We're still assessing all the damage, but it's not a good situation we're looking at," said Holmes County Engineer Chris Young, noting two bridges had been shut down.

"All we can do is fix things up as fast as possible so we can be ready for the next round of rain," he said. "But I would advise everyone to be careful, especially if more rain hits, and they shouldn't drive through high water."

With flooding and the possibility of more rain on the way, the Holmes County Chapter of the Red Cross is on high alert, said Director Pat Lang, who said Monday's rainfall was more severe than she had seen in a long time.

"It was raining so hard I couldn't see anything on the roads," she said. "The lightening felt as if it was right there in the van with me. Whole areas of the ground were washed away and big rocks were pushed out of berms and lay across the middle of the roads."

Lang advised residents to check for watches and warnings later in the week, especially if out on the road, because "with the ground already saturated, there's a high chance of more runoff."

Another casualty of the rainfall was the Holmes County fairgrounds, which was almost entirely submerged.

As in past years, the flooding was the result of an overflow at Sap's Run and Killbuck Creek.

"This flood kind of had a double impact on us," said fair board President Kerry Taylor. "Excavation at the new fairgrounds site is a mess, so the work there has come to a stop. And now, obviously, our big concern is getting ready for the upcoming fair, and the current site is going to need a lot of work."

As soon as the water recedes, the board will initiate a cleanup, Taylor said, and will try to rally the community to help with that effort, which will entail clearing several inches of mud and silt left behind by the water.

# THE PLAIN DEALER

# Flooding remains concern in Northeast Ohio with showers, thunderstorms in forecast

By Cliff Pinckard, Northeast Ohio Media Group on June 25, 2014

CLEVELAND, Ohio — A break from the showers and thunderstorms is on its way, but Northeast Ohio residents again will have to contend with rain this morning.

The soggy conditions made driving difficult on Tuesday night, with high water closing parts of the Shoreway and Martin Luther King Boulevard, among other roads in the region. It was the result of 3.54 inches of rain falling in Cleveland, a record for the date.



High water on several Northeast Ohio roads is creating problems for drivers. (Joshua Gunter, Plain Dealer file photo)

It was raining early this morning, and the National Weather Service says another 10th to a quarter-inch could be expected. Showers are expected to taper off during the afternoon but it will remain mostly cloudy with a high of 74.

However, a **flash flood watch** is in effect until 4 a.m. Thursday for most of Northeast Ohio. A **flood warning** is in effect in Lake, Erie and Lorain counties into Thursday.

Weather conditions will clear up on Thursday, with mostly sunny skies and a high of 76. After a cool night with a low of 61, it will reach 79 on Friday with sunshine. By the weekend highs will push into the mid-80s, but a chance of thunderstorms returns on Saturday night.



#### Brunswick, Ohio, Tornado: Why There Was No Tornado Warning

By Jon Erdman Published: Jun 25, 2014

There was no tornado warning issued when an EF1 tornado tore through a part of Brunswick, Ohio, on Monday evening, damaging at least 45 homes and businesses, according to a storm survey from the National Weather Service's office in Cleveland. No injuries were reported.

In this era of Doppler radar, enhanced spotter networks and social media, how did this happen?

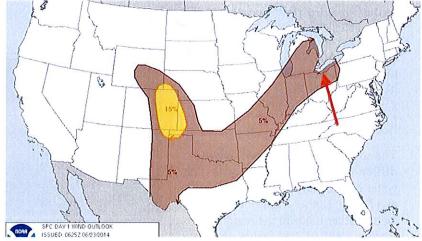
The short answer is this was a difficult case for any forecaster, even those with experience, to diagnose in real time. Let's step through the event starting with the day's forecast.

#### The Forecast: Nothing Stood Out

Day one thunderstorm damaging wind gust outlook for June 23, 2014. Red arrow denotes approximate location of Brunswick, Ohio. (NOAA/NWS/Storm Prediction Center)

The large-scale setup, as is often the case in summer, was favorable for thunderstorms over northern Ohio, but not necessarily supercell thunderstorms.

A frontal system was approaching from the western Great Lakes, with



a warm front lifting northward into the Buckeye State, south of which resided warm and humid air, but not oppressively so by late June standards.

While instability (warm, humid air near the surface and in this case, somewhat cooler, drier air aloft) was in play, wind shear – namely, the change in wind speed and direction with height required to sustained supercells – was rather unremarkable.

