SURVIVAL FACTORS ATTACHMENT

Federal EPA and Private Contractor

Interview Transcripts

Teutopolis, IL

HWY23MH017

(35 pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	
FATAL CARGO TANK COMBINATION VEHICLE CRASH & SUBSEQUENT RELEASE OF ANHYDROUS AMMONIA NEAR TEUTOPOLIS, ILLINOIS ON SEPTEMBER 29, 2023	Accident No.: HWY23MR017

Interview of: ADAM VRABEC, Federal On-Scene Coordinator
U.S. Environmental Protection Agency (EPA)

via telephone

Thursday,
November 17, 2023

APPEARANCES:

RONALD KAMINSKI, Survival Factors Investigator
National Transportation Safety Board

BOB CLATTERBUCK, Branch Chief
Hazmat Investigations Division
National Transportation Safety Board

I N D E X

I N T E R V I E W

MR. KAMINSKI: We're going to be discussing the September 29th hazmat and crash that occurred outside Teutopolis, Illinois. And, my name is Ronald Kaminski. I'm with the National Transportation Safety Board.

And first let me ask you, Mr. Vrabec, do you have any problem with us recording our conversation today?

MR. VRABEC: No, according to your email, this is not a deposition, correct? It's just a statement.

MR. KAMINSKI: That is correct.

MR. VRABEC: Okay.

MR. KAMINSKI: So, again, my name is Ronald Kaminski. It's spelled K-a-m-i-n-s-k-i. I'm a survival factors investigator.

Bob, if you could give your name and spell it, and the same with you, Mr. Vrabec.

MR. CLATTLERBUCK: Yeah. Robert Clatterbuck. Last name is spelled C-l-a-t-t-e-r-b-u-c-k. I'm the Branch Chief for the Hazmat Investigations Division.

MR. VRABEC: And my name is Adam Vrabec, last name V as in Victor, r-a-b as in boy, e-c. I'm with the U.S. EPA as a federal on-scene coordinator.

INTERVIEW OF ADAM VRABEC

BY MR. KAMINSKI:

Q. Okay. So why don't we just start with how you all got -- well, I know why you got involved but how you got involved and I

guess what was your role in the response?
A. Yeah. So I got a call from our duty officer at the time, that Saturday morning. I forgot what time but some, you know, around 4:45, 5 o'clock in the morning stating that there was an incident involving an anhydrous ammonia tanker in Teutopolis, Illinois, and that Illinois EPA and the on-scene or the IC was requesting U.S. federal assistance for the response.
Q. Okay. And did you -- were you on the phone? You went to the scene I believe, correct?
A. Yeah. So once the duty officer, he dispatched or deployed me, he said, you know, you need to get out there. So I, you know, got off the phone with him, made some phone calls and then went to the office, grabbed the GOV and then headed up to Teutopolis, Illinois that Saturday morning. I believe I arrived -- like I said, estimated time around 7:45, 0800 hours that Saturday morning.
Q. Okay.
A. And met with, met with personnel on scene at the Teutopolis High School where incident command was staged and set up.
Q. Okay. And what type of assistance did you guys give?
A. So, we were giving advice to, you know, first I asked the incident commander how, you know, he was in control the scene. So can we provide any assistance for air monitoring or any other assistance he needed, you know, mainly air monitoring or any other assistance he needed, you know, mainly air monitoring. He stated,

yes, he could possibly use some for, you know, clearing -- after the incident was over, clearing houses, if people had questions or had smells in their homes after evacuation was lifted. So I deployed or got on the phone and started mobilizing our START contractors that do our technical assistance to bring air monitoring, you know, for ammonia. And --

Q. Okay. And --

A. Go ahead. I'm sorry.

Q. No, go ahead.

A. And then also the -- our duty officer was in contact with some folks, you know, some specialists dealing with anhydrous ammonia and then they were able to provide some information on some high hazard teams that do -- deal with these types of incidents. So, in the morning, when the PRP, the owner of the company, he showed back up onsite. I spoke with him, you know, briefly when he showed back up and said we have, you know, here's a high haz team that deals specifically with this material and the incidents. They're out of Indiana. I would recommend highly giving them a call and getting a contract with them to, you know, start mobilizing to -- towards the scene to, you know, deal with this tanker that was still in the ditch line. So he -- I gave him that -- the recommendation of that company.

