

U.S. CHEMICAL SAFETY
AND HAZARD INVESTIGATION BOARD

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PUBLIC MEETING

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FLAT TOP LITTLE GENERAL PROPANE EXPLOSION

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THURSDAY

SEPTEMBER 25, 2008

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The Regular Public Meeting
convened in the Tamarack Conference Center
Ballroom, Beckley, WV 25801 pursuant to notice
at 6:30 p.m., John Bresland, Chairman and CEO
presiding.

BOARD MEMBERS PRESENT:

JOHN BRESLAND, CHAIRMAN AND CEO
WILLIAM WARK, BOARD MEMBER
WILLIAM WRIGHT, BOARD MEMBER
GARY VISSCHER, BOARD MEMBER

ALSO PRESENT:

ROBERT HALL, INVESTIGATIONS SUPERVISOR
STEPHEN SELK, INVESTIGATIONS MANAGER
JEFFREY WANKO, INVESTIGATOR IN CHARGE
MARY NIKITYN, INVESTIGATOR
RACHAEL GUNARATNAM, INVESTIGATOR
CHRIS WARNER, GENERAL COUNSEL

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P R O C E E D I N G S

6:29 P.M.

CHAIRMAN BRESLAND: Good evening.

Welcome to this public meeting of the U.S.
Chemical Safety Board, the CSB.

I am John Bresland, Chairman and
CEO of the Board. With me today are Board
Members Gary Visscher, William Wark, and
William Wright. Also joining us is our
General Counsel, Chris Warner, and CSB Staff
Members whose efforts have facilitated this
meeting.

The CSB is an independent,
nonregulatory, federal agency that
investigates major chemical accidents at fixed
facilities. The investigations examine all
aspects of chemical accidents, including
physical causes related to equipment design,
as well as inadequacies in regulations,
industry standards, and safety management
systems.

Following our investigations, we

1 issue safety recommendations which are
2 designed to prevent similar accidents in the
3 future.

4 At this evening's meeting, the CSB
5 Investigation Team will present their findings
6 and the Board will vote on the final report
7 into the January 30, 2007 propane explosion at
8 The Little General Store in Ghent, West
9 Virginia.

10 Following the presentation by the
11 Investigation Team, we'll open the floor to
12 public comment. The meeting will conclude
13 with a discussion by the Board and their vote
14 on the final report.

15 Before we begin, I'd like to point
16 out some safety information. Please take a
17 moment to note the location of the exits from
18 this meeting room. The exits are in the back,
19 I guess the exits are in the back, same way
20 you came in.

21 I also ask that you please mute
22 your cell phones that the proceedings are not

1 disturbed. I'll give you a minute to
2 appropriately mute your cell phones or turn
3 them off.

4 (Pause.)

5 At 10:53 a.m. on January 30, 2007,
6 a propane gas explosion destroyed The Little
7 General Convenience Store in Ghent, West
8 Virginia. The blast killed two emergency
9 responders from the Ghent Fire Department, and
10 two propane service technicians. A volunteer
11 fire fighter was seriously injured, as were
12 four store employees who were inside the store
13 when the gas ignited.

14 As you'll hear this evening,
15 nearly 30 minutes elapsed between the start of
16 the propane release and the explosion. If
17 there had been an evacuation during those 30
18 minutes, all of the lives would have been
19 saved.

20 The main reason we investigated
21 this accident was that there was a tragic and
22 preventable loss of life. Many of you here

1 this evening were affected by the devastation
2 that resulted from this incident. To those of
3 you in the audience who lost family members
4 and friends, or were yourselves injured by the
5 accident, please allow me to extend my deepest
6 sympathies.

7 The process the Board follows is
8 as follows: each independent Board Member has
9 had the opportunity to study the draft report
10 and has come to this meeting with his own
11 opinions. This public meeting is our chance
12 to discuss our opinions about the report and
13 its recommendations.

14 Our objective is to leave here
15 with strong effective recommendations based on
16 the report's findings that will help prevent
17 similar devastating accidents in the future.

18 If anyone in the audience wishes
19 to comment publicly after the investigators'
20 presentation, please sign up at the tables in
21 the check-in area and I noticed that several
22 people had already signed in.

1 I will call your name at the
2 appropriate time. I will first call those who
3 have signed up and then I will open the floor
4 to anyone else who wishes to speak.

5 Please note that we have to limit
6 public comment to three minutes each. Also
7 note that we are not able to take questions
8 for the investigators directly from the
9 audience and so I will ask that all comments
10 be directed to me as the presiding official.

11 If there is a point that is raised
12 in your comment where I believe the
13 investigation staff can provide some immediate
14 clarification, I will ask them to do so.

15 I'd like to thank the team for
16 their diligent work on this investigation and
17 I'd also like to thank the Beckley and Ghent
18 communities for your continued interest in
19 this investigation.

20 I will now recognize the other
21 Board Members for an opening statement.

22 Mr. Visscher.

1 MEMBER VISSCHER: No.

2 CHAIRMAN BRESLAND: Mr. Wark?

3 MEMBER WARK: No.

4 CHAIRMAN BRESLAND: Mr. Wright?

5 MEMBER WRIGHT: No.

6 CHAIRMAN BRESLAND: Thank you. At

7 this time I will ask CSB Investigations

8 Manager Stephen Selk to introduce the

9 Investigations Team.

10 MR. SELK: Good evening, Mr.

11 Chairman, Members of the Board, Mr. Warner,

12 good evening, ladies and gentlemen and

13 officials.

14 The lead investigator is Jeffrey

15 Wanko. Mr. Wanko is a professional chemical

16 engineer and a certified safety professional.

17 He holds degrees from Syracuse University and

18 the Illinois Institute of Technology.

19 To his left is Mary Nikityn, an

20 investigator. Mary was recently enrolled in

21 a doctoral program in psychology and she has

22 experience in hazardous materials regulations.

1 Rachel Gunaratnam is a graduate
2 student in emergency management at the George
3 Washington University in Washington, D.C. She
4 holds degrees from the University of New South
5 Wales in Australia and Boston University as
6 well.

7 Finally, the supervisor is Robert
8 Hall, a former Naval Officer and nuclear
9 reactor operator. Mr. Hall is a graduate of
10 the Pennsylvania State University and also has
11 an advanced degree from the George Washington
12 University. He's a registered professional
13 engineer.

14 Let me assert finally, if I could,
15 that the investigators are wholly impartial,
16 unencumbered by any affiliations or special
17 interests. They seek only to advance public
18 safety. Their objective has been to
19 faithfully reconstruct what happened at The
20 Little General Store and to make practical
21 recommendations to prevent such a thing from
22 happening again here and elsewhere.

1 MR. WANKO: Thank you, Mr. Selk.

2 Chairman Bresland, Members of the Board,

3 ladies and gentlemen, good evening.