The morning convective outlook from NOAA's Storm Prediction Center, a general forecast of both severe and non-severe thunderstorms, only depicted a general area of thunderstorms over northern Ohio, with a small risk (five percent chance within 25 miles of a point) of large hail or damaging winds, as shown above.

The day's TOR:CON forecast from severe weather expert Dr. Greg Forbes assigned a TOR:CON tornado potential index of "2 or less," a value indicative of a low chance of a tornado and one assigned to many areas of the country quite often in the late spring, summer or fall.

There was no severe thunderstorm or tornado watch issued, as forecasters believed thunderstorms would, in the extreme, produce a quick pulse of strong winds or marginal hail, rather than an organized, concentrated area of hail or wind damage.

As you can see in the interactive map above, these forecasts were quite accurate. The Ohio Valley severe reports were not concentrated as, say, with a derecho, but were fairly hit-or-miss.

Using the Storm Prediction Center's filtered database to remove duplicate reports, there were a total of 73 reports of severe weather in the Lower 48 States on Monday, less than 50 of which were in the Ohio Valley. An average June day features 228 reports of severe weather nationwide, according to Forbes.

However, there was that one tornado.

While the large-scale environment was not conducive for supercell thunderstorms and tornadoes, a post-analysis of radar data suggested several factors which combined to generate the Brunswick tornado.

There were three distinct boundaries picked up by the NWS-Cleveland Doppler radar, which are pointed out in the radar loop above.

First, a lake-breeze boundary, a mini cold front between the cooler air over Lake Erie and warmer, more humid air inland, surged southward, denoted by the blue arrows at the beginning of the radar loop above. This lake-breeze boundary may have been boosted by outflow winds from showers and storms over the east and northeast side of the Cleveland metro in the afternoon.

Add to that a pair of thunderstorm outflow boundaries, one moving northward from near Mansfield, Ohio, another surging east from a cluster of thunderstorms arriving from northwest Ohio, and the stage was set for a collision.

These boundaries are a source of horizontal vorticity, or spin, in the lowest levels of the atmosphere, as rain, or in one case above, lake-cooled air rushes outward. Think of this similar to rolling a pencil on your desk.

When boundaries collide, unstable air is lifted, and either new thunderstorms are formed, or existing storms are given a boost by the uplift.

In this case, as you can see in the zoomed-up radar animation above at left, a cluster of thunderstorms was given such a boost after the aforementioned boundaries collided.

This prompted the National Weather Service office in Cleveland to issue a severe thunderstorm warning at 6:54 p.m. ET.

Text of NWS-Cleveland severe thunderstorm warning issued at 6:54 p.m. ET on June 23, 2014. (NWS Cleveland)

At that time, there was a signature in Doppler radar suggesting strong, straightline wind gusts were possible, as shown by the brighter green shadings in the middle radar images above at right.

Less than two minutes later, a tighter rotation began to appear in new storm-relative velocity imagery, denoted by the red circle above at right. This was, in fact, the Brunswick tornado.

What changed so quickly to spawn this tornado?

BULLETIN - IMMEDIATE BROADCAST REQUESTED SEVERE THUNDERSTORM WARNING NATIONAL WEATHER SERVICE CLEVELAND OH 654 PM EDT MON JUN 23 2014 THE NATIONAL WEATHER SERVICE IN CLEVELAND HAS ISSUED A \* SEVERE THUNDERSTORM WARNING FOR... NORTHEASTERN MEDINA COUNTY IN NORTHEAST OHIO \* UNTIL 730 PM EDT \* AT 653 PM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM CAPABLE OF PRODUCING DAMAGING WINDS IN EXCESS OF 60 MPH. THIS STORM WAS LOCATED NEAR LITCHFIELD...AND MOVING NORTHEAST AT 30 MPH. \* LOCATIONS IMPACTED INCLUDE... BRUNSWICK... PRECAUTIONARY/PREPAREDNESS ACTIONS... THIS IS A DANGEROUS STORM. SEEK SHELTER INSIDE NOW AND STAY AWAY FROM

We mentioned the boundaries as a source of horizontal spin earlier. When a thunderstorm's updraft passes over these boundaries, their horizontal spin can be tilted and stretched by the thunderstorm's updraft into the vertical. This may have been how the Brunswick tornado formed.

WINDOWS.

Interestingly, merging thunderstorm cells (illustrated in the first radar loop above) may have also played a factor in the Brunswick case, as recent research on the Moore, Oklahoma, 2013 tornado illustrates.

