



NATIONAL TRANSPORTATION SAFETY BOARD
Investigative Hearing

Norfolk Southern Railway general merchandise freight train 32N
derailment with subsequent hazardous material release and fires,
in East Palestine, Ohio, on February 3, 2023

GROUP	G
EXHIBIT	
31	

Agency / Organization

NTSB

Title

**Interview Transcript, Drew McCarty, President
Specialized Professional Services, Inc.,
February 23, 2023**

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of:

*
*
*
*
*
*

NORFOLK SOUTHERN TRAIN DERAILMENT
IN EAST PALESTINE, OHIO
ON FEBRUARY 3, 2023

Accident No.: RRD23MR005

* * * * *

Interview of: DREW McCARTY, President
Specialized Professional Services, Inc.

East Palestine, Ohio

Thursday,
February 23, 2023

APPEARANCES:

PAUL STANCIL, Investigator
National Transportation Safety Board

PAUL CAREY, Retired Fire Chief
Boston Fire

SEAN LYNUM, Chief of Pipeline and Hazardous Materials
National Transportation Safety Board

RANDY KELTZ, Manager of Tank Care Programs for U.S. DOT
Federal Railroad Administration

TERRY HEIDKAMP, Vice President
GATX Corporation

DAVE MECKFESSEL, Accident Investigator
Pipeline and Hazardous Materials Safety Administration

PETE MANYEK, Senior Manager of Design Engineering
GATX Corporation

MARC DOUGHERTY, Investigator
National Transportation Safety Board

I N D E X

<u>ITEM</u>	<u>PAGE</u>
Interview of Drew McCarty:	
By Mr. Stancil	6
By Mr. Carey	44
By Mr. Lynum	56
By Mr. Keltz	62
By Mr. Meckfessel	66
By Mr. Stancil	67
By Mr. Manyek	70

I N T E R V I E W

(9:15 a.m.)

1
2
3 MR. STANCIL: Today is February 23rd, 2023. It's 9:15 a.m.
4 This is an interview being conducted in connection with the
5 Norfolk Southern Railway train derailment in East Palestine, Ohio,
6 that occurred on February 3rd, 2023. The NTSB number for this
7 accident investigation is RRD23MR005.

8 My name is Paul Stancil. I'm a senior hazardous materials
9 accident investigator with the National Transportation Safety
10 Board. We are Located in East Palestine, Ohio, at the -- what's
11 the name of the facility here? The --

12 MR. KELTZ: The United Methodist Church.

13 MR. STANCIL: The United Methodist Church in East Palestine,
14 Ohio. This is an interview of Mr. Drew McCarty who is the owner
15 of Specialized Professional Services Incorporated, SPSI.

16 Mr. McCarty, are you aware this conversation is being
17 recorded?

18 MR. McCARTY: Yes.

19 MR. STANCIL: Do we have your permission to record the
20 conversation?

21 MR. McCARTY: Yes.

22 MR. STANCIL: So now I'm going to go around the room and
23 we'll do introductions. It's very important that we all speak
24 loudly and clearly. Please give me your name, the spelling of
25 your last name, and your title, please. Again, I'm Paul Stancil,

1 senior hazardous materials accident investigator, NTSB. And my
2 last name is spelled S-t-a-n-c-i-l.

3 MR. CAREY: Hi, my name is Paul Carey, C-a-r-e-y. I'm a
4 retired fire chief from Boston Fire and I'm here as a party
5 representative from the International Association of Firefighters.

6 MR. LYNUM: My name is Sean Lynam. Last name is L-y-n-u-m.
7 I'm the chief of Pipeline and Hazardous Materials at the National
8 Transportation Safety Board.

9 MR. KELTZ: Randy Keltz, K-e-l-t-z. I'm the manager of tank
10 care safety programs for the U.S. Department of Transportation,
11 Federal Railroad Administration.

12 MR. HEIDKAMP: My name is Terry Heidkamp, H-e-i-d-k-a-m-p.
13 I'm a vice president at GATX Corporation and I'm a party
14 coordinator for GATX.

15 MR. MECKFESSEL: My name is Dave Meckfessel, M-e-c-k-f-e-s-s-
16 e-l. I'm an accident investigator for Pipeline and Hazardous
17 Materials Safety Administration.

18 MR. McCARTY: Good morning. Drew McCarty. M-c-C-a-r-t-y.
19 President of Specialized Professional Services, Inc.

20 MR. MANYEK: My name is Pete Manyek, M-a-n-y-e-k. I'm senior
21 manager of design engineering at GATX Corporation.

22 MR. STANCIL: Okay. And that's everyone in the room.

23 Mr. McCarty, if any question is unclear or you don't
24 understand the question, please ask us to clarify or restate the
25 question. And if you don't know the answer, that's okay. Just

1 tell us you don't know.

2 We also don't want you to speculate if you don't know the
3 answer to any questions that we ask you. Do you understand?

4 MR. McCARTY: Yes.

5 MR. STANCIL: So the sole purpose of this investigation is to
6 improve safety. Not to assign fault or blame or liability. Our
7 mission is to improve transportation safety and prevent accidents.

8 So as such, the NTSB cannot offer any guarantee of
9 confidentiality, immunity from any legal proceeding by any other
10 agency whether it be local, state or federal. A transcript of
11 this interview will be placed in the public docket for this
12 investigation which will be available via the NTSB website.

13 We all good with that?

14 MR. McCARTY: Yes.

15 INTERVIEW OF DREW McCARTY

16 BY MR. STANCIL:

17 Q. To begin with, could you tell us a little bit about your
18 background, your education, and expertise?

19 A. Sure. So grew up very active in my local fire service.
20 Started as a junior firefighter unofficially back in the day at
21 age 13 but officially at age 14. Been helping since a long time
22 ago. 1980-ish or so. But served there as assistant chief for
23 many years and been doing industrial firefighting for industry --
24 industrial firefighting, environmental hazmat since 1989 spring.
25 So this (indiscernible) math in public here. I was thinking about

1 that this morning. About 35 years or so is how long I've been
2 doing this.

3 And among those experiences, we're not unique to railroads.
4 Railroads are one of many clients and many industry. So we're
5 very diverse in terms of our client base, but certainly, railroads
6 and I go way back. So I've been helping class I railroads and
7 short lines probably for 30 of those 35 years pretty actively.

8 Q. And can you tell us what services your company provides?

9 A. So we grew the company from -- we opened the company doors
10 specializing in high-hazard chemical transfers, industrial
11 firefighting support. Things like that. We still do those things
12 today.

13 We certainly are all about helping people. And our customers
14 have asked us to step in, do this, do that. So we're very broadly
15 based in terms of our service capabilities and what we do. And
16 with that said, there's going to come a point in our visit today
17 where you'll kind of realize that after the wreck was cleared, I
18 kind of stepped away from the vinyl chloride risks and the
19 pressure car risks and started helping environmental. So we'll
20 kind of get to that in the visit, I'm sure.

21 But the -- we're pretty broad based and it's just nice that
22 Randy is here. He's also knows we're also C6 certified for valves
23 and fittings repairs on tank cars. Our hazmat credentials afford
24 us the ability to safety deal with cars that are often -- it
25 avoids them having -- avoids our customers having to take them to

1 a shop and clean them. So we can actually do things with PPE and
2 scrubbing and doing things in the field to safely manage those
3 risks while getting their valves and fittings taken care of and
4 leave their cars in service. So we also are very well in tune
5 with tank car packaging. And I've been many, many years as an
6 instructor or guest instruction at Pueblo and -- just we're pretty
7 solid with tank cars.

8 Q. And where is your company headquartered?

9 A. Our headquarters is Washington, Pennsylvania. Which is south
10 of here.

11 Q. And do you have any other locations?

12 A. We do. We have an office in Reserve, Louisiana. It's a
13 small shop. And we have two, what I'll call an affiliate company.
14 It's technically a separate company on the books but we -- and our
15 company is SPSI. Two offices in Ohio.

16 Q. And how many people are employed by the company?

17 A. That's a moving target the last few years. We're somewhere
18 between 90 and 100 personnel.

19 Q. Very good. Well, let's start by asking you to walk us
20 through in as much detail as you possibly can what happened after
21 you were notified of this derailment.

22 A. Sure. So Scott Deutsch, our customer at Norfolk Southern in
23 this region -- he's a hazmat manager for NS who dispatched us that
24 Friday evening. I don't remember the exact time of dispatch but
25 it was pretty quick pretty early on in the incident. I recall

1 that we were noting that we were on scene within two hours of the
2 incident. Don't remember the exact timestamps. I took virtually
3 not notes myself as I was heavily engaged in the intimate
4 operations of the pressure cars and the fires and looking at those
5 as a priority triage the whole time.

6 And I had some good people helping me administratively down
7 in our ops trailer and otherwise. But the exact timestamps of
8 certain things I'm going to be -- I'll just say it now as I
9 present all of this -- what I know is certainty, I'll share as
10 certainty -- and what I know is general I'll say roughly noon-ish
11 or something like that. I'm not going to have an exact, an 11:59,
12 nothing like that.

13 So Friday evening, we got a call for active derailment, lot
14 of fire, not a lot of information known at the time. So as we're
15 mobilizing, you know, you're getting little updates from
16 employees, employees' families showing you media clips that are
17 already out there, and people are already -- between whatever,
18 Twitter and social media, and people taking pictures -- you could
19 see heavy fire. Ditch line fire on the south from the major
20 pileup going westward in the ditch line on the south. There was
21 big -- heavy fire trail. I'm sure you all have seen those
22 pictures by now.

23 So we kind of knew what we were getting into as far as a
24 working derailment with a lot of -- work the consist, figure out
25 what's in there and figure out what we got. Scott Deutsch

1 would've arrived approximately 30 minutes before me. I doubled to
2 the shop. I didn't go straight from my house. I went to the shop
3 to grab one of our response trailers. And -- so I was probably 30
4 minutes or so behind Scott arriving.

5 One of my other senior folks, Ryan Tacharsky (ph.), he did
6 come straight from the house. Excuse me one second here. I'm
7 going to silence the phone. He got here between Scott Deutsch and
8 I. So between a 30-minute period, Scott Deutsch, Ryan Tacharsky,
9 Drew McCarty, we were the threesome representing Norfolk Southern
10 hazmat in that early era. We rolled in to find -- by the way,
11 it's nice to see you engaged in this process as a fellow
12 firefighter.

13 MR. CAREY: Thank you.

14 A. The local folks, fire service folks, had an amazing operation
15 deployed. I mean, the good things they did is they saved
16 buildings. They saved businesses. They definitely -- like
17 (indiscernible) heat exposures, they really did a yeoman's job.
18 But as we often see in hazmat train derailment, local
19 firefighters, they just don't know what they don't know and the
20 risk. And it took us a few hours to kind of help them unwind
21 their offensive operations.

22 We -- Scott Deutsch, myself, Ryan Tacharsky, we all shared
23 the exact same concerns. We have massive fire, many tank cars.
24 We were looking at the consist pretty quickly. The
25 (indiscernible) Scott was sharing as we were in route. We were

1 hearing vinyl chloride. We were hearing butyl acrylate. We were
2 hearing -- we had stuff in the train. Right?

3 So we were politely and respectfully encouraging firemen to
4 unwind, to clear up. You're committed too close. You're not
5 going to put these fires out. There's things that are going to go
6 on here. We don't know what yet. But we need to pull you back.
7 So it was a very good teamwork that happened. It took probably,
8 I'm guessing, two to three hours to make that happen. But I'd say
9 roughly -- and again, I'm saying roughly -- by midnight-ish or so.

10 The majority of folks had unwound and kind of started the
11 unified command down at the local fire station garage. It must be
12 a spare garage maybe. An old garage. So a lot of agency folks
13 from local fire, police, Ohio EPA, even Pennsylvania DEP, EMA
14 people were there. Again, there was a lot of multi-agency
15 presence pretty quick.

16 So the -- we as the team had the wheel report from the
17 railroad and we were working it just as if any -- how we work
18 derailments is (indiscernible) process, work the consist, figure
19 out what's in the wreck and try to start plotting what we know,
20 what we don't know.

