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**A Texas Town With More Problems And Few Answers  
Two Years After A Deadly Chemical Explosion, West Finds Closure Almost  
Impossible**

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**A Texas Town With More Problems And Few Answers  
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Impossible**

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**Report**

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## **Dedication**

To my husband, Michael, and my parents, Milan & Jana.

You are the reason why I can follow my dreams. For that, I am eternally grateful.

## **Acknowledgments**

I would like to thank my readers, professors Minutaglio and Dahlby, who guided me through this report.

## **Abstract**

### **A Texas Town With More Problems And Few Answers Two Years After A Deadly Chemical Explosion, West Finds Closure Almost Impossible**

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The University of Texas at Austin, 2015

Supervisors: Tracy S. Dahlby, William D. Minutaglio

The story of West is a saga of a small Texas town seeking closure—and not getting it. Despite an ongoing, two-year-long investigation, the fertilizer plant explosion remains an unsolved mystery. The disaster continues in a form of medical, emotional and financial problems including unresolved insurance claims and lawsuits. Will people in West ever find closure?

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## **Introduction**

It was the evening of April 17, 2013, another seemingly uneventful Wednesday in the small city of West in north-central Texas. Students had long since left school and most people were through with work. Many were headed for weekday church services.

And then, a few minutes before 8 p.m., the earth trembled from an enormous explosion at the local fertilizer plant. A large dark mushroom cloud rose above West—some said it looked like the images of Hiroshima after the world's first atomic bomb leveled the city in 1945. As the blast shook the ground, it registered 2.1 on the Richter scale and left a 93-foot wide crater where the plant once stood. Fifteen people died and over 200 were injured.

A dozen first responders perished, including 10 firefighters. Two people were later found dead in a nearby apartment complex, and one resident of a nursing home died of a heart attack that many residents believe was brought on by the explosion. Almost every one of the town's 2,800 inhabitants was touched in some way by the disaster—property was destroyed, businesses were uprooted, classes were canceled and then there was an invasion from the national media.

Now, two years later, the media has moved on to other stories. The town looks like it has physically healed. Most of the damaged houses are fixed or rebuilt. Local businesses are back up. The hallways in the schools are filled again with children.

But not everything is healed.

Despite the arrival of local, state and federal investigators, all devoting countless hours to solving the mystery of the explosion, the exact cause of the explosion remains unclear. Since May 2013, federal investigators have not released any groundbreaking updates on their progress—aside from the fact that they were still trying to reconstruct the accident at a Fire Research Laboratory in Maryland.

And now, more than 24 months after their world was rocked, the people of West are still grappling with lingering problems: Conspiracy theories course through town—and so do myriad medical, emotional and financial woes. There are also battles with insurance companies, and there are many complex lawsuits.

In the spring of 2015, the story of West, Texas is one of unclaimed peace.

“People here need a closure,” said Chris Hudson, the local chief of police.

## **The Investigation**

The federal Bureau of Alcohol, Tobacco, Firearms and Explosives, along with the State Fire Marshal's Office, embarked on an investigation the day after the explosion. Over 100 investigators eventually came to the site, which was treated as a crime scene for almost a month. Close to 30 agencies contributed, said Rachel Moreno, a spokesperson for the state fire marshal.

“We used an analogy of an archeological dig. We were looking at every piece of material to see if it was a clue to how the fire started,” Moreno said.

The investigators started at the beginning: Focusing on the chemical fertilizer, ammonium nitrate, at the heart of the blast. Texas has had at least three major ammonium nitrate explosions in the last 68 years. “Explosions of this type are not uncommon,” said Michael Krische, professor of chemistry at The University of Texas at Austin.

In 2009, there was a non-lethal explosion in Bryan, Texas. But the biggest blast was in 1947, in what has come to be called The Texas City Disaster. It is considered the greatest industrial disaster in the U.S. history, in which nearly 600 people died and over 5,000 were injured. The explosion sucked planes out of the sky and lifted oceangoing freighters out of the water.