However, just as fast as the rotation appeared, it weakened as the outflow boundaries continued surging past the storm cluster they boosted, cutting off the flow of warm, humid air thunderstorms feed off of.

The final storm survey from NWS Cleveland estimated the tornado lasted only five minutes, from 6:55 to 7:00 p.m.

#### **Lessons Learned?**

So, from a forecast perspective, let's recap:

- Tornado threat Monday was generally low, but not zero.
- A severe thunderstorm warning was issued for strong straight-line (non-tornadic) winds.
- Less than two minutes later, rotation tightened, but lasted no longer than five minutes total.

Suffice it to say, this was an exceedingly difficult short-lived scenario to react to quickly, even for experienced forecasters.

The conventional radar reflectivity signature was not in any way suggestive of a tornado, compared to a more classic hook echo in a tornadic supercell.

A 2013 study of two years' worth of National Weather Service tornado warnings found the probability of detection (defined as an event for which a tornado occurred inside a tornado-warned area/time) for non-supercell tornadoes, such as Brunswick, Ohio, was only 46 percent, meaning roughly every other non-supercell tornado is not covered by a tornado warning when it forms.

These non-supercell cases are simply more difficult for a forecaster to detect.

As unsettling as that sounds, for supercell tornadoes, the probability of detection was found to be 85 percent. Generally speaking, the most destructive, violent tornadoes tend to occur on days where the large-scale setup tends to favor tornadic supercells, and are the easiest to detect on radar.

Simply put, due to various factors – gaps in radar coverage, geometry of the radar beam rising away from the surface with distance, nighttime tornadoes, a lack of spotters at any given time – a tornado cannot be detected every time.

This puts NWS forecasters in a catch-22:

- Issue more tornado warnings to attempt to capture every tornado, but then risk more false alarms, increasing complacency in response by the public.
- Issue fewer warnings, focusing on stronger tornadoes more likely to claim lives, but then risk
  missing more EFO, EF1 tornadoes. With fewer weak tornadoes warned, there's no guarantee
  more fatalities wouldn't result.

For now, the answer is close to the first option, as missing tornadoes is less acceptable and palatable than false alarms.

It is always good practice to seek shelter for severe thunderstorm warnings. As National Weather Service severe thunderstorm warnings often say, severe thunderstorms can produce tornadoes with little or no advance warning.



# Brunswick tornado reminds not all Ohio twisters will come with weather warnings

By Bob Downing - Beacon Journal staff writer June 25, 2014

Events in Brunswick late Monday serve as a painful reminder that tornadoes can strike without weather warnings.

The tornado that damaged at least 45 homes and businesses emerged from a line of thunderstorms, and the National Weather Service saw no need to issue a tornado watch or a tornado warning.

"It was an atypical case," meteorologist John Mayers from the weather service in Cleveland said Tuesday.

The weather service had issued a severe thunderstorm warning, but overall weather conditions across northern Ohio did not appear to be suitable for tornadoes to form, he said. In addition, there were no reports from spotters of tornadoes touching down nor evidence of tornadoes on radar.

But localized conditions over Brunswick — Mayers called what happened an intersection of weather boundaries and wind sheer — were suitable, and the tornado formed quickly.

"Over Brunswick, all the ingredients pulled together and the storm dropped the tornado," Mayers said.

According to the weather service, the tornado started at 6:55 p.m. near Diana and Maria drives, then moved to the northeast across Center Road (state Route 303). It covered a path about 120 yards wide and 1.7 miles long in about 5 minutes.

Top wind speeds reached 110 mph, classifying the tornado as an EF1 event.

Mayers said such localized tornadoes are hard to detect on radar and are difficult to predict. He said the weather service sent a crew to the affected Brunswick neighborhoods.

Such "unwarned tornadoes, as they're known, do occur ... and are fairly common," said Thomas Schmidlin, a Kent State University associate professor of climatology and an Ohio weather expert.

The weather service does "a good job" predicting tornadoes and issuing warnings, but not all twisters generate weather warnings, he said.

Between 2000 and 2004, 26 percent of all U.S. tornadoes got no official weather warnings, according to a 2010 report in the journal Weather and Forecasting, Schmidlin said.

The Brunswick tornado is a reminder that thunderstorms can spawn tornadoes or can produce damaging straight-line winds of 100 mph that can topple trees and cause fatalities, he said.

"The best advice is to be careful and watchful in thunderstorms because they can be dangerous. They can produce tornadoes — without warning," he said.