21 So the nighttime -- heavy fire, heavy smoke, drone flights,
22 the county commissioner Tim, great guy. He happens to fly drones
23 for his local sheriff's department, police department. He's their
24 local resident drone pilot. He was incredibly helpful that night.
25 Although the drone footage didn't really reveal us as many details

1 as we would've liked.

2 Ryan Tacharsky and I did do some what I'll call very
3 deliberate -- got in maybe around the back of the blue building
4 west/southwest side to see what we could see from a safe distance.
5 The firefighters had successfully put out a burning plastic
6 pellets car behind -- was it Brave -- no, not Brave Industries --
7 that's CeramFab. Behind CeramFab's building they were successful
8 in extinguishing a plastics pellets car while protecting that
9 building from radiant heat.

10 Again, they did a yeoman's job but they were fully committed
11 with aerial apparatus, men in towers, and kind of just way too
12 close to tank cars. And sure enough, it was not long after we
13 pulled everybody back that the first pressure relief device
14 started activating. So those pressure relief devices or at least
15 on one of them started activating I think not long after midnight
16 or in that midnight vicinity.

17 And as the pool fires burned under those cars, and pressure
18 relief devices started going, obviously, fires ensued and then
19 elastomers and things burned out of the valves and fittings
20 otherwise. So three of the five vinyl chloride cars were
21 obviously in high priority attention early on. And on that note,
22 early on, in the very first minutes of the whole -- in that fire
23 department garage, there was very vivid conversation about the
24 fire chief asking Norfolk Southern about should we evacuate.

25 And I've been doing this a long time. The responsible

1 parties never tell the fire chief what to do in an evacuation.
2 Never. It's always the public safety's responsibility to call an
3 evacuation or not. But we, in harmony with Norfolk Southern,
4 guided him to the orange DOT guidebook. And we said look, it's a
5 one-mile recommendation. That's real.

6 You have pressure cars in this wreck. That's a very real
7 thing. You got pressure cars and pool fires. We encourage you to
8 consider that one-mile evacuation. I commented on something that
9 a wise guy told me from -- a guy I respect, Tom Davis, he said the
10 tank car (indiscernible) is three-quarters of a mile and that's
11 where the one mile came from. So I always remembered that and I
12 always try to share that.

13 So they were well aware. And I say they meaning the entire
14 unified command. All agencies heard that message. Recommend one
15 mile based on the orange DOT guidebook. Incident commander's
16 choice to do that.

17 So I do know that fire chief, police, they tried to get
18 people out of their houses Friday night, Saturday, Sunday. It was
19 a challenging thing for them but that's kind of outside my realm.
20 I'm just going to get back to my, I guess, reason I'm here. So
21 Ryan Tacharsky and I observed some of the butyl acrylate not
22 burning. And we know it was butyl acrylate because we've dealt
23 with industrial chemicals. In my case, 35 years. Acrylates are
24 acrylates. When you know an acrylate, you know it's acrylate.

25 So we reported that. We got back that hey, you have liquid

1 acrylate in between the tracks and told them where it was. So
2 again, it was communicated to the group, all people in that
3 building, that there was some stuff not burning. By that time,
4 the ditch fire had burned out. There was no active ditch fire.

5 That ditch fire didn't burn very long from the -- what would
6 it be -- Pleasant Street crossing eastward, that kind of started
7 all the -- that plastic car on fire. Those box cars of beer, they
8 were smoldering for days on the west end. That fire didn't burn
9 very long. It burned itself out in the first two or three hours.

10 But the pool fires pursued through the night. Pressure
11 relief devices were activating through the night. And drone
12 flights attempted to pinpoint cars. Couldn't really see much at
13 night. No good car numbers. Very little was confirmable in the
14 night drone flights.

15 The next morning, we -- myself and Scott Gould with Norfolk
16 Southern hazmat, we were able to get up in an Ohio State Police
17 aircraft with really high-tech video surveillance equipment. That
18 was incredibly helpful. We could pinpoint the isobutylene car.
19 We were struggling all night to find the isobutylene car. We
20 couldn't figure out exactly where it was in the wreck and that
21 Ohio State Police flyover helped us pinpoint that based on car
22 construction and at least getting the NATX (ph.) callsign off one
23 of --

24 Even then though, in that condition, that would've been mid
25 to late -- so let's say mid-ish, mid to late Saturday morning when

1 that flight took place. It was supposed to be 8 a.m. and it was
2 late due to weather or something.

3 But smoky conditions persisted from various hopper cars that
4 were burning and smoldering. Various boxcars that were burning
5 and smoldering. Still had fire at that time from all three vinyl
6 chlorides. Still PRD cycling on the one vinyl chloride.

7 Midday-ish on Saturday, the PRDs on the vinyl chloride
8 settled down and we did note that as like a 90-minute to two-hour
9 -- again, I know it's generalized but it was no more than two
10 hours, but it was at least 90 minutes. I'm going to say I'm
11 confident to say it was 90 minutes and maybe as much as two hours
12 where the pool fires had kind of naturally subsided underneath
13 those cars and the PRDs calmed down.

14 At that point, we made our first real level-B entry with some
15 pressure gauges and some ladders to climb on some cars. We
16 climbed on what was -- what I guess would be the easternmost VC
17 car and I don't remember the car number off my memory but it was
18 the easternmost one that was not in the pool fire. It was kind of
19 between the pool fires and the burning plastic (indiscernible)
20 cars. That one. Whatever one that was.

21 And put a pressure gauge on it just to check it. I don't
22 remember what the pressure reading was but it wasn't alarming. At
23 that point, it seemed to be pretty much behaving itself. The what
24 I'll call the second VC car in from the east it was seriously heat
25 impinged but it never leaked. It never leaked, it never burned.

1 But its orientation was such that we did not want to put our
2 people on it for even attempting to pressure gauge it because we'd
3 have put our people in the line of fire of PRDs if they choose to
4 activate again. We'd have been in the line of fire on top of the
5 car.

6 So we sent two teams one to there and one on the isobutylene
7 car. We just got the ladder up to the isobutylene car for
8 pressure gauge reading when -- I'm sorry, I forgot the card
9 numbers. I'm just tired. But the one particular VC car that
10 cycled more than the others and had been calmed down for almost
11 two hours, it jettied off with a thunder. I mean, it -- when it
12 released it, we had -- we had been observing it releasing all
13 night and when it released Saturday afternoon, it released with a
14 fury.

15 So it had been cycling all night and all morning, stopped,
16 and our assessment was pool fire has calmed down, take away the
17 Bunsen burner, now this car is somewhat not building as much
18 pressure is what our assessment was at that moment but when it
19 released while we were in there with those pressure gauge
20 assessments and damage assessment walk, it had built more pressure
21 than it had through the night.

22 And when it released, it released for a long time. And there
23 is -- somebody did make a note of that and I could probably text
24 somebody right now and that person would remember vividly. But it
25 was like 70 minutes continuous. Not cycling. In fact, I know it

1 was 70 minutes. It's coming back to me.

2 So tactically speaking, we were already looking at areas to
3 build a burn pit for doing hot tapping and liquid flaring of all
4 those cars. At that point, at that moment in time, the
5 easternmost car that we thought maybe wasn't very affected and the
6 pressure gauge looked okay, we really weren't worried about that
7 car from a real safety blowing up kind of thing.

8 But the other three in that pool fire and the one to the west
9 by itself, we were absolutely concerned about that since Friday
10 night. And we absolutely reminded folks every time there was
11 briefings and (indiscernible). There's no reason people need to
12 be down in there. There's these cars that -- so let me focus
13 back. What are we talking -- liquid flaring.

14 We were looking at -- when we were doing those entries with
15 pressure gauging, we were also looking at -- we had welders and
16 staging, we had our hot tap machine and staging, we had hard pipe
17 and staging. We were ready to hot tap those cars and burn them
18 off. Because it's polymerizable material. I'm sure you guys know
19 that. Characteristics of -- flammable characteristics of propane
20 but yet the polymerization of it all was what we were most worried
21 about at that point.

22 So we were looking at hot tapping and liquid flaring. And
23 when that PRD did what it did after not activating for 90 minutes
24 to two hours -- and when it did, it went off with a thunder -- we
25 quickly realized, oh, crap, it's already been polymerizing and now

1 everything is gummed up under the pressure plates. So that's our
2 experienced assessment. At this point, it was still just SPSI
3 boots on the ground. And we were already there at vent and burn
4 in our minds.

5 By the time we came out and met with Norfolk Southern,
6 Dave Schoendorfer had asked Chip Day and some of his colleagues to
7 come in just for extra sets of eyes, extra help, and I welcomed
8 that. They concurred when they got caught up on dynamics of the
9 event and their own assessments, they concurred.

10 So -- and just to talk through that, for the record, when the
11 Monday morning quarterbacks want to guess and what if and all
12 these -- everybody wants to think they're the experts in the
13 media. Right? So all valves and fittings on three of the four
14 cars were shot. Liquid transfer is not an option. Even if we hot
15 tapped and liquid transfers, you can't knowingly and willfully put
16 polymerizing material off spec into another package and sent it
17 down the road. Just not an option.

18 Even if we did, it would've been an inch and a quarter
19 diameter drill hole and a hot tap. We had no idea if some of
20 those three cars may have been burned out. They'd been burning
21 since Friday night. You can't weld in the vapor space without
22 risk of another explosion from welding. You got to have liquid
23 sink. And at that point, we have an unknown container of how much
24 is left in it.

25 We know from science that there's a high probability that

1 these fires and the pool fires have triggered polymerization.
2 Tactically speaking -- well, even the hot tapping to a liquid fire
3 pit -- at that point, we were concerned about welding, potentially
4 hitting vapor space if a car had been burned out already.

5 We were concerned that if we did drill through it, we'd have
6 had polymer and potentially not been successful entering the car
7 to a burn pit. All the while, putting our people at serious risk
8 in that hot zone up close and personal for a lot of intricate
9 details, a lot of setup time. Those things -- they take time to
10 set up. All of which we quickly ruled it out for risk.

11 Like I say, in our minds, as our team, we already came up
12 with a vent and burn recommendation. As SRS guys, we're coming
13 in. We waited for them to get here. Caught them up to speed.
14 Have them have some input. They concurred. We as a team formally
15 went to Norfolk Southern and presented to them. And Norfolk
16 Southern was already there in their minds, as well. They
17 concurred 100 percent. This is where we were at. Went to the
18 command staff. It was kind of a smaller meeting. It was the
19 mayor, the commander, his team. It was not a multi-agency
20 meeting. And kind of presented to them -- I skipped a part. Let
21 me back up here.

22 We talked about the three cars and the pool fire. The car on
23 the west that was by itself, it also had some fire under it at one
24 point. That fire had mostly burned out. But unfortunately, that
25 fire also had a car of resin against it on the east side. So it

1 was perpendicular to the tracks like north to south orientation.
2 Immediately east of that was a cover hopper car with a powdery
3 resin that was on fire but not vented. It was more smoldering
4 combustion.

5 So mention that because we crawled on it to get -- there's a
6 key point here that you folks should know about. There was at
7 some point -- at some point -- this is where my tired brain needs
8 to reboot a minute here. What day -- can you guys remind me which
9 day we did the vent and burn? Was it Sunday or Monday?

10 Q. Monday.

11 UNIDENTIFIED SPEAKER: Monday.

12 A. Monday. Okay. So I'm into Sunday here. Let's see here.
13 Friday, Saturday. So Saturday, all four -- all three cars burning
14 including the one on the west was burning through Saturday into
15 Sunday. Now, Sunday is the day I'm thinking of when we got on
16 that hopper car.

17 So Sunday, what was alarming to us -- the fire on the VC car
18 to the west snuffed itself out. And a lot of people -- oh, that's
19 great, it burned itself up. I'm like, no, no. That's not a good
20 thing. So we did an entry -- level-B entry specifically to
21 evaluate that housing on Sunday.

22 One of our guys did the climbing for me. I was on the ground
23 coaching him but he got up there, walked across this burning --
24 smoldering hopper car so he could get to the housing. It was
25 rolled approximately 2:00 to the east. The housing was such where

1 it was presenting nicely from the catwalk of the hopper car. It
2 was kind of a nice access. So he reported no audible hiss and
3 that's very noteworthy to you folks. There was no audible
4 pressure coming out of that car.