4 The Investigation Team is pleased
5 to present the facts, findings, and causes of
6 the tragic propane release and explosion that
7 occurred in January 2007 at The Little General
8 Store.

9 The presentation includes an
10 incident background, and a computer
11 reenactment, the most likely scenario, what
12 occurred on that day. We will have a
13 presentation of the recommendations and we
14 will take Board questions.

15 The Little General Store was a
16 single-story, combination gasoline and
17 convenience store. In 1994, Little General
18 added this portion of the building to
19 accommodate a pizza franchise. At that time,
20 two pizza ovens, both propane fired were added
21 and a single 500-gallon propane tank was added
22 and installed directly against the rear back

1 wall of the building. It's the one here shown
2 in red.

3 At the time of the incident, the
4 propane technician on site was to transfer the
5 remaining 350 gallons of liquid propane from
6 the existing tank to a new tank recently
7 installed here shown in yellow. Tank-to-tank
8 transfers are performed infrequently, but as
9 we discovered, they can potentially be the
10 most hazardous task a propane technician may
11 perform. Any operation of transferring liquid
12 propane can be hazardous because a spill of
13 just one volume of propane, of liquid propane
14 can result in 270 volumes of flammable gas.

15 Little General had three propane
16 suppliers over the years, starting in 1994
17 originally with Southern Sun. Southern Sun
18 was the installer of the original tank and
19 they installed it directly against the rear
20 back wall of the building. In 1996,
21 Ferrellgas, the nation's second largest
22 propane supplier purchased the propane

1 business of Southern Sun, so at the time of
2 the incident the 500-gallon propane tank that
3 was against the rear back wall of the building
4 was controlled, owned, and filled by
5 Ferrellgas.

6 In the fall 2006, Little General
7 made preparations to change propane suppliers
8 from Ferrellgas to ThomsonGas Propane
9 Partners. ThomsonGas Propane Partners was a
10 joint venture between ThomsonGas and Electric
11 Service, a mid-sized propane supplier in the
12 Mid-Atlantic region, and Appalachian Heating,
13 a local heating, ventilation, and air
14 conditioning service based in Bradley, West
15 Virginia.

16 The terms of the venture was such
17 that ThomsonGas supplied propane, propane
18 equipment, and technical support, whereas
19 Appalachian supplied labor. At the time of
20 the incident, the two technicians, the two
21 propane technicians at the site were employed
22 by Appalachian.

1 As you will see in the
2 reenactment, the propane technician on site
3 calls 911 about 15 minutes after the release
4 begins. That call was received by the Raleigh
5 County 911 Center operated by Raleigh County
6 Emergency Services in Beckley. The 911
7 operator dispatched the Ghent Volunteer Fire
8 Department. All of the responders on site
9 prior to the explosion were from the Ghent
10 Volunteer Fire Department.

11 Following the explosion,
12 departments from Beaver, Princeton, and
13 Beckley, West Virginia responded and later in
14 the day, the Office of the State Fire Marshall
15 arrived and took command of the scene.

16 The team would like to acknowledge
17 the cooperation of the following agencies:
18 first and foremost, Chief Jim Belcher and the
19 entire Ghent Volunteer Fire Department;
20 Raleigh County Office of Emergency Services;
21 Sterling Lewis and his entire staff at the
22 Office of the State Fire Marshall; the West

1 Virginia State Police; the United States Fire
2 Administration; the Bureau of Alcohol,
3 Tobacco, Firearms and Explosives; and the U.S.
4 Occupational Health and Safety Administration,
5 OSHA.

6 The Investigation Team used a
7 thorough process to reach our conclusions. We
8 conducted 64 interviews of witnesses to the
9 event and individuals from the propane
10 industry and emergency services. Hundreds of
11 documents were reviewed by the team provided
12 by the parties involved.

13 Evidence was preserved and
14 protected and when protocols were developed it
15 was tested, including the integrity of the
16 tank, and the function of the liquid
17 withdrawal valve.

18 Finally, the team researched
19 regulatory and policy requirements in West
20 Virginia and around the nation, corporate
21 policies, emergency response guidelines,
22 propane incident experience across the U.S.,

1 and current industry guidelines for propane
2 technicians.

3 In keeping with the mission of the
4 CSB to prevent recurrence of a tragedy such as
5 the one at Ghent, the analysis led the team to
6 five principal issues. First, we investigated
7 the liquid withdrawal valve, why and how it
8 released the contents of the tank on that day;
9 second, the placement of the propane tank and
10 how we believe it contributed to the incident;
11 third, the training of the propane service
12 technicians, how they are trained and the
13 basic functions of their jobs as well as how
14 they are trained to respond to emergencies
15 that may arise during the course of their
16 work; and finally, how emergency responders
17 and 911 operators are prepared to handle
18 propane emergencies, the tools they have,
19 their training, and their experience.

20 The investigative process allowed
21 the team to map the known events, facts on
22 that morning. Based on this information, the

1 team proposed hypotheses and tested those
2 hypotheses against the known events and
3 against the witness statements. Using this
4 information, the team developed the most
5 likely scenario of events on that morning.
6 The team developed the following computer
7 reenactment based on that most likely
8 scenario. The reenactment is in two parts.
9 The first is a history of the tank and what
10 was to occur on that morning. Second is what
11 we believe did occur on the morning of the
12 incident.

13 I may caution the audience, even
14 though this is computer animation, it is
15 rather intense. The reenactment forms the
16 core of the CSB safety video that will be
17 distributed in the near future to further
18 reach stakeholders in the propane industry and
19 emergency response community.

20 (Computer presentation begins.)

21 NARRATOR: The Little General Gas
22 Station and Convenience Store was located on

1 Flat Top Road in Ghent. Inside the wood
2 framed building the store sold soft drinks,
3 magazines, and snacks, as well as pizza which
4 was cooked in two propane-fired ovens.

5 In 1994, the Southern Sun company
6 installed a 500-gallon propane tank against
7 the back wall of the store. Southern Sun sold
8 its propane business to Ferrellgas in 1996.
9 The logo on the tank was changed, but the tank
10 itself was left in place.

11 Years later, in January 2007, The
12 Little General Company changed propane
13 providers from Ferrellgas to ThomsonGas.
14 Appalachian Heating, a local firm selling
15 propane for ThomsonGas installed a new tank
16 ten feet from the building. There were still
17 about 350 gallons of propane in the old tank
18 which Appalachian Heating intended to transfer
19 through a special valve hose and pump to the
20 newly installed ThomsonGas tank.