Q. RMS.

A. Yes, correct.

Q. Okay.

A. And then he said he would get on the phone and, you know, talk with them about mobilizing them to the scene to handle -- to start to handle the, you know, best options or to deal with the tanker that was still in the ditch line.

Q. Okay. Now, was the EPA consulted regarding the mitigation of the anhydrous? And if so, what advice was given?

A. No. At that point, no, we weren't. We were just essentially supporting the incident command. And then like I said, we were -- we recommended that, you know, to the PRP to contact this high haz team which he did, and then they said that they were I believe, you know, 3 hours, 3 1/2 hours out from the scene, and that they would be mobilizing to the scene to, you know, evaluate and assess and then see what type of mitigation efforts once they got on scene. So in the meantime, we were just, U.S. EPA, were in a hold pattern and bringing our START contractor in for additional air monitor resources.

Q. Okay. So from the time I guess you got the call early in the morning and then when you got out there, was there -- were you talking back and forth with the incident commander at that time or just --

A. Yes, yes. So we kind of rolled into the incident command, you know. They were speaking with other agencies on scene, you know, with the Illinois Emergency Management. They had a rep out there, IEMA --

Q. Right.

A. -- they're called in Illinois.
Q. Yes.
A. So I made contact with him, you know, we spoke about, you know, just the incident, also consulting, talking with the IC. At the time, too, when I showed up, I believe they were in the process of going down range and doing body recovery. So that was kind of ongoing, but we did not have any role as U.S. EPA in the actual body recovery.
Q. Okay. So was there ever any discussion regarding using water to help mitigate the situation?
A. Not that I'm aware of. Again, like I said, they were -- the hazmat teams, the county hazmat teams from the surrounding area were going down and doing readings on the, on the tanker. So they were getting the readings, you know, coming back, back to command. And then again like I said, we were kind of in a holding pattern until that high haz team got down actually onsite and was able to go down range and assess the tanker.
Q. Okay.
A. And also Illinois EPA sent their -- they had one on-scene coordinator, state on-scene coordinator arrive, and then a little later on, they had a second state on-scene coordinator arrive there also.
MR. KAMINSKI: Okay. Bob, do you have any for Mr. Vrabec?
BY MR. CLATTERBUCK:
Q. I think the only thing would be is the EPA going to be

involved with dealing with the soil and, you know, anything as far as the home contamination, land contamination? Are you guys going to be involved with any of that?

A. Right now we're just kind of in coordination but once the threat was removed, later on that night, once the tanker was offloaded of the product and deemed upright, we did some -- like I said, we cleared the town, the evacuation zone with the fire department representative going through the evacuation zone doing air monitoring in the, you know, just outside ambient air monitoring with our START contractor getting those readings and forwarding those back to the incident commander. And also we were requested by the Teutopolis School superintendent to do air monitor reading in the school, so which we did provide, go through the school and get readings and provide that information back to incident command. And also we were in coordination with Illinois Department of Public Health with their representative, you know, giving him that information on the readings also.

But once that was done, late Saturday night, I would say around 10:30, when I spoke with, you know, the incident commander, we were, you know, waiting on, once they lifted the evacuation order, people coming back into their homes, if they were smelling anything or had concerns, we would, you know, deploy our START teams to go in and do some air monitoring for ammonia but we never received that call. So after that evening, essentially I transferred the scene or long-term cleanup as you call it, to

Illinois EPA and they are currently working with the PRP for all -- the oversight of all the soil removal and everything in that actual area where the tanker, you know, release -- wrecked and released. So they -- but they have oversight over the long-term cleanup of the soil.

Q. Okay. Do you guys get involved? I mean do they forward any information to you on that or is it just something that's publicly available?

A. No. I mean we had a call with Illinois Department of Public Health, their rep. there was some question about the homeowner I would say. So the residents in front or near where the tanker went over, you know, unfortunately the folks there as you know passed away in the incident, but it's -- they were I believe renting from an actual person who owns the home.