5 Our PRD did (indiscernible) a couple hundred parts per
6 million right at the housing. Back on top of the car six feet
7 away, it dropped instantly to nil. But when you stick the PRD in
8 the housing, it was a couple hundred parts per million VOCs.
9 Uncorrected value. So there was like a 1.9 correction factor on
10 the meter. So call it 4 or 500 parts per million vinyl chloride
11 vapor coming out of that housing after the fire snuffed itself
12 out.

13 Noteworthy to this assessment, there's no audible hiss. And
14 where I'm going with that is on Monday, when the vent and burn
15 occurred, you can see it in your own video, there was a tremendous
16 amount of pressure in that car that relieved itself. Further
17 indicating that pressure relief device -- all devices that had
18 been leaking got gummed up. It gummed up to the point where there
19 wasn't enough flammable vapor to support combustion anymore. It
20 just quit releasing enough gas to burn.

21 It had been burning, burning, burning, burning since Friday
22 night. And all of a sudden, didn't burn. So something internally
23 plugged it off. In our world, we're not chemists but we know a
24 lot of chemists in our lives. All the data points to
25 polymerization. We're just putting two and two together and we

1 believe the polymerization process had been started.

2 So but I think that's a very important point because that
3 car, during that assessment, while we were focused on the housing
4 -- right when we were leaving that car, I noticed there was some
5 jacket that had been torn in the wreck. And I just took a gloved
6 hand and I went and put the back of my hand on the tank shell
7 itself and it was hot. It was hot where I couldn't hold the back
8 of my hand more than five seconds without having to remove it for
9 nerves. Right?

10 So I had my technician. His name is Charles Phil (ph.). I
11 said Charles come back. I says just watch me. And I'm going to
12 do this and I want you to do it. Just don't burn your hand but I
13 want you to be an independent person and do it. And he also put
14 the back of his hand on it and agreed, you know, three to five
15 seconds was about it and then you had to just not hold your hand
16 there for getting burned.

17 So we went back in with a thermal imaging camera and
18 documented a reading. It was in the vicinity of 135 Fahrenheit
19 and ambient conditions at that time were much lower. There was no
20 active pool fires going on. We started tracking that and trending
21 that. It had gone up a couple degrees in 30 minutes or an hour or
22 so. And then we started a trend. I'm happy to report that at
23 some point it peaked out at like 138 or something and never really
24 got worse.

25 But certainly, there was heat going on in that car. And we

1 monitored that pretty closely between Sunday night and Monday.
2 Sunday was when we met with the fire chief, the mayor, and what
3 I'll call his command staff folks to really break the news to them
4 that we had exhausted all tactical options other than vent and
5 burn and here's where we were at and they acknowledged.

6 And somehow, I will say, after the hornet's nest with the
7 governor on Monday -- there was a disconnect somewhere between
8 that meeting and other agencies -- and I have no idea what
9 happened there. But we had told them that this one car on the
10 east really wasn't necessarily affected. However, in the process
11 of vent and burn, it was going to be and it just needed to go with
12 the other four. We couldn't knowingly and -- we couldn't make a
13 big fire that was going to purposely flame impinge that one
14 without just managing it with the group.

15 So none of us can say whether it was polymerizing or not.
16 Certainly, it had radiant heat damage from the plastic pellet cars
17 and things. But much like the isobutylene that behaved itself
18 quite nicely, you know, that eastern VC car may or may not have
19 been affected but it was just -- we couldn't take a chance. It
20 had to be included with the mix.

21 So the plan unfolded. We flew Jason Poe in, Explosive
22 Services International. And he's second generation doing this.
23 His dad was Billy Poe. In the history of North America, U.S., and
24 Canada, those gentlemen, their company have done 99 percent of all
25 vent and burns on tank cars was my awareness.

1 So we brought in the right subject matter expert for that. I
2 picked him up at the airport. At the FBO in Pittsburgh somewhere
3 around midnight, 1 a.m. Saturday night. Brought him back, secured
4 his explosives in one of our cargo trailers. Locked it up. Gave
5 him the keys where he had custody of explosives. He went to the
6 hotel to get some rest. I napped in my truck. My guys prepped --
7 started prepping the burn channels through the night. This
8 would've been Sunday night into Monday.

9 Our guys prepped what I'll call the easternmost burn ditch
10 and channel to channel fires away from the isobutylene car. We
11 purposely created burn ditches to keep the burning vinyl chloride
12 from the vent and burn process away from the loaded isobutylene
13 car. So we channeled the fire to the east from those cars. And
14 on the westernmost single car, we channeled that accordingly, as
15 well, to keep it away from the isobutylene car.

16 So that prep work was done through the night Sunday night
17 into Monday. And then Monday morning daytime -- really the
18 easternmost channel work was prepped through the night Sunday.
19 Then Monday morning, we did a daylight prep on that -- what I'll
20 call the westernmost VC car. The one that was by itself. So two
21 separate burn areas, loaded isobutylene kind in between them. And
22 again, that was by design to keep those fires away from the
23 isobutylene.

24 So at that point, we had taken Jason Poe -- Chip Day and I
25 took Jason Poe into the work areas early that Monday morning to

1 get him and his crew a walk around the cars to look at how we had
2 the burn pits created. Look at where we wanted to set the
3 explosive charges as far as the lowest point in the car. We
4 wanted to drain as much liquid out of the cars when this happened
5 as humanly possible. The way the cars were oriented. So we did
6 some more prep work with Jason and his men. Getting to the point
7 where his explosive charges would be in good shape and perfect
8 positions and things.

9 So that was kind of a planning recon trip Monday morning with
10 him and his team. And we weren't even all the way walked out of
11 the hot zone after that recon trip just about ready to start doing
12 that work to get his cribbing and blocks and sandbags and things
13 in there when Scott Deutsch from Norfolk Southern called me and
14 says hey, can you, and Chip, and Jason Poe please come up to the
15 command post. The governor of Ohio is here. He's got some
16 questions. How did we get here. And then we walked into a
17 political hornet's nest. So I don't know if you need me to go
18 down that rabbit hole but there's -- I'll just share what I
19 experienced.

20 So we came in and there was a roomful of people. I don't
21 know if any of you might've been some of them. I have no idea.
22 But the governor was all riled up. Had the governor of
23 Pennsylvania on the speakerphone. And pretty much said how can
24 you guys kill 3,000 people over 14 miles and we respectfully said
25 well, we don't know what you're talking about, sir.

1 He had really bad air modeling from somebody. And we'll just
2 leave it at that. The old computer adage garbage in, garbage out,
3 it's exactly what somebody fed to governor. So I don't know who.
4 Don't know what agency. But it was bad intel. So I politely and
5 respectfully challenged that. And as I quickly saw that that was
6 kind of a thing, I inquired is the person who did this modeling in
7 this building and somebody said yes. I said can somebody take me
8 to him or her.

9 I literally walked down the hall to the person doing air
10 modeling. I had a CTH person over my shoulder. I forget who she
11 was. I had Mark Duttle (ph.) from Norfolk Southern industrial
12 hygiene with me. It was the three of us. We kind of left that
13 governor's interaction we'll call it. I went down and I politely
14 and respectfully asked the air modeling person to please review
15 their parameters with me. And introduced myself. And the person
16 was a nice person. Don't remember his name.

17 I said just -- I'm -- I just want to know your parameters.
18 So he said he had five cars 90 percent full. I said we'll let's
19 start with that. I said you have two cars on the east that never
20 leaked. They're 100 percent full. You have weigh bills that show
21 the weights. So I said respectfully, use that data.

22 Now you have these other three that have been burning since
23 Friday night. And there's about five of us with a combined 200
24 and some years of experience that are telling you, from our
25 experience, they're at least half empty. And half is graciously

1 heavy. They've been burning a long time. So we're going to
2 respectfully ask that your team put three cars at 50 percent and
3 that should be a high number. So he called his boss, whoever
4 agency he was with, and they agreed. They made that edit.

5 I asked him for the next parameter. What's the next
6 parameter. He said phosgene. I said okay. So what kind of
7 concentration are you picking phosgene. He said 70 percent. And
8 I was like, oh, my. I see the problem. So we said listen, it's
9 less than one percent. And if you inquire with any vinyl chloride
10 producer, they're going to tell you the same thing and we can
11 provide data. And by the time I even got the sentence out of my
12 mouth, the CTH lady had it pulled up and put it right in front of
13 the person. It's absolutely 100 percent fact when you burn VCM,
14 it liberates less than one percent phosgene. Well, less than one
15 percent. That's chemical fact.

16 So once again, he calls his boss. Gets permission to change
17 it. So he changed that. I said what's your next parameter. He
18 said hydrochloric acid. I said what concentration did you use.
19 He said 33 percent. I said okay. So I'm going to bump you up.
20 Make that 50 percent is what I suggested to him.

21 Because again, this is from OXY, the people that make the
22 VCM. I had already had this chat with them in the planning days
23 the last 48 hours. So I knew this to be very factual, very
24 readily on my brain because we had just talked to OXY three or
25 four times about these phenomenon.

1 Because keep in mind, these cars were burning since Friday
2 night. And you could see the HCL in the cloud Friday night. I
3 mean, you could see it in there. The black and the white. So we
4 bumped him up to 50 percent. And the accelerated story, lo and
5 behold, with the revised model with accurate data, it's 1
6 kilometer by 1.4 kilometers. Whatever they came up with is much
7 more accurate of a model.

8 So sadly, that information just -- that's factual
9 information. That factual information wasn't used in someone's
10 modeling and it spun up a couple governors pretty hard. So that's
11 kind of a sad reality of all this story here.

12 But so, you know, my role in that was with Mark Duttie from
13 NS and CTH just really ensuring that accurate data was used for
14 modeling. Timeline thereafter, I'm going to speculate that it was
15 probably within an hour after that, a revised model got funneled
16 through whoever it needed to get funneled through.

17 And we had to politely and tactfully nudge the governor to
18 say, governor, all due respect, if this is going to happen today,
19 we need to go. We need somebody to authorize us to move because
20 we're losing daylight. We needed three hours to get set up
21 minimum. Maybe four. And we were already at that point, as I
22 recall, like 12:26 p.m. And I remember that because they had a
23 press briefing at 12:30. So we got the green light at like 12:29
24 p.m. or whatever it was on Monday to go from the commander, from
25 the fire chief.

1 So we hopped to it. We set that up nothing short of a trot
2 in our spring -- in our step to pull that off before dark Monday
3 night. And it went very successfully. It pretty much went as we
4 planned it. The burn pits worked as exactly how we planned it.
5 We were so proud of that. Kept the fires away from the
6 isobutylene car. It really went off perfectly, frankly. I mean
7 perfect as perfect. It went off perfectly. And that's attributed
8 to Jason Poe, his team, his expertise. My guys, the SRS guys,
9 working as a team. All the prep work. I'm very proud of our
10 team.

11 So on that note, fires burned just for about two hours-ish
12 when the VCM fires kind of dwindled out. But again, ground fires
13 continued to go through the night and we -- we, as a team,
14 encouraged Norfolk Southern to just let the night play out because
15 everybody is anxious to clear wrecks. You know how that works in
16 a railroad. We encouraged the railroad to just let this stuff
17 residually burn out because if you get in there putting fires out
18 with foam, there could be some residual crap in night air that it
19 would just cause everybody to be in (indiscernible) or whatever.
20 Right?

21 So they listened. Next day, daylight, new assessment. All
22 readings were pretty favorable. Whoops. Somebody, is this a drop
23 signal or something? Do I need to -- I don't know if we have a
24 pause or --

25 MR. STANCIL: We'll just pause for a moment while we

1 reconnect our video feed.

2 (Off the record.)

3 (On the record.)

4 MR. STANCIL: -- for the interruption. I think we have our
5 video feed reestablished.

6 BY MR. STANCIL:

7 Q. If you would, please continue, sir.

8 A. No worries. So let's see. Fires burned out through the
9 night following the vent and burn as a good residual -- just let
10 the night air kind of have things burning out versus being
11 extinguished and -- because we still had other cars we had to
12 assess. Right? We still had to get in there and look at that
13 isobutylene car. We had other cars that we still hadn't been able
14 to get into yet for a lot of up close and personal checkouts on
15 them. But the next day would've been Tuesday, wreck-clearing day.