21 To make such a transfer, a
22 technician must first unscrew a safety plug

1 from the top of the liquid withdrawal valve on
2 the tank to be emptied. The safety plug has
3 a small hole in its side called a tell tale.
4 Small amounts of propane flowing through the
5 hole warn that a dangerous release of
6 pressurized liquid propane is likely to occur
7 if the plug is completely removed. So if
8 propane is seen, the plug should be
9 retightened. If no propane is observed
10 escaping the plug may be removed and a valve
11 with a special fitting is then threaded into
12 the liquid withdrawal valve. This special
13 fitting depresses a spring-loaded mechanism
14 allowing propane to flow through the valve and
15 into the hose to transfer the propane.

16 The CSB determined that on the day
17 of the accident, several factors combined to
18 turned what should have been a routine tank
19 exchange into a tragedy. On the morning of
20 January 30, 2007, two technicians from
21 Appalachian Heating arrived to put the new
22 tank into service. The lead technician then

1 departed for another job site, leaving an
2 inexperienced junior technician to prepare for
3 the transfer of propane unsupervised.

4 At about 10:25 a.m., the junior
5 technician began to unscrew the safety plug
6 from the liquid withdrawal valve, a valve the
7 CSB would later determine was permanently
8 stuck in the open position. Propane likely
9 flowed out of the hole in the plug, but the
10 technician had not been trained on the
11 importance of checking for the escaping gas.

12 Immediately, as the technician
13 removed the plug, a jet of propane sprayed
14 upward through the valve, a billowing white
15 cloud of flammable propane vapor formed behind
16 the store. The propane struck the eaves of
17 the building and flowed into the store through
18 vents in the roof overhang and directly into
19 the restrooms through two vent pipes. The
20 flammable gas also diffused down through the
21 ceiling. The gas, colored gray here for
22 illustration, was invisible to the employees

1 inside, but they noted the spreading odor
2 associated with propane.

3 The dense vapor also accumulated
4 at ground level around the tank and the
5 foundation of the building. The technician,
6 standing in the midst of the propane cloud,
7 was unable to stop the release due to the
8 force of the jet. Over the next almost half
9 hour, all four store employees remained inside
10 and the technician stayed by the tank as
11 others responding to the propane release
12 arrived. There was no evacuation as propane
13 continued to escape from the tank.

14 At 10:28 a.m., shortly after the
15 leak began, the junior technician called the
16 lead technician informing him of the
17 situation. At 10:31, the lead technician
18 called ThomsonGas Technical Support for
19 guidance. The lead technician then called the
20 junior technician back and likely told him to
21 call 911. At 10:40 a.m., the junior
22 technician made a 911 emergency call.

1 "911, what is your emergency?"

2 He told the operator "I need the
3 fire department down at The Little General
4 Store in Ghent. I need a -- I've got a
5 propane leak. I need their help to secure the
6 area." He went on to say "I work for
7 Appalachian Heating. We've had a disfunction
8 in the tanks and I have a leaky tank."

9 At 10:43 a.m., the county 911
10 operator broadcast the report of a propane
11 leak.

12 "110, 110, Flat Top Lake and Ghent
13 to Little General. Report of a propane leak."

14 Four minutes later at about 10:47
15 a.m., a Ghent Volunteer Fire Department
16 Captain arrived. He ordered the store to
17 close. The employees turned off the gasoline
18 pumps, locked the door and remained inside.
19 They posted a sign on the door reading "Store
20 closed due to gas leak." Despite the imminent
21 danger, no one inside or outside the building
22 evacuated.

1 Next two emergency medical
2 technicians arrived in an ambulance. They
3 went to the tank to examine the technician for
4 a frost bite injury, likely caused by contact
5 with the liquid propane. Just after 10:50
6 a.m., the lead technician returned to the
7 scene and joined the junior technician at the
8 leaking tank. A short time later, another
9 volunteer fire fighter arrived in his personal
10 vehicle and met the others at the tank. It
11 was now approaching 10:53 a.m.

12 The two propane technicians
13 remained near the leaking tank. The Fire
14 Captain, the fire fighter, and an emergency
15 medical technician stood nearby. The other
16 EMT directed traffic away from the store. The
17 four employees waited inside.

18 The Captain told the fire fighter
19 make sure everybody is out, okay? But 30
20 seconds later, as the fire fighter walked
21 toward the store, the propane found an
22 undetermined ignition source and exploded.

1 "911, what is your emergency?"

2 "The propane tank blew up. The
3 building is gone."

4 The explosion leveled The Little
5 General Store, propelling building fragments
6 in all directions. The propane tanks landed
7 more than 50 feet away.

8 (Computer presentation ends.)

9 MR. WANKO: Chairman Bresland,
10 this is the scene that confronted responders
11 who arrived after the explosion.

12 During our investigation we
13 identified a number of key findings that need
14 to be highlighted and explained. The team
15 determined that the valve, the liquid
16 withdrawal valve was jammed in the open
17 position. Our final examination of this
18 valve, in our final examination of this valve,
19 we found that a manufacturing defect likely
20 caused the valve to jam. We found that a part
21 of the internal mechanism was smaller than
22 specified by the manufacturer causing the

1 valve stem to seize. When stuck open, only
2 the plug stopped propane from releasing
3 uncontrollably.

4 Something is wrong with my
5 PowerPoint.

6 (Pause.)

7 Excuse me. There we go. Thank
8 you. Thank you.

9 This is a picture of the actual
10 valve plug that the technician removed on the
11 day of the incident. You can clearly see the
12 tell tale drilled through the threaded portion
13 of the plug. This style of valve using a
14 safety plug is no longer manufactured and this
15 manufacturer is no longer doing business.

16 Both federal and West Virginia
17 requirements stated that 500-gallon propane
18 tanks must be located at least 10 feet from
19 buildings. Tanks larger than a thousand
20 gallons must be even further away. However,
21 the Ferrellgas tank sat out of compliance with
22 this requirement for more than 12 years. The

1 tank location was critical to this incident.
2 The propane jet from the tank had a direct
3 pathway into the building from both the vented
4 roof overhang and the bathroom vents. These
5 pathways allowed large quantities of propane
6 to enter both the attic space and the occupied
7 portion of the building.

8 Propane service technicians have
9 the potential to introduce significant hazards
10 to homes and businesses around the United
11 States where they install and service their
12 propane tanks. But the team found that West
13 Virginia and 35 other states do not require
14 training for propane service technicians, nor
15 any certification or qualification.

16 Furthermore, the team found that
17 the most applicable national standards from
18 OSHA and the National Fire Protection
19 Association state that propane technicians and
20 those transferring propane must be trained.
21 However, these requirements do not list
22 training criteria or curricula and do not

1 mandate knowledge or skills testing.

2 Finally, the team determined that
3 the lead technician was called back to the
4 scene in response to the emergency, however,
5 propane technicians around the nation are
6 generally not trained in propane emergency
7 response. The best course of action here was
8 to evacuate. However, neither propane
9 technician was trained to know this.