Q. Yes.

A. So that person that was renting the home or the homeowner that was renting had some, you know, he had some concerns about going in there, you know. Is it clear or safe? So we had some discussion on that and, you know, the main discussion we had was that, you know, they're still cleaning, actively removing soil. I don't know if they're done. I'm sorry. I haven't followed up because like I said that the Illinois EPA lead on that. So, you know, what we discussed, too, was that we weren't sure if the I guess homeowner as you call it had even spoke with the PRP and the insurance company about, you know, next steps for what happens

when, you know, with the house, if it's safe or what, you know.
Q. Yeah.
A. We have not been involved with that portion. You know, we just had some discussion, you know, with Illinois Department of Public Health. So -- and then like I said, that was -- now IEPA is doing the long-term oversight of all the removal from the impacted areas in the soil, ditch line, you know, residences and where they started, I believe is what they told me, is that there's an Ameren, I believe it's a company. It's kind of like the gas and electric company --
Q. Yeah.
A. -- in the area. They started near there. They had like a transfer station, that they started there and worked I guess it would be back to the east but there was a lot of work being done there because of, you know, how contaminated the soil was and they had a lot of piping and fiber optic and other stuff. So it was a tedious -- it was going to be a tedious process. But like I said, that was all being done though -- with oversight of the Illinois EPA.
MR. KAMINSKI: Now, are you guys going to generate --
MR. CLATTERBUCK: That's all --
MR. KAMINSKI: I'm sorry. Go ahead, Bob.
MR. CLATTERBUCK: I was going to say, that's all I've got.
MR. KAMINSKI: Okay.
MR. CLATTERBUCK: Sorry.

BY MR. KAMINSKI:

Q. I was going to say, are you guys going to generate -- yourself going to generate any kind of report regarding this incident?

A. So we generate what we call a POLREP and put it out. I just -- we did a -- I generated an initial and final POLREP. So once we got back on -- I got back in on Sunday, we generated one. I provided that to Bob, right -- correct? The POLREP, did I send that do you, Bob?

MR. CLATTERBUCK: Yeah, I think you did actually. Yeah.

MR. KAMINSKI: Okay. Thanks.

MR. VRABEC: Let me just make sure. That just kind of gives what our roles and responsibilities were during the incident and then some of the air monitoring results and what we were tasked, you know, what I tasked our START contractor with.

MR. KAMINSKI: Okay.

MR. VRABEC: And, Ronald, I can -- do you go by Ronald or Ron? I'm sorry.

MR. KAMINSKI: Either one is fine.

MR. VRABEC: I mean I can forward it onto you but I did forward it onto Bob, I think Wednesday after the incident occurred, sometime that week, but I can forward it to both of you again if need be.

MR. CLATTERBUCK: I did send it to Ron. So, yeah, you should have it, Ron. I'll resend it just so it's on the top of your

email.

MR. KAMINSKI: It's kind of a crazy time. We're getting lots of emails. So, yeah.

MR. CLATTERBUCK: I know. So, yeah. I'll send it back to you again.

MR. KAMINSKI: Okay. Okay. Well, I don't think we'll have any follow up, but if we do, any problem giving you a call back or trying to set something else up?

MR. VRABEC: No, that's fine. Like I said, I'm deploying back to East Palestine next Sunday for -- until the 11th, but hopefully it'll be a little less hectic time, but --

MR. KAMINSKI: Sure.

MR. VRABEC: -- I can't -- but, yeah. No, that's fine for a follow up. That wouldn't be an issue.

MR. KAMINSKI: Okay. Well, that concludes our interview here with Mr. Adam Vrabec with the U.S. EPA. It's 10:18 on November 17th. Thank you very much, Mr. Vrabec. I appreciate your help, sir.

MR. VRABEC: Great. Thank you.

(Whereupon, at 10:18 a.m., the interview was concluded.)