16 So Tuesday wreck-clearing day, our company personnel, we
17 supported pretty much south side and north side and east side and
18 not so much the west. The west was box cars. I think we might've
19 put a fire truck down there to help them crunch some box cars at
20 some point but for the most part, a lot of those standing cars on
21 the west -- I'm sure many of you know -- there was a cut of cars
22 that really didn't derail. They were just involved in fire.

23 There was some box cars. I think there was an auto rack.
24 Those cars had been kind of cut and pulled to the west. So we
25 didn't really prioritize them in our world. We were more worried

1 about the tank cars and the mess and kind of working through the
2 wreck. And quenching fires along the way. Cooling down cars
3 along the way. Help facilitating the wreck clearing safely, kind
4 of diapering up, and any cars that were breached and dribbling.
5 There was a lot of product dribbling from jackets and things as
6 you can imagine.

7 So we were doing a lot of that kind of work pretty much all
8 day into the night. What would that be? Tuesday. And it was
9 evening-ish -- it was probably in the vicinity of -- I think by 9
10 p.m. or so Tuesday night, as I recall, the last covered hopper car
11 was cleared to the north. And we actually purposefully left that
12 car to the end because it was that smoldering, festering resin car
13 that had not been ventilated.

14 It had a tremendous amount of heat in it at that point
15 because of the -- once we vent and burned it, you know -- it was
16 just kind of an old festering car before the vent and burn but
17 obviously, we burned out what was left of that western VC car and
18 that pretty much got that car extra hot if you know what I mean.
19 It was -- I took a thermal imaging camera to it before the
20 wreckers touched it and it was like 1200 degrees Fahrenheit and it
21 wasn't vented.

22 So first thing we did on that, we set up a thousand-gallon-a-
23 minute -- or actually a 1250-a-minute five-inch gun with 1250
24 nozzle on it from the south facing north to protect the wreckers
25 and the track operator. And we purposely got a hole, actually a

1 couple holes pulled open on the vertical. We basically did
2 vertical ventilation on that car because I was very concerned for
3 the wreckers on that. With such tremendous trapped heat, it had a
4 potential for a backdraft explosion if that -- the metal was
5 fatigued on that hopper car. If they would've tugged on it and
6 drug it to the north and if it would've come open -- it was a fine
7 powdery resin. And I was sincerely concerned about a potential
8 backdraft explosion with that car.

9 So we vertically ventilated it. Drug it to the north. And
10 they cleared up from it. And within a half hour, it went to free
11 burning and it was kind of -- like I say, by expectation and
12 design at that point, and then our nightshift quenched that fire
13 safely.

14 We finished quenching the fire along with -- let's see, that
15 goes into Wednesday morning. Our teams pretty much suppressed
16 five or six of these residual, what I'll call non-hazlating (ph.)
17 fires that were between the box car of vegetables and the resin
18 cars. There was five or six as a I recall. Between the north
19 side, west side, and east side, we spent Wednesday morning -- we
20 had the last fire midday, like noon, 12:30 was the last of the
21 fires on Wednesday.

22 And to my knowledge, there hasn't been a single fire since.
23 I think that's the one thing disappointingly with this isobutylene
24 car we could purge it right here and get it done, but they just --
25 Norfolk Southern doesn't have any affinity for flaring a car in

1 this town right now and I understand. Yeah, so that put us to
2 Wednesday.

3 As soon as fire suppression was done Wednesday, yours truly
4 here pretty much jumped in to help Norfolk Southern environmental
5 managers. Start helping some other things tactically with
6 aeration, blowers in the creeks. We got some -- what I call the
7 jet-ski float machines installed in, I think it's Leslie Run, by
8 the wastewater plant. We have an otter pump down there blowing --
9 just aerating (indiscernible) organics and adding oxygen for fish.
10 We did that while my guys continued to support wreck -- what I
11 call the tank car cleanouts and things for several days
12 afterwards. And this is where I'm going to be incredibly
13 generally because my men took care of it while I was helping
14 environmental.

15 But we progressively worked through emptying breached tank
16 cars first. We went after all leaky tank cars. Emptied them.
17 Ripped jackets off. Cleaned them out. Cleaned and purged cars.
18 Get them ready for strap. We had -- we have -- we had a shear
19 here. It demobilized Monday. It had to be on another job. But
20 we were helping with the shearing and the demolition process.

21 So we were progressively working through all those cars to
22 get them emptied, get them cleaned, get them ready for scrap, and
23 that effort continues today. There was one the other day that
24 actually -- they drug a part of a car through kind of a puddle of
25 oil so we had to reclean it but other than that, there's been a

1 very progressive from our guys, our employees in a lot of areas.

2 I don't know if you need to go into that detail or not. What
3 all we're engaged in. I don't know how much detail you want
4 but --

5 Q. You can continue if you wish. Just tell us what you think is
6 important.

7 A. Well, I'd say from the tank car rail safety, I mean, moving
8 forward from this point, kind of the derailment is over at this
9 point. That's why I'm asking. Like, I don't know how much you
10 guys -- maybe it's time for you to guys to ask questions. I don't
11 know. This is the first time I've done. Thirty-five guys. You
12 guys are my first.

13 Q. Well, just want to make sure you've told us everything you
14 think that was important about that initial response to the
15 incident. So you'll -- we'll give you an opportunity -- well, go
16 head if you have more.

17 A. Well, as I say, if you guys have questions, maybe you'll ask
18 a question that'll jog a memory.

19 Q. Certainly.

20 A. But you guys kind of asked if I got any sleep. I think Mark
21 -- is it Mark? Mark asked if I got any sleep. I can tell you
22 that I'm fortunate on this particular wreck, I'm able to go to my
23 own home at night. I'm about an hour away. So I have been
24 commuting at night but I usually start at 6 and don't get home
25 until 10 every night. So I'm napping. I'm doing fine. But is

1 there something I may have forgotten to mention? Maybe.

2 Q. Well, we'll see if we can jog your memory on a few things
3 just to follow up. And --

4 A. Sure.

5 Q. -- at the end, we'll give you an opportunity to tell us
6 anything more that you can think of.

7 A. Sure.

8 Q. So going back to what cars were breached, can you give us a
9 list or an outline? And if it would be helpful, I have the --
10 your general worksheet if that was something that you helped
11 produce?

12 A. No, my men produced this. And the one key man is actually in
13 Disney World this week with his family. So I was very blessed for
14 -- up until this past Friday that he -- we were joking that he was
15 me -- my traditional role was while I was in the trenches. I was
16 really heavily engaged in the vinyl chloride pressure cars and
17 that iso car and making sure we were good.

18 So I'll tell you what I know for fact. The breached cars
19 were the butyl acrylate car. The two ethyl acrylate car. I know
20 there were some propylene glycol car or cars but that's a general
21 -- I'd have to really study this list and get Mike's -- I can
22 certainly follow up with you folks. I mean, I'm sure that our
23 guys captured those kind of data. I have not studied those kind
24 of data yet. But I know from all my intimate walking around and
25 doing what I've done in the last few weeks here, for sure, the

1 acrylates. I'm 100 percent sure and I can even tell you there's
2 two holes in the one head end of the butyl car. And there's hole
3 (indiscernible) wrinkled and pretty big gaping holes in the two
4 ethylhexyl acrylate car.

5 Certainly, one of the lube oil cars, maybe two of the lube
6 oil cars. I know one was a double compartment car. At least one
7 of those compartments -- I think both of those compartments
8 actually my guys told me had leaked. Yeah, both breached. Here's
9 that. Yeah. So I'm looking here at his notes. In fact, this is
10 pretty descriptive. I mean, this is Mike's notes. So you're
11 saying our guys gave this to you guys or NS --

12 Q. Got it from Norfolk. Yes.

13 A. Well, this is probably Mike's notes. So let me just kind
14 of --

15 Q. And if there's anything that's changed from those notes,
16 please let us know if you notice anything.

17 A. Well, just to clarify, I see he's -- at least on the VC cars,
18 car did not leak. Cars vented product through PRD and ignited.
19 So the point of those notes was there was no VC cars breached.
20 None of the vinyl chloride cars breached in the wreck that we're
21 aware of. The fires that ensued were out of their protective
22 housings.

23 There's an RACX here, propylene glycol. It's one of the ones
24 that had breached and lost a lot. Now, that was actually an
25 alcohol-type fire. That glycol had some alcohol in its chemistry

1 because there was that blue flame-ish that we did notice in the
2 ground fires over there.

3 The diethylene glycol had an (indiscernible) leak. Yeah, so
4 his notes here I'm going to concur -- knowing Mike's
5 professionalism and his notes, I feel that everything written here
6 would be accurate.

7 Q. So what was burning? What was creating the pool fire?
8 Imagine that the butyl acrylate was not burning?

9 A. Yeah. Ryan Tacharsky and I clearly observed and smelled
10 butyl acrylate in our west/southwest assessment around the back of
11 -- I keep forgetting the name of that company. The big blue
12 building. CeramFab. We walked around the back of CeramFab from
13 that southwest corner. And you could sense a little bit in the
14 air. And as we walked westward to see -- we saw smoke coming from
15 down towards Pleasant Street Crossing. I said why is there smoke
16 down there. Because we weren't kind of putting it together at
17 first. Like, what's burning down there.

18 So as we were walking down there, we walked into an
19 incredibly strong acrylate and then we looked in between the two
20 tracks and you could see it, about a two-inch deep puddle of
21 chemical laying over there. And the temperature outside that
22 night was like 3 or 4 degrees Fahrenheit. It wasn't water. It
23 was chemical and you could see the -- kind of that temperature
24 change like a cold air breath at night, like a hot air, cold
25 night. It was doing that. Laying in the railroad right away

1 there.

2 So you asked what's burning. Again, I'm going to say that
3 this is my general observations from the few days we were
4 offensive in helping with the assessments and safety and clearing
5 the wreck. You had propylene glycol, you had lube oil, you had
6 the two ethyl hexyl acrylate that I believe also played a role in
7 the fire because we never found a lot of that. There was some
8 laying in the car but I think a lot of that burned, too.

9 So the glycols, the oils, and that two ethyl hexyl acrylate.
10 Oh, there was an ether. There was -- what was that? diethylene
11 glycol monobutyl ether -- they always screwed up that name. Give
12 me a second here. Yeah, monobutyl ether. He has this one as an
13 unknown status. That one had also breached that I think you're
14 going to find. That had a hole in it. Yeah.

15 Q. Going to -- back to the discussion about the PRDs, the
16 pressure relief devices, which of the vinyl chloride cars were
17 venting through the PRDs?

18 A. I'd have to go back and look at the notes. I'm sorry. I
19 don't remember the car numbers like you might know them right now.

20 Q. Well, when you talk about from the front to the back or east
21 to west, were all of them at some point venting or --

22 A. At one point, they were all venting and burning pretty good.

23 Q. They were?

24 A. Yes, sir. Yeah. And I believe there's video that'll show
25 that from those drone flyovers.

1 Q. And which one had the most vigorous or violent -- you
2 described how that one --

3 A. Yeah, it was cycling. Right, right, right. Hold on. I took
4 a picture of my board here. Let me -- oh, shoot. I'm trying to
5 see if I -- I thought I took a picture of my whiteboard but the
6 picture I have is -- it's an updated board after they showed them
7 as ready for scrap. So if you'll just give me a minute. I'm
8 going to try to dig through some texts.

9 Q. Take your time, sir.

10 A. I'm going to have to -- I don't -- I'd have to get back to
11 you on that. We have notes somewhere but unfortunately, our
12 whiteboards (indiscernible) keeping them and I think somebody did
13 this and then changed it (indiscernible). So I'll have to get
14 back to you.