10 The team examined propane incident
11 frequency through the National Fire Incident
12 Reporting System and found that a propane
13 emergency requiring fire department response
14 occurs nearly every day across the United
15 States. Propane, we found, is the third most
16 common material involved in hazardous
17 materials incidents in the nation. And fire
18 fighters around the country are very likely to
19 encounter a propane emergency at some point in
20 their careers.

21 Because of the likelihood of fire
22 fighters responding to hazardous materials

1 incidents, West Virginia, similar to most
2 states, requires hazardous materials incident
3 response training for its fire fighters.

4 However, Mr. Chairman, the training
5 requirement is for a minimum of four hours of
6 instruction with no requirement for
7 recurrence. Fire fighters in West Virginia
8 take this course early in their careers and
9 may never receive a refresher course.

10 The Captain who responded first to
11 the release at The Little General had last
12 attended hazardous materials response course
13 in 1998, nine years before the incident.

14 More specifically, the propane
15 industry has developed a propane emergency
16 program the textbook to which is provided free
17 to fire departments around the United States.
18 In West Virginia, this course is given by both
19 West Virginia University and the Regional
20 Education Services Agency. However, it is
21 voluntary for fire fighters. The team found
22 that neither the fire fighters nor the EMTs

1 who responded to the initial report of a
2 propane leak had received this training.

3 Throughout the United States, 911
4 operators act as conduits of information.
5 They receive information from callers and
6 relay it to responders. Additionally, they
7 give information to callers to assist them
8 prior to the arrival of the emergency
9 responders. To assist the 911 operators with
10 the collection and dispensation of
11 information, prewritten guide cards are
12 available.

13 911 operators often give callers
14 vital first aid information on how to
15 stabilize and calm victims before emergency
16 services arrive. This information comes from
17 a guide card. The team found that had a guide
18 card for propane existed, events may have
19 progressed differently. However, there is no
20 guide card to help 911 operators collect
21 information or dispense lifesaving advice for
22 callers reporting propane emergencies.

1 Finally, there exists guidance
2 from both the United States Department of
3 Transportation and the propane industry on
4 actions to take during propane emergencies.
5 Both sources recommend evacuation as the first
6 step with assessment from a safe distance as
7 the second step.

8 In the case of the DOT, the
9 initial safe distance is 330 feet and then in
10 the case of a large spill or release like the
11 one at Ghent an additional half mile downwind
12 is recommended.

13 Members of the Board, the team has
14 taken the facts and findings of this case and
15 based on our analysis determine there to be
16 three basic causes of the fatalities and
17 injuries in this incident. We hope that
18 members of the propane industry and emergency
19 response community will take these causes and
20 learn from them as a means of preventing
21 future tragedies such as the one in Ghent.

22 The Investigation Team concluded

1 that the placement of the propane tank was
2 critical. As you saw in the reenactment,
3 liquid propane and propane vapor had two
4 direct pathways for large quantities to enter
5 the building. The team recognizes that small
6 quantities had multiple routes of entry into
7 the building. But had the tank been separated
8 by the required ten feet, large quantities of
9 propane likely would not have entered the
10 building in quantities sufficient enough to
11 cause the explosion.

12 The team determined that the
13 Ferrellgas inspection audit program did not
14 identify the tank location as a hazard. The
15 hazard remained uncorrected for more than ten
16 years.

17 The junior propane technician was
18 not formally trained and left alone to work on
19 the day of the incident. He was put in a
20 position to act, but had no experience in the
21 transfer task for which he was preparing. As
22 I mentioned earlier, the transfer is

1 infrequent and hazardous. The junior
2 technician was only five or six weeks on the
3 job and without formal training he was ill-
4 prepared to perform the transfer or act when
5 the emergency arose.

6 Therefore, the team determined that
7 Appalachian's failure to formally train the
8 technician prior to allowing him to work alone
9 is a cause in the incident.

10 Finally, all available guidance on
11 propane releases from the Department of
12 Transportation and the propane industry give
13 the first step in response to a propane
14 release as evacuation to and assessment from
15 a safe distance. Those who responded
16 including the fire fighters, EMTs, and the
17 lead propane technician had no recent training
18 in their careers on hazardous materials
19 releases and had none on propane releases
20 specifically.

21 Therefore, the team determined
22 that responder training was not sufficient to

1 help them to recognize the need for immediate
2 evacuation during a liquid propane release.

3 Members of the Board, this
4 concludes the Investigation Team's summary of
5 the findings and causes of the tragic
6 incident. We'd be happy to take your
7 questions.

8 CHAIRMAN BRESLAND: Thank you, Mr.
9 Wanko.

10 Let's start to my left with Mr.
11 Wright.

12 MEMBER WRIGHT: Thank you, Mr.
13 Chairman.

14 Mr. Wanko, do you know how long
15 the ten-foot placement rule has been in
16 existence?

17 MR. WANKO: I don't, but I can
18 tell you I have a textbook in my office from
19 1952 and it is listed in that textbook as the
20 requirement of ten feet for 500-gallon propane
21 tanks.

22 MR. WANKO: Thank you. That's all

1 I have, Mr. Chairman.

2 MR. WANKO: Mr. Visscher.

3 MEMBER VISSCHER: Thank you, Mr.
4 Chairman.

5 Jeff, why did the team conclude
6 that had the tank been located ten feet away
7 that this event likely would not have
8 occurred?

9 MR. WANKO: As you saw in the
10 reenactment, witnesses to the event described
11 a column, a distinct column of propane liquid
12 and vapor striking the eaves of the building
13 and cascading, billowing down, collecting on
14 the ground. This is very -- this is exactly
15 what we would expect and exactly how we expect
16 propane to behave during a release such as
17 this, a straight column up and cascading
18 downward collecting at ground level.

19 Had the tank been moved ten feet
20 from the building, that jet of propane from
21 the tank would not have been striking the
22 eaves of the building and entering through the

1 vented, perforated eaves and entering the
2 bathroom vents.

3 MEMBER VISSCHER: The propane is
4 heavier than air, so it would gather around
5 the ground if it had been further away from
6 the building, I guess.

7 MR. WANKO: That's correct.

8 MEMBER VISSCHER: So you still
9 would have had a cloud, but it wouldn't have
10 risen up the wall or been sprayed into the
11 building.

12 MR. WANKO: Absolutely. All the
13 other points of entry into the building were
14 diffusive in nature and they weren't as
15 forceful as we had with the tank directly
16 against the back wall of the building.

17 MEMBER VISSCHER: Did the team
18 make a calculation as to how much propane it
19 would take to have -- in the building, to have
20 the kind of explosion that occurred?

21 MR. WANKO: No, we did not do that
22 calculation, but from a quantitative

1 standpoint. From a qualitative standpoint
2 about 1 or 2 20-gallon -- 20-pound propane
3 tanks that we use for our grills at home was
4 enough to cause the explosion.