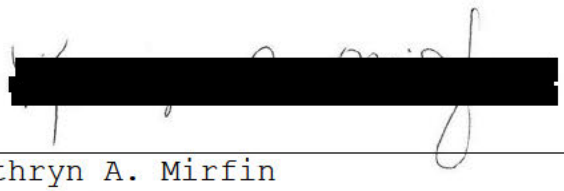
CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	FATAL CARGO TANK COMBINATION VEHICLE CRASH & SUBSEQUENT RELEASE OF ANHYDROUS AMMONIA NEAR TEUTOPOLIS, ILLINOIS ON SEPTEMBER 29, 2023 Interview of Adam Vrabec
ACCIDENT NO.:	HWY23MR017
PLACE:	via telephone
DATE:	November 17, 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.



Kathryn A. Mirfin
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	
FATAL CARGO TANK COMBINATION VEHICLE CRASH & SUBSEQUENT RELEASE OF ANHYDROUS AMMONIA NEAR TEUTOPOLIS, ILLINOIS ON SEPTEMBER 29, 2023	Accident No.: HWY23MR017

Interview of: CHARLES "CHIP" DAY, Senior Project Manager
Specialized Response Solutions

via telephone

Tuesday,
November 14, 2023

APPEARANCES:

RONALD KAMINSKI, Survival Factors Investigator
National Transportation Safety Board

BOB CLATTERBUCK, Branch Chief
Hazmat Investigations Division
National Transportation Safety Board

I N D E X

I N T E R V I E W

(10:00 a.m.)

MR. KAMINSKI: Hello.

MR. DAY: Hello.

MR. KAMINSKI: Hello. Mr. Day.

MR. DAY: Um-hum.

MR. KAMINSKI: Hello. This is Ron Kaminski with the National Transportation Safety Board.

MR. DAY: Hey, Ron.

MR. KAMINSKI: How are you doing today?

MR. DAY: Sorry. I'm doing good.

MR. KAMINSKI: Good.

MR. DAY: A lot better than the last time I talked to you.

MR. KAMINSKI: Good. I'm glad to hear that. So do you have a couple of minutes you can talk to myself and Mr. Bob Clatterbuck?

MR. DAY: Sure. Can you give me just a minute to finish what I'm doing, and I'll be right back to you?

MR. KAMINSKI: Absolutely.

MR. DAY: I mean it'll just take me about a minute and a half.

MR. KAMINSKI: Not a problem, sir. Thank you.

MR. DAY: Hang on.

(Pause.)

MR. DAY: Oh, yeah. I'm back.

MR. KAMINSKI: Okay. Great. So, Mr. Day, if you don't mind, I'm going to record this, and I'll give you a transcript when it's done, but this way I don't have to interrupt you and, you know, I'm not a real good note taker. So, do you mind if I record this?

MR. DAY: No, sir.

MR. KAMINSKI: Okay. And then if you could start with -- well, first of all, my name is Ronald Kaminski, K-a-m-i-n-s-k-i. I'm an investigator with the National Transportation Safety Board, survival factors, and so today's date is November 14th. It's approximately 10 o'clock a.m. And, also with me is my colleague, Mr. Bob Clatterbuck. Bob, could you spell your last name please?

MR. DAY: Common spelling.

MR. KAMINSKI: Yeah. Bob, are you there? You know what, I've got to merge his call. I've got to merge his call.

Hello, Bob. Are you there?

MR. CLATTLERBUCK: I'm here.

MR. KAMINSKI: Okay. Could you -- we have Mr. Day on the phone. Could you spell your last name, Bob?

MR. CLATTLERBUCK: Last name is spelled C-l-a-t-t-e-r-b-u-c-k.

MR. KAMINSKI: Great. So I have Mr. Day on the phone.

Mr. Day, you're last name is spelled D-a-y, correct?

MR. DAY: That is correct.

MR. KAMINSKI: And your first name is Chip, and you have a different first name or is that --

MR. DAY: My legal name is Charles but I go by Chip. Everybody knows me by Chip.

INTERVIEW OF CHARLES "CHIP" DAY

BY MR. KAMINSKI:

Q. And would you be able to -- why don't you just give us a description. I know when the crash occurred on the 29th, who called you and we're kind of wondering how you got involved in this event.

A. To be brutally honest, when bad things happen, I usually get pulled in. I've done this for -- I've done response work for 40, now 42 years. So when bad things happen, I usually get pulled in some way, shape or form to provide, you know, some kind of assistance to the on-scene coordinators.