15 Q. Fair enough. We'll reserve that question for later. You
16 mentioned the cycling of the PRDs. Give me a little idea of the
17 timeline on that. How -- does it happen over a period of time?
18 What's the period --

19 A. It got more frequent. I mean, through the night -- that
20 would've been what? Friday night into Saturday. It would go
21 pretty steady and then reclose and then that frequency got more
22 active Saturday day. Saturday morning-ish. It would go for a
23 couple of minutes. And then get calm. It wouldn't get close. It
24 would just get calmer. It would try to close but obviously, it
25 was leaking. So it was about a two-minute-ish cycle.

1 Q. So were the PRDs open to the -- they were leaking -- at that
2 point, were they continually open?

3 A. Well, no, I can't -- it's not all the PRDs, gentlemen. It's
4 pretty much at some point through the night, all -- I mean,
5 everything was burning. I mean, liquid lines, vapor lines. Any
6 sample lines that would've been there. I can't remember if there
7 was sample lines on the cars at this point. I'm so tired.

8 But pretty much all service equipment was burned out. All
9 elastomers you could clearly see -- when we could see daylight,
10 you could see the fire was being fed from all components. So
11 that's one clarity. I appreciate the question.

12 If everybody is kind of tunnel visioned on the PRDs, it was
13 -- when fire -- and this isn't unique to vinyl chloride. This is
14 something we've seen in derailments multiple times. When there's
15 a fire in the housing, inevitably everything, elastomeric seals
16 burn out. They melt out. They burn out. They fail.

17 So you're going to get that fuel-fed fire from all appliances
18 after the elastomers burn out.

19 Q. Can you describe any other experiences you've had with vinyl
20 chloride?

21 A. Yes. We've transferred a handful of times for our customers.
22 Car-to-car transfers. No problems. Paulsboro -- some of you may
23 or may not have been involved in Paulsboro. I happen to be kind
24 of the lead hot zone guy for that one where we had to do creative
25 tactics and introduce acetone into the car to get the last residue

1 out. We had to get this last residue out of the car using a
2 carrier solvent. The chemists described it to me -- you're not
3 going to vein pump it out because it's going to keep flashing off.
4 You're going to have to do something to put liquid in. It'll
5 absorb in the liquid. Think about marbles rolling around in a
6 jar. You pump all the marbles back out. The marbles come with
7 the liquid and then they deal with it at the back end at the
8 chemical plant. So that's what we did. Worked like a champ. But
9 yeah, I was the lead guy at Paulsboro, as well.

10 Q. Any other ones?

11 A. Well, fortunately, there's not a lot of vinyl chloride
12 emergencies. So no.

13 Q. What about polymerization or polymers that would've been
14 involved in vent and burn? Had there been any incidents that your
15 company has handled?

16 A. Well, keep in mind, the polymers formed are combustible
17 solids like -- basically, plastic. They burn just like the
18 plastic pellets and resins do. So if you're looking for evidence
19 of polymers, they're probably burned up to ash is -- if that's
20 where the question is going. But we know from what we know -- we
21 had (indiscernible) flow. We had stuff that was actively venting
22 and burning that choked itself off. Inside the car, there's only
23 one thing that can do that. And that's polymers.

24 Q. Polymers.

25 A. That's just fact.

1 Q. And after the vent and burn occurred and the fires were going
2 on, were there -- was there any fire burning inside of the cars
3 themselves?

4 A. The cars would've burned themselves after that. Once they
5 were emptied and the pool fire happens, then there's like that
6 draft kind of chimney effect of the fire will get back in the car
7 and burn itself out. Yes. That's been our experience.

8 Q. And so tell us a little bit more about your interaction with
9 Oxy. You mentioned that you had some discussions with them
10 leading up to the decision to vent and burn.

11 A. Yes.

12 Q. Can you tell us a little bit how that went?

13 A. Well, let's see. Started -- well, I'm not going to guess
14 when it started because I don't remember when it started. They're
15 also one of our mutual customers. I don't remember when the first
16 phone call with Oxy would've occurred. I don't recall.

17 But one vivid call that I can recall would've been Saturday
18 evening. Yeah. Would've been Saturday evening. Myself, Norfolk
19 Southern, including the chief executive officer of Oxy was on the
20 phone. They had a whole posse of people on the phone.

21 So the general gist of that was they wanted to make sure that
22 somebody was doing a model of a blast zone. And somebody had
23 already done that, I believe. But we as the -- what I'll call the
24 hazmat field guys with our fellow hazmat manager of the railroad
25 was there on the call -- we weren't sure who did it or where it

1 was but kind of felt that it had been done.

2 So after that call, he made sure that he assigned CTH to make
3 sure that it got done and got it across the finish line. So that
4 was done and it got across the finish line. So that was probably
5 the biggest thing they were concerned about. I think just wanting
6 to know that the fire chief was getting people out of the homes.

7 And you know, on a note of personal observation, there was a
8 lot of genuine stress from the police chief and the fire chief
9 that people were refusing to leave. And I think that's something
10 that should go on record. I personally observed several briefings
11 where people were refusing to leave. And I believe that to be
12 true.

13 They were trying to get people to leave and just -- people
14 were saying I'm not leaving my house. You hear the media like
15 they never told us. We told them since Friday night. DOT
16 guidebook one mile. And we told them that throughout the weekend.
17 So -- and I say we meaning Norfolk Southern. I was there and
18 observed the conversations.

19 So I can tell you I observed stress on the fire chief and the
20 police chief of frustration with those people not wanting to
21 leave. They ramped up those efforts once they knew this was an
22 (indiscernible) and a vent and burn. I think people were starting
23 to wake up to the reality of what we've been saying since Friday
24 night that these cars are at risk of exploding. And I think once
25 they realized like, oh, my God, this really is going to happen and

1 we're going to not let it happen -- we're going to take control of
2 these cars so that they don't take control of themselves.

3 So I think then is when they had more success, if you will,
4 moving some people out of their houses. But unfortunately, it
5 took until -- what would that have been -- Sunday evening. I
6 think it was like a Sunday evening night operation to get people
7 out of their houses. That had started Friday night in multiple
8 attempts. Not my department. I was more worried about tank cars.
9 But just sharing with you my personal observations from the
10 unified command post.

11 MR. STANCIL: Well, thank you. I'm going to let some of our
12 colleagues here ask you any of the questions that they may have
13 and we'll go next to Chief Carey with the IAFF.

14 BY MR. CAREY:

15 Q. Thank you, Paul. Drew, thanks for joining us today. I just
16 had a few things. I'm interested in the emergency response end of
17 it. Not just (indiscernible) but what you observed as far as fire
18 department actions, inactions, and things like that.

19 You mentioned the -- somebody finally used the ERG and come
20 up with that distance. And we know that the ERG, although a very
21 basic reference, is one of the -- the only ones out there that
22 really gives you definitive distances as far as initial isolation,
23 protective action, distances, and stuff like that. And who
24 actually opened up that discussion as far as consulting the ERG?

25 A. Norfolk Southern hazmat, Scott Deutsch.

- 1 Q. Scott?
- 2 A. Yes.
- 3 Q. So Scott is the one that did that.
- 4 A. Yeah. Well, he and I together. But --
- 5 Q. Yeah.
- 6 A. -- I work for him so I'm standing by his side. But we
- 7 collectively made sure that they looked at that.
- 8 Q. Cool. And you mentioned this car that you put your hand on
- 9 and it was warm and then you used the tick and you said it was up
- 10 around 1200 degrees.
- 11 A. No, no, no. Different car. Thanks for the clarity. The one
- 12 I put my hand on was the vinyl chloride car to the west.
- 13 Q. That was -- that was my question which car that was.
- 14 A. Yeah.
- 15 Q. That was a vinyl chloride car?
- 16 A. That was the single -- the one by itself to the west. And
- 17 where that jacket tear was was on the west in opposite position of
- 18 the hopper car. The hopper car beside it was kind of a
- 19 smoldering, festering car from a pool fire that had been under it.
- 20 It was --
- 21 Q. That was the car with resin. The covered hopper car.
- 22 A. Correct, correct.
- 23 Q. Right.
- 24 A. It wasn't 1200 at that time. I think that's also important
- 25 to understand.

- 1 Q. Right.
- 2 A. At that time, that was pre-vent and burn.
- 3 Q. Right.
- 4 A. So it was a festering car but it wasn't 1200. Just had a
5 little wispy smoke to it.
- 6 Q. So the car that was 1200 degrees, that was the VCM car?
- 7 A. No.
- 8 Q. It wasn't?
- 9 A. It was the resin car.
- 10 Q. The resin car.
- 11 A. After we burned off what was left of the VC in that car that
12 we're talking about. In other words, the VC when we did the vent
13 and burn, that pool fire was inherently at and under part of that
14 hopper car.
- 15 Q. Right.
- 16 A. That kicked off the hopper car, you know, worst combustion.
17 So that car wasn't 1200 degrees prior to the vent and burn. It
18 was a few hundred as a I recall in my tick. So it was just
19 festering, it was just smoldering. Just kind of a nuisance.
- 20 Q. And who was the fire department incident commander for the
21 record that you were working with in the unified command --
- 22 A. Keith -- I don't remember Keith's last name. Keith is his
23 first name. And I'm sorry. I don't remember his last name.
- 24 Q. Did you have a lot of interaction with him?
- 25 A. No. I mean, from a distance across the room, yes. But

1 again, I'm kind of side by side with Norfolk Southern. I whisper
2 to Norfolk Southern and Norfolk Southern does most of the talking.

3 Q. So Norfolk Southern was dealing directly with him?

4 A. Yes.

5 Q. And you were in -- kind of in their ear --

6 A. Yes, sir.

7 Q. -- making suggestions.

8 A. Yes, sir.

9 Q. Okay, good. Do you feel as though the fire department got
10 good information early on in the incident about the consist and
11 things like that?

12 A. Yes, I do. Because we were the ones that gave it to them.
13 We had the wheel report in their building by midnight reviewing it
14 line by line, by line, by line, by line. Now, when you say early
15 on, I don't know how early -- I don't know what they had early
16 form the train crew. I'm not privy to that. I can tell you when
17 we rewound all of their offensive operations to get them safe in
18 the clear, when we rallied up in the garage, there was Ohio EPA,
19 Pennsylvania DEP, EMAs from both Pennsylvania and this local
20 county. Pretty much everybody. And were huddled together working
21 the consist. We were working that wheel report.

22 So again, this media frenzy going on is unprecedented but
23 everybody is claiming they didn't know. I can tell you Norfolk
24 Southern had that information really quick. And every agency knew
25 it. So interagency disconnects probably happened, obviously.

1 Q. Yeah, they always happen.

2 A. But yeah, they had the information. And were working that
3 consist together.

4 Q. And how did that go in terms of dealing with the fire
5 department and convincing them it was time to go defensive?

6 A. It was a little fragmented at first. We had to see several
7 white hat officers on scene. We kept getting pointed to that guy.
8 And then that guy would point us to that guy. And that guy would
9 point us to that guy. So that's the honest truth. It was -- they
10 were really -- I mean, again, if it was a commercial structure
11 fire, they had it. They were -- they had an amazing operation for
12 a -- that's the other thing they shared by the way. Their
13 community water system was shit in their words. They had a broken
14 water line. Even on a good day, it's a lousy hydrant system. So
15 they had a tanker task force operation.

16 Q. They did bring in tankers.

17 A. Oh, it was amazing.

18 Q. Yep.

19 A. But it was like three to four degrees Fahrenheit so they were
20 obviously making hockey rinks, too, right?

21 Q. Sure.

22 A. But they had an amazing orchestrated mutual aid. I give him
23 A plus on effort and operations. What I see in my heart from
24 jumping on trucks at 14 and what I know from industry, let's put
25 it this way, Chief, I know career chiefs that retired and never

1 been to a train wreck. Most fire departments are really good at
2 structure fires, rescuing people.

3 Q. Correct.

4 A. But they have a train wreck like this in their town, they
5 just don't know what they don't know.

6 Q. It's a low-frequency high-risk event.

7 A. That's right.

8 Q. Yeah.

9 A. So once they realized the message, they were incredibly
10 cooperative to just unwind and pull out and get themselves in a
11 safe place.