5 MEMBER VISSCHER: One or two sort
6 of barbecue grill tankfuls would have been
7 enough to cause an explosion like that?

8 MR. WANKO: Correct.

9 MEMBER VISSCHER: Did the company,
10 Appalachian, have any written work procedures
11 that people were required to follow either in
12 terms of procedures for this kind of work or
13 requirements regarding the supervision of the
14 junior technician such as was on the site?

15 MR. WANKO: We requested any
16 written procedures or protocols from
17 Appalachian and they were unable to provide
18 any. All of their information on their --
19 what work they were doing was coming from
20 Thomson, but Appalachian themselves had no
21 written protocols or procedures.

22 MEMBER VISSCHER: Had they been in

1 this business very long?

2 MR. WANKO: The agreement between
3 ThomsonGas and Appalachian, I believe
4 finalized in August of 2005.

5 MEMBER VISSCHER: Last question,
6 with regard to the valve, you said that the
7 manufacturer of it is no longer in existence.

8 MR. WANKO: Correct.

9 MEMBER VISSCHER: And the valve is
10 no longer manufactured?

11 MR. WANKO: Correct. The name --
12 the name of that company still exists. The
13 name and assets of the company were purchased
14 by another entity and the name exists, but the
15 company that manufactured the valve that was
16 on the Ferrellgas tank on that day is no
17 longer doing business.

18 MEMBER VISSCHER: Is there any way
19 to see how many of these valves are out there
20 in use and what to do about that?

21 MR. WANKO: Well, with about 3500
22 propane marketers around the United States,

1 it's a large undertaking, but one that we
2 didn't feel was necessary to go after in this
3 case. We felt that drawing attention to the
4 valves themselves may create even greater
5 hazards with propane marketers around the
6 United States trying to empty the tanks and
7 get these valves out of service.

8 You know what we were going at in
9 this case was the people and fixing
10 systemically the gaps we saw in the training
11 of propane technicians and training the
12 emergency responders to properly and
13 adequately respond to these incidents when
14 they occur because as we found, propane
15 emergencies are common. They are happening
16 every day across the United States.

17 MEMBER VISSCHER: Thank you, Mr.
18 Chairman.

19 MR. WANKO: Mr. Wark.

20 MEMBER WARK: Yes, I have a couple
21 of questions. Did you decide not to make any
22 recommendations with regard to the valve and

1 I think you've pretty much just answered that.

2 I am curious. It appeared from
3 the animation and the actual 911 call that
4 there was a second call after the explosion.
5 Who made that call?

6 MR. WANKO: I don't know. There
7 were many, many calls after the explosion to
8 the 911 Center. They were flooded, but we
9 didn't find out who made that first call or
10 the call that was in the video.

11 MEMBER WARK: So that was just one
12 of many.

13 MR. WANKO: Many.

14 MEMBER WARK: Did you find any
15 instances where tanks are stored up against
16 the buildings in violation of the 10-foot
17 rule?

18 MR. WANKO: Well, we know there
19 was one other tank that was controlled by
20 Ferrellgas at Little General's Alderson, West
21 Virginia store that had also been installed
22 directly against the back wall of the

1 building. But because there are about 17
2 million propane installations around the
3 United States we made no attempt to quantify
4 that on a national level.

5 MEMBER WARK: Okay, that's all I
6 have. Thank you, Mr. Chairman.

7 CHAIRMAN BRESLAND: Getting back
8 to the ten feet from the wall requirement, can
9 you just clarify for me the legal requirement
10 that there is there. I understand it's both
11 OSHA and NFPA. But it's not something that is
12 voluntary, it is a legal requirement that the
13 tank be ten feet away from the wall?

14 MR. WANKO: That's correct, both
15 in West Virginia -- West Virginia has codified
16 the appropriate NFPA standard in NFPA 58 into
17 their Fire Code and we have back to at least
18 1967 that that was codified into their Fire
19 Code. So that requirement has been on the
20 books in West Virginia since at least then and
21 OSHA incorporated NFPA 58 into their rules in
22 1972, so that's been a federal requirement

1 since at least 1972.

2 CHAIRMAN BRESLAND: A question
3 about the animation, in the animation you
4 discussed, and also in your presentation you
5 discussed the opening of the plug on top of
6 the tank and I guess I'm puzzled as to why
7 someone would be opening that plug, there
8 would be a release of propane that would be a
9 warning that there's a problem with the valve
10 underneath and at that point he wouldn't just
11 close it again and go back to square one?

12 MR. WANKO: Well, that is why the
13 tell tale on that plug exists. However, we
14 determined in our analysis that the junior
15 technician had no training on the function of
16 that plug or the valve. The plug itself is --
17 has only two or three threads of engagement
18 and so it doesn't take a lot to get that plug
19 out of the valve. With no training, he
20 probably didn't expect a release and simply
21 spun the plug off.

22 CHAIRMAN BRESLAND: Thank you.

1 Any other questions from the Board Members?

2 Okay, please proceed.

3 MR. WANKO: Thank you. Now I'd
4 like to introduce Mary Nikityn who will
5 present the recommendations.

6 MS. NIKITYN: Thank you,
7 Investigator Wanko.

8 Chairman Bresland, Members of the
9 Board, ladies and gentlemen, Investigator
10 Wanko has presented to you the facts,
11 findings, and causes from the CSB's
12 investigation into the tragic explosion that
13 occurred at The Little General Store in Ghent.
14 The Chemical Safety Board investigation does
15 not, however, end with a reconstruction of the
16 facts of the case. Rather, our mission is
17 prevention, prevention of future accidents and
18 future loss of life.

19 To that end, an integral part of a
20 CSB investigation is to make recommendations.
21 Our recommendations are designed solely to
22 effect change in ways we believe will prevent

1 future accidents and future loss of life.

2 Chemical Safety Board

3 recommendations are made to government,

4 industry, companies, professional

5 organizations, in short, to the recipients we

6 believe have the most potential to effect

7 positive change in the future.

8 Mr. Chairman, Members of the

9 Board, you have seen the Investigation Team's

10 reconstruction of the propane explosion. You

11 have heard our findings and the root causes we

12 discovered. At this time, and in light of

13 these findings and causes, the Investigation

14 Team will present a series of proposed

15 recommendations.

16 Our first recommendation is to the

17 Governor and Legislature of the State of West

18 Virginia. The Investigation Team recommends

19 that the state require training and

20 qualification for all propane service

21 technicians including those who dispense and

22 deliver propane, install and service propane

1 systems, and appliances and operate bulk
2 propane plants.

3 Our next recommendation is to the
4 West Virginia Fire Commission. We recommend
5 that the commission require annual hazardous
6 materials response refresher training for all
7 fire fighters in West Virginia. Additionally,
8 we recommend that the Fire Commission require
9 fire departments to perform annual hazardous
10 materials response drills.