Q. And who are you employed by?

A. I work for a company called Specialized Response Solutions based in Fort Worth, Texas. Our parent company is a company called Republic Services.

Q. Okay. And you said you've been with them for 42 years?

A. I've been doing this in the commercial (indiscernible) response for 42 years.

Q. Okay. Fair enough.

A. Not just for these guys.

Q. Okay. So how did you get -- how did they know to call you or how did that happen?

A. So, I got a call at 3:45. I guess the wreck happened on the

29th, and that's a question?
Q. Yes, about 8:45 in the evening.
A. Okay. So, I got called at 3:45 the following morning from the federal (indiscernible) coordinator from the U.S. EPA. I know this gentleman very, very well, and basically my phone rang at 3:45 and I looked at it and said, well, this can't be a social call. Hey, Paul, what's up? And he basically just gave me a very quick overview that there was an anhydrous ammonia tank trailer, that there was rupture, there was a release and they had about half a load remaining in the trailer, and I needed to communicate with the incident command staff for T-Town. And I had no idea where. So I went to my office and got things fired up while I was talking to the incident commander and getting another overview of the incident, of what've they seen, what proactive attack -- things that they have done, and what they were looking at possibly doing or allowing the trucking company to do with the remaining material to get it out of the trailer so they could, you know, do the rest of the response. I don't know how far you want me to go before you start asking questions or just --
Q. Just keep going. Yeah, we'll pipe in.
A. Okay. So, we talked very briefly about the material. I didn't know, you know, at 3:45 in the morning, I had no earthly clue what they knew, what they didn't know. I didn't know. At the time that I started talking, I didn't know how much before my -- that I get pulled into it did it occur. I wasn't until way

later in the morning that I find out that it happened at 8 something, 8:30 the night before.

They told me they patched the hole, and as soon as he told me that, I said, you all get ready to take that patch off or -- and let that trailer breathe, and they just could not fathom why I would tell them to take the patch off. Just based off of my knowledge of compressed gases, and anhydrous ammonia is one of them, just like LPG and several other things, if you have a breach and you have a release, the material is going to sit there. It's going to release for so long, and then it's going to super cool or what we call in the industry auto refrigerate. And, then when it auto refrigerates, it's sitting somewhere in the minus 30-ish range of temperature, and it's just sitting there as a liquid. As long as it can still breathe and can't building up any pressure, it's going to basically just very slowly gas off.

So I explained, you know, all the mannerisms with the material, and I said, you know, I asked the hole was in the trailer. Had they seen the hole and they said, yeah, it's on the head. And I said, well, okay. What possibly could have punctured it, and they sent me -- really quick sent me a few pictures of the trailer, not really a close up of the hitch assembly that I understand from later conversations, that it was the -- a pintle hitch that actually went through the head of the trailer.

Q. Yeah, correct. Lunette ring I think they call it.

A. Yeah, us normal people just call them pintle hitches.

Q. Right.
A. So it went through. I said, okay. And they used a MagPatch type of sealing mechanism which because of the training classes that I put on, one of the biggest problems that we've had with first responders is they're really, really good at focusing on the problem and trying to correct that problem. So they'll, you know, they'll patch something. What they don't realize, they don't have enough knowledge with the material they're dealing with, that if you patch it, now that material is going to say, hey, you know what? I can -- I'm feeling a little bit of pressure. Let's start warming up which is exactly what happened.

So they sent me a video. They sent another crew in. They sent me a video of what they found, and as they got close to the trailer, you could just hear the gas pressuring out of the patch.
Q. Right.
A. I told the chief, I said that is exactly the problem we have right now. You need to take that patch off that trailer because it's going to do nothing but continue to build more and more pressure because the material feels some pressure, and it's going, oh, we can start warming up and then making more and more gas.
Q. Okay.
A. They said, oh, okay. So that's exactly what they did. They pulled the patch off or repositioned the patch to allow it to breathe, and that problem was rectified. So the -- I believe it was the transportation company, someone from the transportation

company, whether it was the owner or somebody that was, you know, fairly knowledgeable about anhydrous ammonia, the chief told me that the plan was for them to gas the trailer off. I said, okay, that's a good move. It's going to be slow, but that'll be fine. They said they want to build up pressure in that trailer, and I said stop right there. Do not listen to the words that are coming out of their mouth, and I used that term, you know, frequently on these big incidents, that I really need to listen very intently to what I'm fixing to you. Do not let them build up any pressure in that trailer.