12 Q. And their fire extinguishment methods did not involve any
13 foam? It was pretty much water?

14 A. It's funny you ask that. I did not see any foam being
15 utilized. There were discussions of foam with Scott Deutsch and
16 myself and we talked them out of it because it was fluorinated
17 foam and because they weren't going to do anything in the big
18 picture. Again, they're putting people at risk offensive with no
19 meaningful success in a thing. They're not going to succeed here.

20 Q. So you did a risk/benefit analysis on that and decided --

21 A. Correct.

22 Q. -- no.

23 A. And again, they decided. However, now this is just within
24 this week, someone told me that somebody from NS environmental
25 interviewed the firemen and said yeah, we flowed like 40 gallon of

1 fluorine -- fluorinated foam. Don't know when that happened. If
2 it happened before we got here. Maybe that's why the ditch fire
3 wasn't burning long. I don't know but I cannot confirm that. But
4 Norfolk Southern managers told me that they interviewed somebody
5 from the fire department. Said they used 40 gallon of fluorinated
6 concentrate.

7 Q. So it's unofficial comment.

8 A. Correct.

9 Q. And your company, did your company actually do
10 extinguishment?

11 A. We did.

12 Q. And how did that all work and what kind of resources do you
13 deploy for that?

14 A. So among our assets in high hazard chemical handling, we also
15 have a very respectable inventory of water moving and industrial
16 firefighting equipment. So we utilized the lake east of town.
17 There's kind of a lake on the south side of the tracks and there's
18 a state park lake on the north side of the tracks. Little bitty
19 lake here. Big lake over there. We have what we --

20 (Crosstalk)

21 A. -- call otter pumps, floating submersibles. We deployed a
22 floating submersible from the big lake. Ran five-inch pipes
23 underneath the tracks to basically make sure their little league
24 didn't run out of water.

25 Q. High-tech way of doing drafting. Right?

- 1 A. It is. It's not drafting at all.
- 2 Q. It's not drafting.
- 3 A. It's floating submersible.
- 4 Q. It's better. Yeah, right.
- 5 A. That's right. So basically, we made sure that our water lake
6 never dried up. We put seven and a quarter supply line 900 feet
7 up to leak -- not leak oil to the State Line Tavern. We had a
8 relay engine there, 2,000 gallon (indiscernible) engine there with
9 two five-inch relays (indiscernible). We did -- I'll say on the
10 vent and burn, while Jason Poe was setting his explosives, we did
11 exposure protection lines. We had wetting on an oil tank farm.
12 We had wetting behind that tank farm. We had wetting on
13 buildings. We had wetting on a big pile of timber that had been
14 placed there. We didn't want timber catching on fire and having
15 another building burn down.
- 16 Q. Is that wetting -- is that just water or is that --
- 17 A. That was just water.
- 18 Q. -- like a wetting agent like --
- 19 A. That was just water.
- 20 (Crosstalk)
- 21 A. That was just water during the vent and burn. Just
22 protecting exposures so that we didn't let the vinyl chloride vent
23 and burn burn down buildings and burn down businesses. So we did
24 that through the vent and burn process. (Indiscernible) talk
25 about that.

1 So when it came time for wreck clearing the next day, same
2 assets deployed. And then we went into more, I'll call
3 strategically positioned hand lines and ground monitors. So we
4 supported the wreck clearing and --

5 Q. Like portable deck guns like --

6 A. Portable deck guns. Yeah.

7 Q. -- and things like that.

8 A. Yeah. If you're familiar with industrial DASPIT devices,
9 DASPIT tools.

10 Q. Yep.

11 A. So we had portable hydro foam nozzles. Mostly that. We used
12 one because ergonomics. I'm a big fan of do this with a big gun
13 versus killing people with hand lines. Right?

14 Q. Right.

15 A. So we did that with fluorine-free Versaguard AS100 3x3 which
16 is an all-things alcohol resistant top performing -- it is the top
17 performing fluorine-free foam in the world. So that's what we
18 stock. We have warehouse (indiscernible) of it. That's what
19 Norfolk Southern stocks. And we help surpass like the glycol
20 fires. Like I said, we had some blue flame fires that we were
21 suppressing. So we did use some. It was probably in the vicinity
22 of a couple -- 24-ish, 30 -- 20 to 24 -- I already did this
23 inventory. I think the number came down to 26 five-gallon pails.
24 Something like that. Give or take.

25 Q. Of an alcohol-type foam?

1 A. Of an alcohol-resistant fluorine free --

2 Q. Alcohol resistant. Right.

3 A. No fluorine. And that's -- we did use that as far as
4 supporting the wreck clearing.

5 Q. And actually, I applaud you for your restraint when you dealt
6 with the governor's people. And that modeling that was done that
7 was incorrect, what was the original thought they had as far as
8 distance? Three miles?

9 A. The governor -- I'll chose my words carefully here. He was
10 already pretty spun up when we walked into that room and we had no
11 idea what we were walking into. We were told we were coming here
12 to answer some questions about how did we get here.

13 We thought we were going to just kind of educate the
14 politician so he could please his constituents is kind of what I
15 thought we were going into. And he was more than pissed. And he
16 laid into us pretty good. So pretty much how can you guys justify
17 killing 3,000 people over a 14-mile radius or something.

18 Q. So it was 14 miles.

19 A. Something like that.

20 Q. Something outrageous.

21 A. Something -- first of all, I would never professionally
22 recommend this if I even thought that was a model. So I
23 respectfully, all due respect, don't know what you're talking
24 about, and then he referred to this model. I said all due
25 respect, I don't even need to look at that and I can tell you

1 what's wrong. So it was a very awkward moment for me
2 professionally but I stuck to my guns and professionally walked
3 down the hall to the guy doing the model and helped correct it.
4 We were on -- these cars are not in good shape, folks. We ain't
5 got time to play around.

6 Q. It sounds like you were looking at two possible outcomes.
7 Either a bleve or a rapid runaway polymerization which would
8 catastrophically resemble a detonation of that container. Right?

9 A. Yeah, technically, the bleve, no. Because we weren't in a
10 pool fire anymore. But the polymerization building pressure --
11 what we observed, what we personally observed when we were getting
12 in there to start pressure gauging and looking closer at cars, we
13 thought we were safe to do so when the pool fires kind of calmed
14 down, the PRDs had kind of calmed down, we thought, okay, let's
15 get our air packs on.

16 Let's get in there, see what we can see. Let's start looking
17 at where we can burn the stuff in liquid flare. And when that one
18 PRD and again, I know I got to get back to you on that car number,
19 but that one, when it launched -- gentlemen, when it launched --
20 when it relieved itself, it relieved itself in exponentially more
21 pressure audible -- I mean, that audible pressure relief was
22 significantly louder and stronger and persistent for 70 minutes.

23 Q. It's like a jet. Right?

24 A. It was -- yeah, it went from -- I mean, keep in mind, when it
25 was cycling before, it was loud. And it was relieving meaningful

1 pressure. When it stopped activating I'll say roughly midday that
2 day, that 90-minute to two-hour lull when it wasn't activating,
3 when it did, it went on with a thunder. And it persisted for 70
4 straight minutes. That car was reacting. There's pressure being
5 built up in that car. There was no pool fire under it at that
6 point.

7 Q. And were you watching it with a tick while this is going on?

8 A. No, they're jacketed cars. I mean, that's the other thing --

9 Q. So it's --

10 A. Everybody said well --

11 Q. -- not good information.

12 A. It's not good information. They're jacketed, thermally
13 protected, 105, 300s. They had -- there's not a lot you're going
14 to do with a tick other than say yeah, the car is hot.

15 Q. So the --

16 A. -- burning.

17 Q. So the concern was more polymerization versus bleve.

18 A. That's correct.

19 Q. And was there a concern that some of the material had already
20 polymerized and was plugging up the PRDs?

21 A. One-hundred percent. That was exactly our concern.

22 Q. Yeah, that's what I would think. Yeah.

23 A. That is exactly our concern, sir.

24 MR. CAREY: Great. Well, thank you very much for your time.

25 MR. McCARTY: Oh, happy to help.

1 MR. CAREY: And thank you for your service.

2 MR. McCARTY: Well, thank you.

3 MR. STANCIL: Thank you, sir. We'll next move to Sean Lynum
4 with the NTSB.

5 BY MR. LYNUM:

6 Q. Hi. Sean Lynum. NTSB. Just a few questions for
7 clarification for the record. So when you first arrived on scene
8 or when Scott Deutsch arrived, who did you check in with once you
9 got here?

10 A. Scott Deutsch both had to work to find command. We were
11 directed into a maintenance garage at Leak Oil. And there were
12 EMA, white hat firemen. I didn't get names at that point. We
13 were more trying to get the message to please unwind. Please get
14 things wrapped up and out of here. We were trying to spread that
15 message and then we really didn't formalize meeting command until
16 down at the firehouse.

17 Q. Could you briefly describe hot tapping and liquid flaring for
18 the record?

19 A. Sure. So hot tapping and liquid flaring is kind of a two
20 technique -- they're kind of two different topics. Two tactics.
21 So hot tapping would be step one because the valves and fittings
22 are all burnt out and non-usable. So how do you get liquid out of
23 the damaged tank with no valves and fittings to deal with.

24 Hot tapping is a process of welding a nipple onto the lowest
25 level possible, the liquid space of the car. If you weld a

1 nipple, there's a hot tapping machine which is a drilling machine
2 with packing to not let the chemical (indiscernible) back out
3 through the shaft on the stem to expose people doing the drilling.
4 We install our own full port ball valve over the nipple. We drill
5 through the ball valve through the nipple, through the car,
6 extract it, and then we basically close the ball valve and now we
7 have control of that liquid in the car.

8 Then tactically, you can do different things with it. If it
9 wasn't polymerizing, transferring could be an option. However --
10 sorry, phone has just been ringing off the hook here. So again,
11 something I learned early on in my career, with polymerizable
12 materials that are suspected of polymerizing, the last thing you
13 want to do is put them in another package and send them down the
14 road. Put that problem in somebody else's community, no thank
15 you. Not an option in my book.

16 So people can speculate all they want. Well, you can add
17 inhibitor, you can suspend a reaction. Like, well, that's all
18 theory and that's not practical out of an inch-and-a-quarter hole
19 when we got three or four other cars at risk here. We don't have
20 time for that. It's not really an option.

21 So for three scientists they'll tell you it may be able to
22 happen, you'll have three scientists say no. Right? You'll have
23 this -- nobody has time for that in the heat of battle. You got
24 to go with the conservative tactic.

25 So hot tapping, talked about that. Liquid flaring. So

1 liquid flaring -- there's two types of flaring. Vapor flaring,
2 liquid flaring. Vapor flaring is truly that. Taking vapor space
3 chemical and burning it in vapor space form. And you're basically
4 doing that to destroy chemical residue and reduce vapor pressure
5 internally.

6 As we all know now -- or the world seems to know -- when you
7 burn vinyl chloride, you have less than one percent phosgene and
8 HCL production. So it's not something that the industry says, oh,
9 we're just going to flare those ones. It's not an easy decision.
10 If you have the choice, you don't flare it.

11 In this case, again, tactically, we didn't have a choice.
12 The things were polymerizing in unstable conditions. And keep in
13 mind, folks, we hadn't had a chance to get up close and personal
14 for damage assessment. Scores, welds, we didn't talk about that.
15 Damage assessment on weld seams and all that. Frankly, we never
16 got there because we couldn't get close enough to the cars safely
17 for our own people's safety.

18 So that's a factor in all this. You take that design build
19 spec and then you put hidden damage in the mix of all this recipe
20 of decision-making.

21 So back to vapor flaring for the record. Vapor flaring, we
22 do it to burn off residue vapors. We do it to control pressures
23 during transfers like a cryogenic ethylene for example. You would
24 transfer ethylene from package to package with a backside flare
25 keeping the pressure down --

1 Liquid flaring is where you're physically burning off the
2 liquid product. And we had a 316 stainless steel atomizing
3 burning bar ready to -- we had everything ready to go in staging.
4 We were ready to deploy. So we would atomize the liquid in a
5 spray bar much like they do at industrial fire schools when they
6 burn atomizing simulators for fire. They atomize the propane and
7 butane and throw it out there in atomized form. We were prepared
8 to do that had liquid -- or had hot tapping and liquid flaring
9 evolved here.