This mo fourth p as mea	June onth has no place for ra asured at to Airport.	ainiest Junes,
RANK	YEAR	INCHES OF PRECIPITATION
1	1924	///11.12/
2	1989	8.42
3//////	1920	////// 8.09
4	2014	///// 7.83*
5	1896	7.79
6	2008	7.76
7	1902	7.23
8	1970	7.06
9	1996 📈	6.63
10	2004	6.62
* as of 5 p.m. Tue	sday Color	
SOURCE	: National Wea	other Service Akron Beacon Journa



### Brunswick residents encouraged to sign up for CodeRED Emergency Communication Network alerts

*Tracy Carloss* 5:12 PM, Jun 24, 2014

BRUNSWICK, Ohio - The City of Brunswick is encouraging residents to sign up for CodeRED alerts.

Monday evening, Brunswick experienced a severe thunderstorm that produced a tornado. Some residents have expressed concern about the lack of warning from the outdoor warning sirens. The outdoor warning sirens were removed from service in August of 2008, following security concerns due to numerous false alarms being set off by hackers.

The city then opted to contract with CodeRED Emergency Communication Network.

According to city officials, the sirens were mainly to alert those outside, the mass notification system CodeRED was determined to be the best overall solution. CodeRED can place calls directly to home phones or mobile phones, or utilize text and email depending on the situation. According to officials, the service can be used for many other situations and has been used successfully to notify residents of missing persons, amber alerts and flooding assistance.

Residents must opt in to receive the weather alerts. "Some have not signed up to be notified of weather alerts. However, as Brunswick experienced last evening, a severe thunderstorm warning means that the storms could bring damaging winds, large hail or tornadoes without further notice, as the National Weather Service and local meteorologists have confirmed," said city officials in a press release.

Monday night the CodeRED call went out at 6:56 p.m. based on the National Weather Service alert. The system placed 8,789 attempts on 7,272 phones. All of these calls were placed within two minutes of the National Weather Service bulletin.

The city is encouraging all residents to visit the City of Brunswick website at www.brunswick.oh.us to update their CodeRED contact information.

Red Cross is doing damage assessment: Meeting with families in the hard hit area of Medina County to determine if the families can stay in their homes.

Red Cross is also out trying to determine what other help residents would need.

People can donate by texting 90999 to Red Cross. \$10 will be accessed to your account – the \$10 will be placed in the Red Cross donation fund.

People can also donate by sending a check to your local Red Cross chapter.



# Decontamination trailer finds new home

Federal funding makes unit free to Licking County
Jun. 25, 2014

Written by Joe Williams, Advocate Reporter

NEWARK — Licking County officials on Tuesday accepted delivery of a free truck cab, decontamination trailer and emergency equipment from the Mifflin Township Fire Department, of Gahanna.

The unit, valued at \$240,000, will serve multiple purposes, according to Kevin Carver, interim director of the Licking County Office of Homeland Security and Emergency Management. It can serve as a hazardous materials response vehicle, a cooling center for firefighters at fire scenes, or a rest/ rehabilitation station for safety personnel during cold-weather incidents.

"It'll run on a generator," Carver said. "We pull it up at a site and set it up."



The Licking County Office of Homeland Security and Emergency Management has received a decontamination trailer for its hazardous material team. The Mifflin Township Fire Department in Franklin County transferred it to Licking County at no cost. / Jessica Phelps/The Advocate

In addition to the generator, the trailer washing and rinsing stations and a changing room, according to Assistant Fire Chief Michael Grossman, of the Mifflin Township department. The 2004 Ford F550 XLT Super Duty cab has just more than 5,000 miles on it and was purchased to tow the trailer and equipment.

Mifflin Township bought the truck, trailer and emergency equipment with federal Urban Areas Security Initiative grants, Grossman said. The unit no longer is needed there because the Columbus Fire Department expanded its services, and the township department has redefined its mission, he said. Additionally, a twin of the unit remains available for regional use at the Norwich Township Fire Department in Hilliard, he said.

Since Mifflin Township bought the unit with grants from the initiative, it could not sell it outright, but had to make it available for free to an emergency agency in Central Ohio.

"I see this as possession of a tool that has more of a regional value," Licking County Commissioner Tim Bubb said.

Bubb said the equipment can be used by neighboring counties during large-scale emergencies, in addition to the local uses.

"We're hoping to be able to set it up for our primary responders as a hazmat unit," said Lt. Brian Hoffman, of the Heath Fire Department, who also is in charge of the countywide Hazardous Materials team.