The Texas City Disaster led to massive overhauls in safety regulations and emergency management including how the state responds to hurricanes and terrorist attacks. But the changes in emergency management were apparently not enough to prevent the disaster in West.

Some critics say that Texas' anti-regulatory political culture may be responsible; others say that Texas might not be heeding lessons from its own history.

“We have not learned a lot from the past since these accidents keep happening,” said the local Mayor Tommy Muska. Cynthia Montgomery, a local independent insurance adjuster, adds that she worries that the next one—wherever it occurs—“will even be worse.”

Ammonium nitrate, the compound at the heart of the West disaster, was well known to the investigators who descended on West. Timothy McVeigh employed it in Oklahoma City in 1995, in one of the deadliest domestic terrorism acts in U.S. history, in which more than 160 people were killed and nearly 700 were injured. Terrorists also tried to use ammonium nitrate in an attempt to blow up the World Trade Center in 1993. It was used as a weapon in both World Wars.

But despite its destructive nature, ammonium nitrate is also an essential compound for humanity. It became an important fertilizer that moved worldwide food production to unprecedented levels in the 20<sup>th</sup> Century. “It is responsible for sustaining half the human population,” Kricshe said. “If we were to stop making ammonium nitrate, there would be widespread famine.”

Investigators had focused on the chemical compound—and now they needed to see it as a protagonist in the story of West. They needed to do some detective work to figure out how it got to West, who brought it there, and whether anyone really knew how dangerous it was.

## **Regulation Dilemma**

Investigators searched the local history and learned that the West Fertilizer Co. first began supplying area farmers with ammonium nitrate and other fertilizers in 1962. The farmers were grateful because it meant not having to go to larger cities such as Waco or Hillsboro for the same supplies.

Because the company was privately run and because the plant was obliterated and never revived in West, it was hard to determine exactly how many people worked there—and how much fertilizer it processed. Some media reports indicated that the plant employed nine people and stored 270 tons of ammonium nitrate. The plant's 12,000 square foot, main, building was called the Dry Barn. The plant's owner was Donald Adair, a local farmer who bought the plant in 2004 to prevent it from going out of business. None of his employees died in the explosion because the plant was closed for the day. Plant officials could not be reached for comment.

The plant was originally built away from the city, but as West flourished, more buildings were built closer to the plant: schools, a hospital, a nursing home and even a park where children played. "That's probably when it became dangerous, but nobody really gave it a second thought," Muska said.

By 2013, the plant was less than 1,000 feet outside of West's city limits, but the town could not regulate it and put it under its jurisdiction. That lack of control over facilities that are just outside of town is an issue for many small towns across the nation. Either way, the West fire department always responded to any emergencies at the plant, including the occasional ammonia leaks.

But who exactly regulated the plant?

The West Fertilizer Co. had been subject to various oversight agencies, including the Occupational Safety and Health Administration (which has not responded to repeated inquiries for comment). Its public records indicate that it last inspected the facility in 1985. During that inspection, the plant was fined a total of \$30 for improper storing and handling of anhydrous ammonia, another type of fertilizer.

In October 2013, six months after the deadly explosion, OSHA fined the West Fertilizer Co. \$118,300. The plant was cited for 24 safety violations, including inadequate ventilation and lack of an emergency response plan.

The federal Environmental Protection Agency had fined the company \$2,300 in 2006 for violations of the Clean Air Act -- specifically for lacking a risk management plan. Another state environmental agency inspected the plant the same year after receiving a complaint about a strong anhydrous ammonia smell. Its inspection revealed the plant had been operating without an air quality permit for two years.

In 2011, the federal Pipeline and Hazardous Materials Safety Administration fined the plant for over \$10,000 for using unauthorized tanks to store anhydrous ammonia. They were missing non-flammable gas placards, identification numbers and "NH<sub>3</sub>" (ammonia) markings. On top of that, the plant failed to have a safe plan for transporting hazardous materials. The agency reduced the fine to \$5,250 after the plant took some corrective actions.