10 But again, with the cars behaving the way they did, we
11 quickly had to rule it out because we were concerned welding in a
12 vapor space potentially -- if one or more of those three cars had
13 burned themselves out, we'd have potentially had our own explosion
14 and potentially killed our workers by welding on an empty car,
15 potentially empty car.

16 Secondly, had there been polymers, we might've gummed up our
17 system anyway. It's only an inch-and-a-quarter hole. And then
18 you talked about -- well, I talk about. This was part of our
19 thought process. Even if we'd have been okay on Saturday to do
20 that and that PRD would have never went off the way it did and
21 frankly scared the shit out of us and said screw this. We don't
22 have a window that we thought we had. It would've taken hours.
23 We'd have probably been like 12 hours per car. They were worried
24 about two hours of burning. We'd have been burning VC out of an
25 inch-and-a-half hole for a long time.

1 So that was on the table as -- vent and burn, it goes now,
2 it's done. Liquid flare, all things keep pointing us towards vent
3 and burn. So that's -- I mean, I don't know if I answered your
4 question or not.

5 Q. You did. Thank you. Could you explain who CTEH is for the
6 record?

7 A. Sure. Center for Toxicology and Environmental Health. I've
8 worked with them for years at wreck sites. They have built their
9 company around third-party neutrality professional people. What I
10 like to describe as PhD toxicologists that don't mind getting in
11 the mud with boots on and helping people in the trenches.

12 So they help people like us in the trenches to help worker
13 exposure, making sure that if conditions require us to upgrade
14 respiratory protection, that we're aware of it. While we do a lot
15 of our own monitoring every day, it's nice to have them around.
16 Help support our people. So they help us in the hot zones.

17 They also provide community air monitoring with digital
18 telemetry. They collect data points all around regions and
19 cities. And I can't know exactly how they do it but I pretty much
20 know how they do it. It's a lot of meters that will automatically
21 transmit data every half a second or ever second. Collects data
22 points of whatever that data is. It gets permanently recorded.
23 And they run around and monitor those meters. Make sure they're
24 not getting fouled up with crude, dirt, road dirt, ice, snow,
25 batteries dead. They just make sure that there's continuous

1 service to those meters. That they're performing functionally
2 accurately with calibrations every day.

3 Then they also provide true PhD toxicology consults. If
4 people believe they've been exposed, they are my first call. If
5 I've got somebody in my company that claims they were exposed, I
6 have them call CTH and get the right advice. So they probably do
7 more things than that that I'm not remembering. But those are the
8 three primary things that they do in these derailment-type
9 scenarios and other industrial fires I've been on with them.
10 They're just a great resource.

11 Q. Good. Let's see. Last question. Vertical ventilation,
12 could you just briefly explain what that is for the record?

13 A. Sure. I guess for -- let me go to fire triangle 101, if you
14 will. Heat fuel oxygen to make fire. That resin car had plenty
15 of fuel and a whole load of resin. Finely-powdered resin. That's
16 a whole other deflagration of flash fires and powdered dusty
17 fires. But you talk about confinement. In fact, let's take
18 hazmat out of it for a minute. Let's just go back to just the
19 chief (indiscernible) like residential structure fire. All
20 firemen -- this is one of their risks when they roll into a house
21 fire on an engine company.

22 They get to a house and it's all buttoned up. Maybe it's
23 wintertime. No windows open and there's a tremendous fire in that
24 house but it's starving for oxygen. So the fire is built, it's
25 built, it's built but then it's starving for oxygen. Firemen come

1 along, open the door. Big rush of oxygen comes in and the house
2 comes boom, blows out every door and window in the house and
3 firemen go out in the front porch on their house.

4 So it's called a backdraft explosion. So that's what I was
5 trying to avoid to those wrecking guys that night with that last
6 car. I worked with mechanical all through the day. Three
7 different mechanical people and handoffs. And essentially, we had
8 a plan to just leave that car to the end because of that. We
9 wanted to vertically ventilate it. Give that heat somewhere to go
10 and that way, when they cleared the wreck, if that metal fatigue
11 started doing anything, it would've went to free burning but it
12 wouldn't have exploded on them. So that was what we did that for.

13 MR. LYNUM: Great. Thank you.

14 MR. WOOD: Yes, sir.

15 MR. STANCIL: Next we'll go to Mr. Randy Keltz with the
16 Federal Railroad Administration.

17 BY MR. KELTZ:

18 Q. Yeah, hey, Drew. Just a couple quick questions regarding the
19 venting of the tanks. What point did you note -- or did you note
20 that the three VCM cars, the protective housings were no longer
21 intact?

22 A. We noticed that Saturday-ish. The aluminum lids had kind of
23 cooked out. Those aluminum covers.

24 Q. Yeah.

25 A. They had kind of melted out through all the fires that night.

- 1 Q. So Saturday morning, when you got a good look at it?
- 2 A. Yeah. I can't remember if it was morning or afternoon but it
3 would've been --
- 4 Q. When the lights --
- 5 A. -- Saturday-ish.
- 6 Q. -- were on so to speak?
- 7 A. Yes, sir. Yes, sir. Yep.
- 8 Q. Was there ever any concern about where that molten aluminum
9 went such as into the PRDs to potentially either allow them to
10 remain open or to actually weld them shut so to speak?
- 11 A. I won't say any conscious thought because it was all
12 pressurized outward kind of thing. I think where we found it all
13 during our removing of them with your group or with NTSB group was
14 around the bolts and the low ends. They seem to be all kind of
15 gathered up on -- I guess as the cars were oriented, they seemed
16 to be -- I don't know -- kind of down at the one where the -- like
17 a 2:00 roll, it would've been --
- 18 Q. Yeah, pulling in that area. In the space?
- 19 A. Yeah. Because we had to kind of chunk it out to get the
20 bolts out.
- 21 Q. The other two cars that were equipped with the metal
22 protective housing covers, was the observation made that when they
23 were venting, it was actually blowing the ventilation flap open on
24 the top or was the fire coming -- when the PRDs would cycle, was
25 it more of fire coming from out the whole top of the pressure

1 housing or was it venting out that flap?

2 A. So let me clarify the two. When you say the two cars, were
3 the --

4 Q. So there was five car -- five VCM cars total. Right? Three
5 of the cars had the aluminum covers on melted away.

6 A. Right.

7 Q. So there was two other cars. I believe it would've been the
8 TILX car that was on its side. It was spring line in front of
9 them. And the GATX car would've been equipped with a metal
10 protective housing cover. All these cars would've had the
11 protective -- a hole in the top of that protective housing --

12 A. Right.

13 Q. -- and a flap that covers it.

14 A. Right, right.

15 Q. Centrally located over the PRD.

16 A. Right.

17 Q. So when they -- when the cars -- when those cars were vented
18 or when they were observed venting and burning out of the tops,
19 was it noted that they were venting out that flap hole or was the
20 fire coming out from the whole protective housing?

21 A. So those two you're referring to never leaked, never vented.

22 Q. They never vented?

23 A. Correct. They were not on fire. They never vented.

24 Q. So everything stayed calm with those and --

25 A. That's correct. Yeah. So that's -- I'm glad you asked that

1 question. So they never vented. They stayed perfectly intact.

2 But the one of the two took a lot of heat.

3 Q. Yeah. But the GATX saw the brunt of it. Yeah. Because it
4 was in the mix with the two OCPX cars that --

5 A. Yeah.

6 Q. -- were about 1, 2:00 that were actively venting we saw on
7 the drone footage. So -- yeah.

8 A. Right.

9 Q. The pool fire itself, was -- to the best of your assessment,
10 it was all liquid, right, under the VCM cars -- there was no --

11 A. Correct.

12 Q. -- power, no --

13 A. It would've been that propylene glycol. I believe some of
14 that monobutyl ether and the two ethylhexyl acrylate all mixed in,
15 the lube oils, there was a lot of hodgepodge of stuff that we
16 found in there.

17 Q. So the solid -- the resin -- that fuel really didn't
18 contribute to the pool fire under those cars in any way. It was
19 just -- it was ancillary --

20 A. There might've been some.

21 Q. -- to the derailment?

22 A. It might've been ancillary. Yeah. It was more of those
23 liquids. That's right.

24 MR. KELTZ: Perfect. Thank you. That's all I had, Paul.

25 Thank you. Thanks, Drew. Yeah.

1 MR. McCARTY: Yes, sir.

2 MR. STANCIL: Thank you, Mr. Keltz. Mr. Heidkamp, GATX.

3 MR. HEIDKAMP: Hi, we have no questions. Just appreciate
4 your recap and your service here. Thank you.

5 MR. McCARTY: Happy to help.

6 MR. STANCIL: Okay. (Indiscernible).

7 BY MR. MECKFESSEL:

8 Q. Yeah, this is Dave Meckfessel. I just have a couple quick
9 questions. One, you had made mention that they built the air
10 model with information that was not real to the situation. Any
11 idea where that information that they were basing that off of?
12 Did it come from something? Do you know?

13 A. Didn't come from Norfolk Southern or CTH or SPSI. I promise
14 you that.

15 Q. Right. No, I was just curious.

16 A. No, I don't want to speculate. It would've been agencies but
17 I don't know which agencies.

18 Q. Then the consist, did anybody -- do you know if anybody went
19 to get the e-consist from the engineers or the conductors in
20 the --

21 A. I don't know.

22 Q. You don't know.

23 A. I never heard of that and I don't know that answer. I'm
24 sorry.

25 MR. MECKFESSEL: That's all I have. Thank you.

1 BY MR. STANCIL:

2 Q. I have a couple of follow-up questions and we'll do one more
3 check to see if anyone else does after. Regarding hazard
4 communications, things like placards, was that an issue in
5 locating which cars were which in the pileup?

6 A. Yes. And quite frankly, that's not unique to this
7 derailment. Again, I'm 35 years into this industry, into my
8 career. In fact, when I train firefighters on approaching
9 derailments, we make a feature discussion of that. That if you're
10 -- every fireman is going through a basic hazmat awareness. And
11 you go thumbs-distance and placards and stencils and -- but in a
12 derailment, oftentimes, they're getting torn off. They're upside
13 down in the mud. They're burned out. It just -- it is
14 challenging but that's not unique to this derailment.

15 Q. Well, tell us about this one where -- what challenges did you
16 experience in identifying which cars were which in the pileup?

17 A. So for our own safety, knowing tremendous pool fires, PRDs
18 starting to activate, I am not going to get me or any of my
19 employees in there up close and personal walking the wreck. The
20 old walking the wreck. We're not going to do that in this kind of
21 environment. Right? So we try remote technology. In this case
22 was drones.

23 And the challenge was smoke, fire, glare, camera glare from
24 orange fire, smoke, dark night, all kind of different -- it was
25 just very limited value. And there was a couple flights done

1 between Friday night and Saturday morning. State police were to
2 be here at 8:00 with a helicopter. Something happened with that.
3 It turned into an aircraft. Fixed-wing aircraft at 10/10:30 a.m.
4 Nevertheless, it was very helpful. By then, a lot of the pool
5 fires had kind of -- they were still burning but kind of settled
6 down. The smoke was less dense. Saturday daylight.

7 Again, the one -- there was a few things we got out of that
8 as I recall but the clear one that I really was focused in on was
9 finding that isobutylene car and verifying where it was and what
10 orientation it was in and that was on my mind all night. I was
11 certainly really wanting to know where that car was. So that was
12 incredibly helpful with that overview of a flight surveillance.

13 Again, there were -- the unnerving knowing that these cars
14 were in there and knowing that no human being need to be flirted
15 around there up close and personal, just any purposefully entries
16 than more than necessary. And so the more remote surveillance we
17 could do, the better. And that's what we tried to do.

18 Q. At what point did you feel confident as to what cars were
19 involved in fire, which were breached in terms of which hazardous
20 materials were you dealing with out there?

21 A. Really only in the wreck clearing frankly. We knew the VC
22 cars were burning from the protective housings. The -- that's
23 where all the clear evidence of the heavy black smoke with the
24 white HCL -- we could clearly see it. It was the white separating
25 HCL and the smoke coming out of three burning VC cars. The pool

1 fires were not liberating HCL.