For now, the truck, trailer and equipment will be stationed at the Licking County Regional Communications Center, 119 E. Main St., Carver said. However, he said he will work with the county commissioners to find a permanent home for the unit.



Toledo

# Lucas County EMS dispatch gets \$6.6M upgrade

by Nick McGill

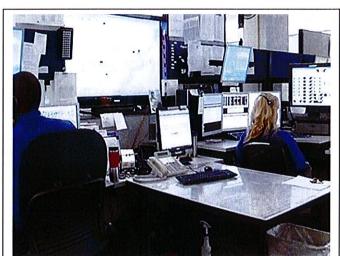
Posted: 06.24.2014

If you have an emergency, first responders have a new dispatch system after four years of preparation and a \$6.6 million upgrade to the system.

The Lucas county emergency management service has faster response times and better resources.

Lucas County EMS director Dennis Cole said the new system is far more integrated. An advanced map-tracking system locates all available response units in the area using GPS, allowing dispatch and emergency crews to share information instantaneously. What the officers see in the field is exactly the information that the dispatchers see.

The new system also tracks duplicate calls, grouping times and locations every time a caller dials 9-1-1.



The new system also tracks duplicate calls, grouping times and locations every time a caller dials 9-1-1. / Nick McGill

Cole said the learning process of the new system may take some time, but so far, there hasn't been any negative effect on response time.



#### **UPDATE: Ravenswood Man Injured in Ohio Explosion**

Updated: Tue 7:56 PM, Jun 24, 2014

WASHINGTON COUNTY, Ohio --Three men were hurt in an explosion at a company in Washington County, Ohio Tuesday.

The explosion happened about 8:50 a.m. at Enviro-Tank Cleaning.

Ohio State Fire Marshal Larry Flowers said the explosion had nothing to do with the process of cleaning a tank, but something as simple as transferring gasoline.



"The truck that they were transferring fluids out of into a storage tank and what they feel very confident about is that during that process there was some vapors that were released and in that area there were several ignition sources and those vapors found its way to one of those ignition sources and then that created the explosion," says Flowers.

The fire marshal added that things can happen with something as simple as static from a cell phone or light wind to push fumes into an ignition source.

The Washington County Sheriff's Office has released the names of the three men injured in the explosion. Kevin S. McClain, 32, of Ravenswood, West Virginia, was flown to Cabell-Huntington Hospital, where he is in the burn center.

Fred Johnston, 53, of Belpre, and Justin Flesher, 33, of Belpre, were treated and released for their injuries.



### Officials start cleanup of two Trumbull gas and oil spills

June 24, 2014

NEWTON FALLS -- Several environmental agencies responded to two spills of gas and oil — one at a gas station in Newton Falls Tuesday morning and one at an oil well in Bristol Township Monday night.

A gas-delivery driver spilled a couple hundred gallons of gasoline while delivering gas at Convenient Food Mart, 321 S. Milton St., at about 11 a.m. Tuesday, according to Deputy Harold Wix, environmental officer with the Trumbull County Sheriff's Office.

The spill put gasoline on the sidewalk and parking lot of the gas station, but it didn't reach the storm drain, Wix said. Officials with the Ohio Environmental Protection Agency and Trumbull County HazMat worked on the cleanup.

The driver of the truck drove off after the spill but was stopped by Lake Milton police. Newton Falls police are investigating that part of the incident and will determine whether any criminal charges will be filed against the driver, Wix said.

A dump-truck load of sand and other materials were used to clean up the gasoline, Wix said.

Officials also were called at 9:11 p.m. Monday to a spill of close to 1,000 gallons of gas and oil from a holding tank at an oil well on state Route 88 just west of Corey-Hunt Road in Bristol Township, Wix said.

Trumbull HazMat went to the scene right away and stopped the spill from getting into a creek, Wix said. Also working at the site were the Ohio EPA and the Ohio Department of Natural Resources.

The spill resulted from a malfunction of the well's holding tank, which was full, Wix said.

Cleanup continued Tuesday morning, with a machine being used to suck up the oil and gas from on top of the soil. Additional cleanup will most likely involve digging up soil to get to the rest, Wix said.

# The Columbus Dispatch

# Toxic algae, now in East Fork Lake, will be part of Ohio's future, expert says

By Kathleen Martini

The Columbus Dispatch • Wednesday June 25, 2014

Lake Erie is going to continue to see huge, harmful algae blooms over the next century, experts said yesterday.