11 To the West Virginia Office of
12 Emergency Medical Services, the Investigation
13 Team recommends that annual hazardous
14 materials response refresher training be
15 required for all emergency medical personnel
16 in West Virginia.

17 To the National Fire Protection
18 Association, we recommend that the NFPA
19 clarify the liquified petroleum gas code, NFPA
20 58, to specify competencies and testing
21 requirements for propane service technicians,
22 including performance evaluation and written

1 examination.

2 To the Association of Public
3 Safety Communications Officials, the
4 Investigation Team recommends that a guide
5 card be developed specifically for propane
6 emergencies to assist 911 operators in
7 exchanging vital information on propane
8 emergencies.

9 To the West Virginia E911 Council,
10 we recommend that the Council work with the
11 National Propane Gas Association to develop
12 and distribute propane emergency guidance for
13 use by all regional, county, and municipal
14 emergency communication centers in West
15 Virginia.

16 The Propane Education and Research
17 Council is a national organization funded by
18 the sale of odorized propane. Its goal is to
19 promote the safe use of propane in the U.S.
20 We recommend that The Propane Education and
21 Research Council revise its certified employee
22 training program to address the transfer of

1 liquid propane from tank to tank. We
2 recommend that the Council either provide
3 specific procedures for tank-to-tank transfer
4 or prohibit tank-to-tank transfer.

5 Also to The Propane Education and
6 Research Council, we recommend that the
7 certified employee training program be revised
8 to include emergency response guidance for
9 propane service technicians.

10 To the National Propane Gas
11 Association, the Investigation Team recommends
12 that the NPGA request a letter of
13 interpretation from the United States
14 Occupational Health and Safety Administration,
15 OSHA, to determine if the certified employee
16 training program satisfies OSHA's propane
17 training requirements.

18 Also, to the National Propane Gas
19 Association, we recommend that the NPGA work
20 with the West Virginia E911 Council to develop
21 propane emergency guidance.

22 Finally, to Ferrellgas, the

1 Investigation Team recommends that Ferrellgas
2 establish and implement a comprehensive safety
3 management system that will include an
4 auditing program, the tracking of audits,
5 inspections, and corrective actions, trend
6 analysis, using this audit and inspection
7 data, reporting of the results to Ferrellgas
8 management and board of directors, and a
9 mechanism for third party auditing.

10 Chairman Bresland, Members of the
11 Board, this concludes the series of
12 recommendations made by the team. At this
13 time, we would be happy to take your
14 questions.

15 CHAIRMAN BRESLAND: Thank you very
16 much. Let's again start with Mr. Wright for
17 questions.

18 MEMBER WRIGHT: I don't have any
19 questions, Mr. Chairman.

20 CHAIRMAN BRESLAND: Mr. Visscher?

21 MEMBER VISSCHER: Thank you, Mr.
22 Chairman.

1 I'd like a little clarification on
2 the recommendations regarding the certified
3 employee training program.

4 CHAIRMAN BRESLAND: Are these
5 questions going to Mary or to Jeff?

6 MEMBER VISSCHER: Either one of
7 you, to either one of you.

8 Explain to all of us a little bit
9 about who the CEPT is and how they're funded.
10 It's my understanding they're -- I think Mary
11 said they're funded through a charge on every
12 gallon of propane that's --

13 MR. WANKO: That's correct. PERC
14 is chartered by Congress to promote the safe
15 use of propane as a fuel in the United States.
16 Half a cent of every gallon of odorized
17 propane that's sold in the United States goes
18 to PERC for their annual funding.

19 MEMBER VISSCHER: And they have an
20 existing training program for propane service
21 technicians?

22 MR. WANKO: Yes. The certified

1 employee training program that Mary alluded is
2 what is considered I guess the national
3 propane program, the curriculum of which is
4 prepared by PERC and then it is administered
5 by the National Propane Gas Association and
6 their affiliates throughout the United States.

7 MEMBER VISSCHER: And we're really
8 making at least two recommendations here in
9 the sense that we're recommending that that
10 training curriculum be expanded some to
11 include emergency response guidance and also
12 on the transfer issue. And then we're also
13 recommending that the State of West Virginia
14 adopt it or something similar as a requirement
15 for propane technicians in West Virginia.

16 MR. WANKO: If they feel that's
17 the best way to go about it, yes.

18 MEMBER VISSCHER: And just to
19 clarify, I mean people in West Virginia are
20 currently paying the half cent already. It's
21 just -- so -- they're paying it in order to
22 help develop the curriculum, but the

1 curriculum is not currently being utilized
2 necessarily at least --

3 MR. WANKO: That's correct.

4 MEMBER VISSCHER: For propane
5 technicians.

6 MR. WANKO: That's correct.

7 MEMBER VISSCHER: Thank you, Mr.
8 Chairman.

9 CHAIRMAN BRESLAND: Mr. Wark.

10 MEMBER WARK: I have one question
11 concerning the recommendation to the
12 Association of Public Safety Communications
13 Officials. We talk about a guide card for the
14 911 operators and that the Propane Education
15 and Research Council's certified employee
16 training program may be used as a model. Can
17 you tell us some of what's in that model? Do
18 you have any --

19 MR. WANKO: Section 1 of the
20 Propane Emergency -- I'm sorry -- of CETP,
21 Certified Employee Training Program, has a
22 model questionnaire, if you will, a single-

1 page questionnaire that's to be used by
2 propane suppliers around the United States.
3 If they were to get calls from their customers
4 asking questions such as can you smell propane
5 in the house? Can you see the release? Can
6 you hear the release? Is it safe to shut it
7 off? There's a whole series of questions that
8 PERC has developed for use by propane
9 companies around the U.S.

10 We found that to be an excellent
11 model and if some of the questions in that
12 model had been used in Ghent, if that tool had
13 been available, then maybe things would have
14 progressed differently. And that is the
15 jumping off point that we would like to see
16 for the E911 Council and for MPGA in working
17 together.

18 MEMBER WARK: So in addition to
19 asking the questions, there's, I assume,
20 something in the guide about actions to be
21 taken if, for instance, they do smell gas or
22 something?

1 MR. WANKO: That's correct. After
2 a series of questions is asked, five or six
3 questions, then there's a brief paragraph that
4 the operator can use, can read to the caller,
5 based on the information that you've given me,
6 we recommend that you leave the premises and
7 call us from a neighbor's house or call 911,
8 it reads something like that.

9 MEMBER WARK: That's all I have,
10 Mr. Chair.

11 CHAIRMAN BRESLAND: Thank you. I
12 don't have any questions.

13 It's now time for an opportunity
14 for members of the public to comment on the
15 accident and on our report. I would like to
16 remind you of something I did say earlier in
17 the meeting and we are limiting public comment
18 to three minutes. We are also -- we're not
19 able to take questions directly to the
20 investigators. If you have a question, it
21 should be directed to me and if it's
22 appropriate then I would direct that question

1 to the investigators for their answer.