2 Q. What records did your company maintain as to things like car
3 pressures, temperatures? Was any of that recorded?

4 A. Only on the two cars that we mentioned. The VC car on the
5 east that we were optimistic wasn't too badly flame impinged.
6 Like I say, paint singed but not in a pool fire. And this
7 isobutylene car. And that was it because everything else was kind
8 of already breached. We -- when we -- the general service cars
9 like the lube oil cars and the propylene glycol cars, we assessed
10 them as we got to them.

11 Q. If I were to send you a request for any written
12 documentation, what would you have?

13 A. Probably what you already have, sir. This table from
14 Mike Klein this is pretty thorough and I think the one we could
15 update would be the one that he shows as pending confirmation or
16 something he put here. But that one with that monobutyl ether,
17 I'm 99.9 percent sure that it had been leaked, it had leaked.

18 Q. Is there -- would there be anything else?

19 A. No. And the -- we were just so heavily engaged in
20 playmaking. We just didn't -- I just -- I mean, I -- we just
21 didn't -- we were so engaged in getting it done that he just
22 didn't take a lot of notes. This was more of our internal
23 organization for our own notes. This is -- as I'm learning about
24 this moving forward, this could be maybe I can teach them moving
25 forward. Like, okay, let's just maybe expand on these notes a

1 little bit next time. But honestly, this has been -- this is more
2 of our organizational worksheet for us as we work through the
3 transfers, clean and purges, is really what this initiated to be
4 for. It was more for us.

5 MR. STANCIL: I almost forgot about our folks online here.
6 Let's go to Mr. Lawler with Trinity. Do you have any questions,
7 Mr. Lawler?

8 MR. LAWLER: No, sir. I don't. I do appreciate your efforts
9 facilitating the inspection yesterday.

10 MR. STANCIL: Thank you, Mr. Lawler. Mr. Dougherty with the
11 NTSB.

12 MR. DOUGHERTY: Yes, sir. I do not have any questions.

13 MR. STANCIL: Anyone else in the room have any questions that
14 needs to be answered? No. Okay.

15 MR. MANYEK: Can I ask one.

16 MR. STANCIL: Identify yourself.

17 BY MR. MANYEK:

18 Q. Oh, my name is Pete Manyek with GATX. I noticed when were
19 looking at the nozzles that were removed the cars, you mentioned
20 that the Trinity and the GATX cars did not breach at all. And --
21 but out of the top of the valves on the GATX car, I noticed there
22 was more of a fire and part of the vacuum safety valve was blown
23 off the top.

24 Was that the car that was the 70-minute fire or -- because
25 you mentioned one had more of a catastrophic blow out in the

1 pressure relief valve.

2 A. I apologize. You caught me with a tired brain. And when you
3 say the one that had part of the PRD blown off the top --

4 Q. Yes.

5 A. -- you're saying that was which car?

6 Q. The GATX car.

7 A. And we're saying that was the one that was --

8 Q. Yeah. And all the valves in that housing were melted, as
9 well, more predominantly than the others.

10 A. So that was one -- and I'm going to ask you guys. Was that
11 the second one in from the east? Would that have been in sequence
12 second one from the east? Do you know?

13 MR. STANCIL: No. The GATX car would've been the fourth
14 one --

15 A. Fourth one from the east.

16 Q. Yeah. Pardon the scribbling on that. That's my notes from
17 before I formalized that overlay that it has all the cars
18 identified on it. And are we -- it should be up towards the top
19 of the sheet.

20 A. So would it have been GATX 950098?

21 UNIDENTIFIED SPEAKER: Yes.

22 MR. McCARTY: So that was one that burned. Looking at this
23 orientation. The OCPX 80179 also was one that burned. The OCPX
24 80235 is one that did not burn and did not leak.

25 MR. MANYEK: Could you repeat that? The OCPX --

1 MR. McCARTY: So -- okay, from the east -- there's one out of
2 view here. And maybe you can help me. Is this that car -- I
3 don't know who I should ask but -- would this be this car?

4 MR. STANCIL: That's the TILX car, the -- that would be the
5 lead -- you're pointing to the lead VCM car which would've been
6 the TILX 402025.

7 MR. McCARTY: So TILX 402025 did not leak. And only took
8 this, what I'll call, paint burned off damage from this west end
9 of this car.

10 MR. STANCIL: And when you say not leaked, you mean the
11 pressure relief device did not actuate?

12 MR. McCARTY: Correct. It had no indication of leaking. No
13 fires, no leaks. The car just west of it, perpendicular here,
14 this OCPX 80235 did not leak. But did have significant heat from
15 all the fires. It was definitely in the mix of the fires but it
16 showed no signs to us that it ever leaked.

17 BY MR. MANYEK:

18 Q. And no visual observation of it venting anything?

19 A. That is correct. And I believe if you found two lids that
20 were still intact, it would've been those two cars.

21 Q. Correct. Well, it'd have been -- the OCPX cars were equipped
22 with aluminum so that's why there's no cover on.

23 A. I see.

24 Q. Yeah. And the other OCPX is off of this photo. So TILX did
25 not vent. It was on its side. Did not vent.

- 1 A. Correct.
- 2 Q. OCPX -- what's the number on that one again, Drew? I --
- 3 A. 80235.
- 4 Q. You're saying that one did not vent/leak, as well?
- 5 A. Correct. These two were clearly burning from their
- 6 protective housings.
- 7 Q. 80179 and then the GATX?
- 8 A. The 95098. Yes, sir.
- 9 Q. And then the --
- 10 A. And then the one down --
- 11 Q. -- OCPX that's off -- yeah, it's off this --
- 12 A. That's correct.
- 13 Q. Yeah.
- 14 A. Yeah, down on the west end. That's correct.
- 15 Q. It was venting, as well?
- 16 A. Correct.
- 17 MR. MANYEK: Perfect, thank you.
- 18 MR. McCARTY: Whose was this?
- 19 MR. MANYEK: That's mine. Yeah. Thank you for clarifying.
- 20 MR. McCARTY: No problem. Thanks for the question.
- 21 MR. STANCIL: Thank you. Does anyone else have any questions
- 22 before we end the interview? One last or maybe two last
- 23 questions. Is there anything else that occurs to you that you
- 24 think we should know about?
- 25 MR. McCARTY: No, I think -- I don't want to pretend to know

1 how you guys do your thing but I've watched you do it for 35 years
2 remotely and I appreciate everything you guys do. So this was my
3 pleasure to try to help the cause. So this was the first time in
4 35 years in my career I've been interviewed like this. So I hope
5 something I've offered was helpful for you.

6 MR. STANCIL: Well, we certainly appreciate your time. I
7 know you're a very busy person out there and a very critical
8 person to the success of this remediation and we appreciate that.
9 Is there anyone else that you know of that you think we should
10 talk to?

11 MR. McCARTY: I mean, my guy Ryan Tacharsky was with me in
12 the first early entries but after that, I mean, I don't know that
13 he would have anything more than what I've already shared. You'd
14 be more than happy to talk with him but I mean, after that, I
15 think it's -- I feel 100 percent in what I've shared with you is
16 pretty vivid memory. If it was something I'd be -- general, I'd
17 tell you general. Like I say, I'm not good on exact times, the
18 moment in time other than certain things like the governor but
19 that was a first for me. But yeah, just unfortunate there that he
20 got spun up for bad intel. But anyway --

21 MR. STANCIL: Well, thank you for your insight. We
22 appreciate your time, Mr. McCarty. It's 11:07. And we'll go
23 ahead and end the interview. Thank you, sir.

24 MR. McCARTY: Thank you, all.

25 (Whereupon, at 11:07 a.m., the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the
NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: NORFOLK SOUTHERN TRAIN DERAILMENT
 IN EAST PALESTINE, OHIO
 ON FEBRUARY 3, 2023
 Interview of Drew McCarty

ACCIDENT NO.: RRD23MR005

PLACE: East Palestine, Ohio

DATE: February 23, 2023

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been transcribed
to the best of my skill and ability.



Katie Leach
Transcriber



National Transportation Safety Board
Washington, D.C. 20594

Transcript Errata (1 of 4)

**TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: DREW MCCARTY, SPSI
RECORDED ON FEBRUARY 23, 2023**

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
9	3	not notes	no notes
9	24	lot of ...work the consist	lot of tank cars and products, we would work the...
10	5 8 22	Tacharsky	Tokarski
10	10	rolled in to find...	rolled into find large fire department deployment
10	25	(indiscernible)	limited and partial information available
11	2	hearing...we had stuff...	hearing multiple hazmats & combustibles...we had
11	16	so the...we as the team	so the group, we as the team had the wheel report
12	2 and 3	Tacharsky maybe around...	Tokarski got in around the back of blue building
12	18	ensured	ensued
12	20	three of the five	four of the five
13	9	told me from ...	told me from Pueblo (TTCI at the time)
13	10	(indiscernible)	"tank car throwing record"
13	21	Tacharsky	Tokarski
13	19	(indiscernible)	covered hopper cars
16	8	card	car
16	11	it...when it	it was violent with significantly more pressure when

If, to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEEDED. _____
Initials

Drew McCarty

Printed Name of Person providing the above information

Signature of Person providing the above information

3/27/23

Date



National Transportation Safety Board
Washington, D.C. 20594

Transcript Errata (2 of 4)

**TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: DREW MCCARTY, SPSI
RECORDED ON FEBRUARY 23, 2023**

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
17	12	cars that...so let me	that may be polymerizing
17	13	talking....liquid flaring	about is hot tapping and liquid flaring
17	19	of...flammable	of vinyl chloride is that it has
17	20	of it all was	of it was what we were most...
18	23	sink.	heat sink.
18	25	from science	from science and the product SDS
19	6	entering the car	evacuating the cars to a burn pit
19	12	guys, we're	guys were coming
21	5 and 7	PRD	PID did detect
22	5	took a gloved hand	took off my glove from my hand
22	10	Charles Phil	Charles Filby
26	11	Duttle	Dudle
27	7	picking	putting in for
28	8	that information	that initial modeling information just was not factual
29	2	in our spring	with a spring in our steps
29	19	(indiscernible)	SCBA or at least APR's of whatever PPE...

If, to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEEDED. _____
Initials

Drew McCarty
Printed Name of Person providing the above information

[Redacted Signature]
Signature of Person providing the above information
3/27/23
Date



National Transportation Safety Board
Washington, D.C. 20594

Transcript Errata (3 of 4)

**TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: DREW MCCARTY, SPSI
RECORDED ON FEBRUARY 23, 2023**

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
31	18	that car extra hot	that covered hopper car extra hot
32	16	non-hazleting	non-hazardous
33	13	generally	general
33	18	strap	scrap
34	11	guys	years
36	14	of...	of look it over.
36	17	he's...at least	he's noting at least
36	21	ensured	ensued
38	11	they	I
38	22	they were all	Three in the pool fires were venting and burning
39	12	(indiscernible)	get updated
39	13	(indiscernible)	as information became available and updated
41	21	(indiscernible)	active flows and then choked off flows
43	22	(indiscernible)	reality requiring vent and burn operations
46	18	tick	TIC (Thermal Imaging Camera)
47	12	we are the ones	we (NS team) are the ones

If, to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEEDED. _____
Initials

DREW MCCARTY

Printed Name of Person providing the above information

Signature of Person providing the above information

3/27/23

Date



National Transportation Safety Board

Washington, D.C. 20594

Transcript Errata

(4 of 4)

TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: DREW MCCARTY, SPSI RECORDED ON FEBRUARY 23, 2023

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
50	23	league	lake
54	1	what's	It's
55	7	tick	TIC (Thermal Imaging Camera)
54	18	That's correct	That's correct at that time after pool fires were out
57	23	this...nobody	debate and
61	15	fuel and a whole lot of resin	resin fuel and a whole lot of heat
61	25	built, its built	building, and it's building and starving for oxygen
74	11	Tacharsky	Tokarski

If, to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEEDED. _____
Initials

Drew McCarty

Printed Name of Person providing the above information

[Redacted Signature]

Signature of Person providing the above information

3/27/23

Date