The plant failed to report to the Department of Homeland Security that it stored 270 tons of ammonium nitrate in 2013. (Any amount over 400 lbs. of potentially explosive fertilizer has to be reported). It is unknown if the plant was subsequently fined.

And lastly, the Office of the State Chemist used to visit the plant frequently to check that it was properly labeling chemicals. Inspectors issued several violations for fertilizers that did not contain the proper chemical blend.

## **Investigation without Progress**

Into 2013, over 280 leads had been developed and more than 500 interviews conducted. Investigators used everything, including hand sifters, looking for evidence. The accident scene covered over 14 acres, with some debris found approximately 2.5 miles from the site of the explosion. But not a lot of valuable evidence was left.

<b>LIST OF THE MAIN INVESTIGATING AGENCIES</b>
1) Bureau of Alcohol, Tobacco, Firearms and Explosives
2) State Fire Marshal's Office

Table 1: Main investigating agencies

LIST OF ALL ENTITIES THAT ASSISTED IN THE INVESTIGATION
1) West Police Department
2) McLennan County Sheriff's Office
3) McLennan County District Attorney's Office
4) Texas Department of Public Safety – DPS Criminal Intelligence Division
5) Texas Rangers
6) U.S. Attorney's Office, Western District
7) U.S. Environmental Protection Agency
8) Texas Commission on Environmental Quality
9) Texas Department Insurance - Fraud Unit
10) Texas Department of Emergency Management
11) Occupational Safety and Health Administration
12) Texas Parks and Wildlife
13) Texas Office of State Chemist
14) Waco Fire Marshal
15) Hill County Sheriff's Office
16) Texas Task Force I/II – Texas Engineering Extension
17) Drug Enforcement Administration
18) Federal Bureau of Investigation
19) U.S. Postal Police
20) National Institute of Occupational Safety and Health
21) Texas Forest Service
22) Lake Jackson Fire Marshal's Office
23) U.S. Chemical Safety Board
24) Harker Heights Police Department
25) Federal Emergency Management Agency
26) Union Pacific Rail Road
27) U.S. Department of Homeland Security
28) U.S. Army Corp of Engineers

Table 2: Entities that assisted in the investigation

One thing was apparent early in the investigation—an estimated 28-34 tons of the deadly fertilizer had exploded (there were 20-30 more tons in the building, and another 100 tons in a rail car, that did not explode).

In May 2013, the ATF issued a statement that narrowed down the causes to three possibilities. The first one was that a 120-volt electrical system inside the plant had malfunctioned. Another was that a battery failed on a golf cart—and that might have led to a fire. And the last possibility was one that many people did not want to believe—that someone had intentionally set a fire that led to the explosion.

“All the testing is still going on,” said ATF spokesperson Nicole Strong, adding that the investigation could continue into the summer of 2015. She declined to discuss specific findings. And folks in town now wonder if the federal investigators will simply end the investigation with the three possibilities hanging in the air: “I would not be surprised if at some point they say this is as far as it is going to go,” said Robert Payne, president of the Aderhold Funeral Home and a volunteer firefighter.

## **Speculations Run Rampant**

Today, the mayor and others theorize that the explosion could have been prevented.

“If the plant had a sprinkler system, the small fire would not have engulfed the fertilizer plant building,” Muska said.

Moreno pointed out that if the ammonium nitrate had not been stored in wooden bins, it would have been less prone to combustion.

Other theories have proliferated. “Everybody is entitled to their own opinions until we get the facts,” said chief Hudson.

Al Cinek, a retired metal sheet metal worker and a lifelong resident of West, said one of his friends drove by the plant on the day of the explosion and claimed that he saw a bonfire and old palettes being burned.

“No fire should ever be conducted on any of the premises right there,” Cinek said. He believes that a bonfire—in combination with some strong winds—could have triggered the explosion.