2 So I have two people listed as
3 speakers and let me start with Hazel
4 Burroughs.

5 She has decided not to speak.

6 And a second questioner is Elder
7 Craig L. Dorsey, Sr. I'm sorry if I
8 pronounced that incorrectly. Please come up.
9 Thank you.

10 MR. DORSEY: Okay, I'm sitting
11 here and I'm just listening. I got just a
12 question or two. On the tanks, like the
13 gasoline tanks they have an emergency shut-off
14 valve. How come the tanks wasn't required
15 emergency shut-off valve there? And then my
16 question would be we've been listening to
17 recommendations of what? The Fire Department
18 and propane and all of this you do, but what
19 is the responsibility of the store as to the
20 update on the tanks and everything?

21 My understanding is this tank was
22 11 years old, so why wasn't the procedures

1 followed up to keep the tanks operational?

2 CHAIRMAN BRESLAND: Let me direct
3 the first question to Mr. Wanko. The first
4 question was was there an emergency shut-off
5 high flow valve on the tank and if so, why did
6 it not work?

7 MR. WANKO: There are no emergency
8 shut offs in the 500-gallon propane tanks.
9 There are high-level indicators. There are
10 emergency indicators such as the tell tale in
11 this case that would give one a warning of an
12 emergency in the tank, but there's no way to
13 or there's no system right now for -- to shut
14 off the flow.

15 The valve that released the
16 propane in this case, the liquid withdrawal
17 valve, as we said, had the tell tale drilled
18 through the plug. It also had another
19 feature, an excess flow feature. There was
20 another spring-loaded mechanism in the valve
21 that would lift up if flow through the valve
22 reached or exceeded 20 gallons per minute. In

1 our examination of the valve, that excess flow
2 feature had a elastomeric gasket basically.
3 That gasket had corroded and was crumbling and
4 could not seal the valve when the release
5 began.

6 CHAIRMAN BRESLAND: If I can
7 clarify what you said, there was an excess
8 flow valve on the tank similar to an excess
9 flow valve that might be on a rail car, for
10 example, if a rail car is involved with an
11 accident and the valve is knocked off, but you
12 say that that excess flow valve was not
13 operating or did not operate properly?

14 MR. WANKO: That's correct.

15 CHAIRMAN BRESLAND: Okay.

16 MEMBER WRIGHT: If I may, Mr.
17 Wanko, in essence, if that valve had not been
18 defective, and had operated properly, it would
19 have acted as a shut-down valve, is that
20 correct? Prior to the attendant putting in
21 the release valve?

22 MR. WANKO: If flow exceeded 20

1 gallons per minute, then that could have shut
2 off the flow, the liquid flow from the valve,
3 yes.

4 MEMBER WRIGHT: No, I mean if the
5 valve had not been defective, if the spring
6 had operated properly and it had seated
7 properly, we wouldn't have an escape of
8 propane in the first place, is that correct?

9 MR. WANKO: That's correct.

10 MEMBER WRIGHT: Thank you.

11 CHAIRMAN BRESLAND: The second
12 part of Mr. Dorsey's question had to do with
13 the responsibility of the store and I would
14 like to know if the investigators had any
15 comment on that question?

16 MR. WANKO: Well, we certainly
17 explored the role of The Little General and
18 The Little General employees in this incident.
19 We found though that their actions on that day
20 were, although as you stated this morning,
21 inexplicable when they stayed inside the
22 store, they were taking direction from a Fire

1 Captain who they knew quite well and they knew
2 -- they also knew that the propane technician
3 was on scene. No one gave the employees
4 inside the store a sense of emergency.

5 The tank itself is the
6 responsibility of Ferrellgas. The Little
7 General does not own the tank. It is simply
8 a lease agreement with Ferrellgas or
9 ThomsonGas, whoever the supplier may be. It
10 is Ferrellgas's responsibility to inspect the
11 tank and make sure that the tank is operating
12 and functioning properly.

13 CHAIRMAN BRESLAND: Thank you.

14 MEMBER WRIGHT: Mr. Wanko, I
15 assume then that part of your logic in making
16 the recommendations that your team made was
17 that if the fire fighters and emergency
18 response personnel are aware of the hazards
19 and/or the actions to be taken in the presence
20 of excessive propane leaks, that that
21 information would then be translated to people
22 who are operating stores and in this

1 particular case, the hope is or was that they
2 would evacuate the store, vent the store, and
3 try to mitigate any explosive build up of
4 vapor?

5 MR. WANKO: That's correct, if
6 that mitigation could have been done safely.

7 MEMBER WRIGHT: Right. Thank you.

8 CHAIRMAN BRESLAND: Do we have any
9 members of the public who wish to comment?
10 And if so, please address the microphone with
11 your name and your affiliation.

12 MR. McCLOUD: Good evening,
13 everyone. My name is Michael McCloud. I'm an
14 attorney from South Florida and I represent
15 the insurance company for the building that
16 exploded. You might be able to consider this,
17 a three-part question.

18 Mr. Chairman, I'm interested in
19 knowing whether a better description of the
20 actual defect that was found on the valve.
21 The second part is whether there was any
22 investigation into whether that valve that's

1 at issue had been recalled by the
2 manufacturer, and whether that manufacturer,
3 if it had been recalled, followed the
4 procedures to let Ferrellgas, for example or
5 the tank owner know that there was a recalled
6 part at the store.

7 And the third thing is I know
8 there may not be a determination of a specific
9 ignition source for the gas. Is there a
10 number of different possible sources they
11 found? I would be interested in finding out
12 information responsive to that, those
13 questions.

14 CHAIRMAN BRESLAND: I think the
15 answer to some of your questions may be in our
16 written report which will be available, but
17 let me direct those questions again to Mr.
18 Wanko.

19 The first question was was there
20 information about a defect in that valve that
21 was made available to the public, if I'm
22 paraphrasing you correctly?

1 MR. HALL: Chairman Bresland, if I
2 may answer for Investigator Wanko, in the
3 examination of the valve, we did find a
4 manufacturing defect and it was one of the
5 parts was out of manufacturing tolerance and
6 had a hole too small for the stem to smoothly
7 pass through in the valve which jammed the
8 valve open.

9 We did contact the law firm that
10 represents the remains of the company who did
11 have records from the company when they were
12 in business and asked them specifically had
13 there ever been any customer complaints or any
14 customer inquiries about problems with this
15 valve, anything reported to the company that
16 they would share that with us.

17 They searched their records and
18 found none. They did find some records of
19 customer complaints on other components that
20 they manufactured for these tanks, but not on
21 the specific design of valve. So there never,
22 to our knowledge, never was any kind of recall

1 or understanding of the problem with this
2 valve.