Depending on rainfall and carbon emissions, some data indicate that the lake could experience an 85 percent increase in blooms that stretch 117 square miles or larger, said Jay Martin, a professor of ecological engineering at Ohio State University.

Martin is part of a team of scientists studying the western part of Lake Erie and the Maumee River, from which the most amount of phosphorus floods into the lake.

"If you look at harmful algal-bloom events — that's really what's driving this work — the (algae) have been linked pretty well to what's going on in the Maumee basin," Martin said during an online seminar on the blooms.

Cyanobacteria, also called blue-green algae, are common in most Ohio lakes. They grow thick by feeding on phosphorus from manure, fertilizers and sewage that rain washes from farm fields into nearby streams.

As many as 19 public lakes, including Erie and central Ohio's Buckeye Lake, have been tainted in recent years by toxic algae.

This week, toxic algae warnings were posted at East Fork Lake in southwestern Ohio.

GRAND LAKE
ST. MARYS

TO

BUCKEYE
LAKE

STATE PARK

25 MILES

THE COLUMBUS DISPATCH

The Ohio Environmental Protection Agency found levels of microcystin, a liver toxin produced by blue-green algae, measured at 8.7 parts per billion and 190 parts per billion at two beaches at East Fork State Park, located east of Cincinnati. The state's safety threshold is 6 parts per billion.

Similar warnings are posted at Grand Lake St. Marys in western Ohio and at Buckeye Lake.

Swimming and wading are not recommended at those beaches for seniors, young children and those with compromised immune systems.

Fertilizers used by farmers in the area enter the Maumee River during storms and make their way to Lake Erie. The phosphorus feeds the algae, which can grow to mammoth proportions. In 2011, a bloom stretched 1,600 square miles from Toledo to Cleveland.

Rainfall has been increasing in amount and intensity in recent years, which has contributed to a jump in blooms, Martin said. "There were very few before 2000, and now there's almost been a harmful algal bloom every year."

He said huge blooms — those larger than 585 square miles — should continue to occur at least once every 10 years.

Martin's team uses rainfall predictions, watershed models, carbon emission levels and 36 global climate models to estimate the frequency and size of algae blooms in the coming century.

"I do think climate change has a role," he said.

Thomas Bridgeman, an algae expert at the University of Toledo, studies blooms in Lake Erie.

"There's a lot of variation in blooms over the last 12 years or so, so it's hard to say whether there's a general increasing trend," he said. "But it does look like it."

Mark Bruce, spokesman for the Ohio Department of Natural Resources, said visitors at East Fork can still enjoy themselves.

"You can still boat. People can still play at the beach," he said. "There are still plenty of things that can be done there."

Still, these blooms aren't called harmful for nothing.

"I think the most important thing to consider is the toxins that these blooms can produce," Bridgeman said. "If they weren't toxic, they would just be a nuisance, but the fact that they can produce deadly toxins is the biggest concern."



#### Dark skies rest black bear hunt in Miami Township neighborhood

#### Officers have been tracking it since Friday

WCPO Staff 11:50 AM, Jun 24, 2014

MIAMI TOWNSHIP, Ohio -- Authorities say they have cornered a black bear spotted earlier Tuesday in Miami Township, but they don't consider the animal a threat to anyone's safety.

Hours after the bear's last sighting, Wildlife officers reminded residents of Miami Township to leave the bear alone if they happen to see him, but to enjoy his unusual visit.

"Please do not chase after it and do not shoot it,"
Ohio wildlife officer Gus Kiebel said. "Observe it
from a distance. It's kind of a neat sighting.
Definitely rare for this area. Just don't push it too
hard. Stay back and enjoy it from a distance."



Wildlife officers ended the bear hunt for the night Tuesday along Bypass 28 because it got too dark outside to see.

Clermont County officials received several calls just before 11:30 a.m. of a bear wandering through neighborhoods near Teakwood Drive and Deblin Drive. The Ohio Department of Natural Resources has been tracking the bear since Friday.

Authorities cornered the animal near the Pinebrook Retirement Living community on Wolfpen Pleasant Hill Road in Milford just after 2 p.m. It's described as about 2 years old and 85 pounds.

Resident Kevin Tate said the bear is "the size of a large dog."

In fact, Tate thought it was a dog until he got a closer look.

"I was telling my wife to try and get a quick picture of him, but he took off towards this pumping station which is right at the end of the street here," he said.