Larry Knapek, an editor at The West News, says he has heard that the smoke from the initial fire was so thick that it had particles in it. Knapek has heard that the particles were interacting with the electrical lines that run along the tracks behind the plant.

“When the smoke was drifting by the power lines, it caused the particles to conduct electricity and go back to the plant, which arced in there and blew up,” Knapek said.

David Dunn, a manager of a self-storage facility in Waco and someone whose extended family lives in West, has heard many theories. And he remains skeptical about the ATF's work.

“I just do not see them as investigating,” Dunn said. “I see them as covering up.”

He believes they are trying to find evidence that fits their narrative—and that his cousin's husband, Bryce Reed, was a victim of this strategy. Reed, a paramedic and a first responder who had lived in West, was arrested and charged with possession of an explosive device, 24 days after the tragedy. Even though federal agents eventually determined Reed had no connection to the explosion, he was sentenced to 21 months in federal prison for possessing pipe bomb making material.

Dunn said he saw a photograph of the evidence against Reed. “The ATF actually assembled the device. He did not,” Dunn said. “They found some stuff . . . and they put it together and claimed it was a pipe bomb.” ATF declined to comment on the allegations due to the ongoing investigation.

Meanwhile, there are plenty of other hunches that people talk about—from a military missile hitting the plant, to the explosion being a form of revenge against the West Fertilizer Co.

Muska said he has seen how wild theories can spread: “Kennedy died what, 50 years ago? And they still talk about conspiracy.”

## **Medical Troubles**

Many people in West suffered painful injuries. Payne, for instance, had broken bones in his face, broken teeth, a broken left ankle and elbow, nerve damage in the right shoulder, a severe concussion and a damaged eardrum. Some of his injuries are still not healed. “Coming back after what happened to me was tough and it is still tough,” he said.

Other people are also dealing with disaster-related health problems they never encountered before, including hearing loss.

A. J. Urban, who runs an advertising firm and lives right across from where the plant was, did not have medical insurance. She had to wait a couple of months for insurance to kick in before she could take care of her dislocated shoulder and hearing loss.

“You patch up one thing and before you know it you are patching up something else,” Urban said, adding that she is facing life-long health struggles. She sometimes has nightmares about the terrifying night of the explosion. “I am also still seeing a psychologist, which I never did before in my life.”

Montgomery, the insurance adjustor, fears the explosion contaminated the air with carcinogenic substances. Urban shared her concern: “When everybody was helping everybody, I did not see anybody wearing a mask,” she said.

Their fears are not far-fetched. The Centers for Disease Control and Prevention says exposure to ammonia can sometimes be fatal and first responders should use masks when dealing with leaks.

Both the state and federal environmental agencies monitored air quality the day after the explosion. The initial monitoring detected high amounts of ammonia, but two days later there was no ammonia noted, according to state environmental officials.

But the findings have not tamped down fear, among residents, that the death and cancer rates in West have gone up since the explosion. State health officials say the statistics they have show no such thing.

Andrea Morrow, a spokesperson for state environmental agency, said, “cancer that may be associated with chemical exposure typically develops 20-30 years after the initial exposure.” Her comment suggests it is unlikely that people in West are already experiencing higher cancer rates related to the explosion.

A psychology professor at UT, James Pennebaker, studies how people respond to traumatic events. He said that disasters often result in increased paranoia. “Health concerns are a common result of that,” Pennebaker said.

## **Financial and Legal Hardships**

Against that backdrop of conspiracy theories and health concerns, some people are still trying to get insurance settlements that will help them fix damaged homes – and some people are also resorting to lawsuits.

“Some of the houses are still unlivable, unfixed and un-indemnified,” Montgomery said. “People live in constant terror of a roof falling.” She says that insurance is “probably the most unfair part of this whole catastrophic event.”

One of her clients is a 78-year-old man who has had the same insurance company for 42 years. His house was completely destroyed but his claim is still pending. “They are literally being tortured by their insurance carriers,” Montgomery said.