3 It's important to point out that
4 these valves are used very infrequently and in
5 some tanks they may never be used. In this
6 tank, the team concluded it was likely that
7 maybe it was used only once prior in the
8 entire history of the tank.

9 CHAIRMAN BRESLAND: Okay, thank
10 you, Mr. Hall.

11 The third part of the question was
12 possible sources of ignition.

13 MR. WANKO: Well, this being a
14 convenience store, there were many, many
15 sources of ignition, both inside and outside
16 the building. So the team made no
17 determination on what the likely ignition
18 source was, but they were callous as we listed
19 this morning, possible thermostats, pizza
20 ovens, just hundreds of ignition sources.

21 MEMBER VISSCHER: You did conclude
22 the ignition was inside the building, right?

1 MR. WANKO: We know the explosion
2 was inside the building.

3 MEMBER VISSCHER: Not necessarily
4 the ignition.

5 MR. WANKO: Not necessarily the
6 ignition. That's right. Could have
7 propagated into the building.

8 CHAIRMAN BRESLAND: Do we have any
9 other members of the public who may wish to
10 say something?

11 MR. KESSLER: Yes. I'm Delegate
12 Melvin Kessler, and since you all made
13 suggestions on legislation that should be
14 offered on training, after this terrible
15 disaster happened, I talked to several gas
16 companies, the ones that would talk. Because
17 of litigation going on some of them wouldn't
18 talk which was understandable, but the ones
19 that I talked to told me that there was
20 absolutely no way and it shouldn't be done,
21 gas transferred from one tank to another. And
22 I sat down with their help and introduced a

1 bill that said with their, like I said, with
2 their recommendation that if you switch
3 companies, the tanks should be used down to
4 like five percent, then it was safe to move.
5 And I just wondered if that was a
6 consideration or something that should be
7 considered in future legislation. Thank you.

8 CHAIRMAN BRESLAND: Has this
9 legislation been passed in the State of West
10 Virginia?

11 MR. KESSLER: No, sir. The bill I
12 offered didn't go anywhere. I think that a
13 lot of people didn't think that was necessary
14 or the appropriate action to take until
15 supposed conclusion on what the circumstances
16 around the disaster was.

17 CHAIRMAN BRESLAND: Thank you. Do
18 you have a comment?

19 MR. WANKO: Certainly, I think the
20 Delegate makes an excellent point. And we
21 found very similar opinions on the tank-to-
22 tank transfer that the Delegate found.

1 However, we found firms that say they do it
2 commonly. So our recommendation to the
3 Propane Education and Research Council is such
4 that either (a) they write formal procedures
5 on how this is done, how it can be done
6 safely, with appropriate warnings to
7 technicians or they prohibit it entirely. And
8 that's intended to be a national, have
9 national effect.

10 CHAIRMAN BRESLAND: Okay, thank
11 you. Do we have any other persons who may
12 wish to say something?

13 MR. LEWIS: Mr. Chairman, Members
14 of the Board, I'm Sterling Lewis, State Fire
15 Marshall. I have more of a comment than
16 anything else.

17 We're not real familiar down here
18 in southern West Virginia working with a lot
19 of federal people. As a matter of fact, we
20 don't trust you a whole lot. But I want to
21 commend this Investigation Team. They were
22 one of the most professional, courteous to

1 all, and thorough in their investigation of
2 any investigation team that I have ever worked
3 with.

4 What we are hoping that we gather
5 out of this tonight is closure for these
6 families, closure for this community. I'm
7 starting to get to work with your people more
8 and more, it seems like, and I don't like
9 that, because it means something has happened
10 when you come into town. But I want you all
11 to know as their overseers they are tops.
12 Thank you.

13 CHAIRMAN BRESLAND: Thank you for
14 those comments, Fire Marshall.

15 Do we have any more public
16 comments? We have one more.

17 MS. MANN: Thank you, sir. Thank
18 you, Mr. Chairman, I'm Delegate Virginia Mann.
19 I represent Raleigh and Summers County in the
20 West Virginia Legislature. I also would like
21 to echo the comments of the Fire Marshall.
22 The team has been excellent to work with on a

1 legislative level. I have met with them and am
2 prepared to offer legislation based upon the
3 recommendations. I want the folks here to
4 know that everyone's lives were changed that
5 day and we do need to address some of the
6 complacency that we have found as a result of
7 the investigation. I thank you for that and
8 look forward to working with you.

9 CHAIRMAN BRESLAND: Thank you for
10 your comments.

11 Do we have anyone else? Do we
12 have any closing comments before we take a
13 vote from the Board Members?

14 Mr. Wright?

15 MEMBER WRIGHT: I have no closing
16 comments.

17 CHAIRMAN BRESLAND: Mr. Visscher.

18 MEMBER VISSCHER: No.

19 CHAIRMAN BRESLAND: Mr. Wark?

20 MEMBER WARK: No.

21 CHAIRMAN BRESLAND: I call for a
22 motion to vote on our report.

1 MEMBER WARK: Mr. Chairman, I'd
2 like to move that the Board approve this CSB
3 investigative report No. 2007-04-I-WV
4 regarding the Agency's investigation into the
5 propane explosion that occurred on January 20,
6 2007 at The Little General Store in Ghent,
7 West Virginia.

8 MEMBER WRIGHT: Mr. Chairman, I
9 second that.

10 CHAIRMAN BRESLAND: I just want to
11 make one typographical correction. It was
12 January 30th.

13 I will call for a vote. Board
14 Member Wright?

15 MEMBER WRIGHT: I vote in the
16 affirmative.

17 CHAIRMAN BRESLAND: Board Member
18 Wark?

19 MEMBER WARK: Yes.

20 CHAIRMAN BRESLAND: Board Member
21 Visscher?

22 MEMBER VISSCHER: Yes.

1 CHAIRMAN BRESLAND: I vote yes
2 also. As a result of that vote, the motion is
3 approved and the report is approved.

4 As we're almost at the end of our
5 public meeting here this evening, I would like
6 to thank each of the Board Members for their
7 participation. All of us share a strong
8 interest in the prevention of these tragic
9 accidents and our hope is to make sure that
10 fire department personnel, emergency response
11 personnel, and members of the public are not
12 killed or injured in an incident similar to
13 this one.

14 Propane is a widely-used fuel, but
15 death from propane explosions can be
16 prevented. In the next three months, the CSB
17 will be working with state, local, and
18 national entities to ensure implementation of
19 the safety recommendations that were approved
20 here this evening. I'd like to thank all of
21 today's participants. I'd like to thank the
22 team for their hard work over the last year

1 and a half in putting together this
2 investigation and the report. I'd like to
3 thank the audience for your very careful
4 attention at the meeting this evening. And
5 with that, our meeting is adjourned.

6 (Whereupon, at 7:41 p.m., the
7 public meeting was concluded.)

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