Payne’s house was a total loss as well and it was underinsured. He and his wife were within few years of having their house paid off. “Now we are back to a 30-year mortgage,” Payne said.

“I can’t begin to tell you how horrific it is that these insurance carriers are not paying their claims,” said Montgomery.

RVOS Farm Mutual Insurance Company, which covers the majority families and businesses in West, did not respond to repeated inquiries for an interview.

By early 2015, lawsuits involving over 200 entities had been filed in the 170th Judicial District Court in McLennan County. Plaintiffs include the injured, families that lost loved ones, homeowners whose homes and property were damaged, and businesses that suffered property damage or had their work interrupted.

The City of West filed a lawsuit in early 2015 against Adair Grain Inc. and companies that produced and sold fertilizer. City officials are alleging that the company was negligent in the way it stored the nitrogen-based fertilizer and did not provide adequate warnings. Meanwhile, Adair Grain, Inc., the parent company of West Fertilizer Co., is both a plaintiff and defendant—it is suing fertilizer producers and sellers.

In October, three families who lost their loved ones will be the first plaintiffs to go to trial. They are suing Adair Grain and the companies that produced and sold the fertilizer. “I believe that plaintiffs are prepared and eager to have a jury in McLennan County hear their stories,” said their lawyer, Zona Jones.

## **Hazy Future**

Despite the lack of answers in West, some say there is a silver lining: The tragedy has started a new conversation on safer handling and storing of ammonium nitrate. While trying to become safer is a positive change to come from this tragedy, it does not do anything for the people in West.

Locals know that many outsiders have already moved on from news about West – and they fear that all the conversations about a safer future will lead nowhere.

“I do not think that something will happen because what happened in West is yesterday’s news,” Muska said. He also said that people in West learned quickly not to wait for an outside help.

Four bills related to the blast are pending in the Texas state legislature. Two of them, authored by state Rep. Kyle Kacal, R-College Station and Rep. Joe Pickett, D-El Paso, are suggesting improving the way plants store ammonium nitrate. Pickett’s bill is more rigorous because it attempts to get state fire officials more involved in regulating and inspecting facilities that store ammonium nitrate.

Other proposals are focused on requiring public liability insurance for anyone who produces, transfers and stores ammonium nitrate, and creating better alert systems in case of chemical leaks. It remains unclear whether any of the bills will pass, but it is clear that none of them will help the people affected by the West explosion.

And that leaves West in limbo –with residents wondering if a cause will ever be found, if their financial and health concerns will be addressed, and whether future tragedies will be averted. For many, the process seems interminable:

“The whole recovery of our small town is taking a lot longer than I think it should,” Muska said.

## References

Cinek Al: Retired Sheet Metal Worker; West Resident

Dunn David: Manager at Pioneer Stor&Lok

Hudson Chris: Chief of Police, City of West Police Department

Jones Zona: Attorney, Provost Umphrey Law Firm LLP

Knapek Larry: Editor, The West News

Krische Michael: Professor of Chemistry, The University of Texas at Austin\_

Montgomery Cynthia: Public Insurance Adjuster

Moreno Rachel: Public Information Officer, State Fire Marshal's Office

Morrow Andrea: Media Relations, The Texas Commission on Environmental Quality

Muska Tommy: Mayor, City of West

Payne Robert: Firefighter, West Volunteer Fire Department; President of Aderhold  
Funeral Home, Inc.

Pennebaker James: Professor of Psychology, The University of Texas as Austin

Strong Nicole: Public Information Officer, Bureau of Alcohol, Tobacco, Firearms and  
Explosives

Urban A.J.: Advertising Business Owner; West Resident

## **Vita**

Andrea Nedorostova was born in Brno, Czech Republic. After graduating from Sportovní Gymnázium Ludvíka Daňka, Brno, Czech Republic, in 2009, she entered Northwestern State University of Louisiana. She received the degree of Bachelor of Arts from Northwestern State University in May 2013. In August, 2013, she entered the Graduate School at the University of Texas at Austin.

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This report was typed by the author.