And I guess the transportation owner or a representative said, well, why not? I said, you've got a holed (ph.) trailer. It will not build up any pressure. So it will not allow this material to warm up. And I said what kind of equipment are you talking about using. He said, well, a pump and a compressor, and I said, okay. That's good for the pump. Forget the compressor. There's no need to use a compressor because you're not going to do what you think you're going to do. And I guess a light bulb went off in his head, and he said, I'm thinking about a whole vessel, not a holed vessel but a whole vessel. He said I can usually, you know, draw the liquid down. I said, exactly. You can't do it this way.

So, I recommended, suggested that they bring a company called RMS. I mean I was -- I'm in Fort Worth, Texas. So Fort Worth, Texas to Effingham, Illinois, it takes a little while to get

there. I said you need help really, really bad and I've got a contractor that I use, that I train with, based out of Schererville, Indiana, and it's a company called RMS.

Q. Right.

A. So I reached out to Connor with RMS, and I said this is the problem. There is where I need you. And this is what I need you to be able to go down and do. So there was some back and forth because myself, incident command, the trucking company and RMS and EPA trying to get all the ducks in a row because we're a for profit corporation, and we don't do anything -- do very much for free. What I was doing for free was free, but I'm not going to have a contractor go and do anything unless he's going to get paid for it.

So there was some jockeying done between the EPA. They were going to hire us direct or through the start contractor to come and basically take care of this problem. So, everything got worked out. RMS got on the road. They went down. They did a detail damage assessment. We talked about it. The trailer was still open to the atmosphere. So it wasn't building up with any more pressure. They brought a transport in, another ammonia transport in. They backed it in. They pulled the rear man way plate off, dropped the hose in and did some other things that is hard for a pump to be able to pull auto refrigerated material whether it's LP or anhydrous ammonia. It's very, very difficult because as soon as it starts drawing a little bit of vacuum, it

wants to flash to a gas. So you kind of take the pump. So you've got to do a bunch of series of open valve, close valve, pinch valves back, in order to get the pump primed. Once they, once they got the pump primed, pumped it out, got down to the very last little bit of liquid, put the man way back on, patched the hole and we're talking, they were -- the trailer was virtually empty. Stood it up and took it to a local coop I believe and filled the trailer with water and then they were going to use the water for beneficial reuse somewhere on a piece of property.

So that's the 30,000 foot view of everything that happened on that incident.

MR. KAMINSKI: Okay. And, I guess, Bob, do you have any questions for Mr. Day?

MR. CLATTERBUCK: Yeah. Bob Clatterbuck with NTSB, hazmat investigations.

BY MR. CLATTERBUCK:

Q. Chip, did -- when you talked to the fire department, did you discuss in any way what the proper PPE or what they should be doing as far as approaching this tank?

A. Well, they had the -- I was told early on that the Effingham Fire Department was on scene, and I know they've got a fairly decent hazmat team. We didn't really touch base at all on PPE, knowing that they had already gone in and patched the trailer or a group had already gone in and patched the trailer, just knowing the product. There was no need with what I felt to reiterate

levels of protective clothing, SCBAs or respirators or whatever. So that really was not discussed.

Q. Okay. And then as far as the tank building up pressure, could you give me a better a description of that? I don't think I followed you quite close enough on why not have a patch on that tank?

A. Okay. So, a compressed gas material, whether it's LP or anhydrous ammonia, both react similarly. Both of those materials are by nature gases. As long as they're put into a pressure vessel, and you can build up pressure inside that vessel, the material will go into a liquid state. So you can move this material in large volumes in a liquid state. So, any of the compressed gases, any of the tank cars or tank trucks that run down the road in pressure vessels are most likely, and that's not 100 percent, but really close, are compressed liquids, compressed gas liquids. So they stay in a liquid state as long as they have pressure on them.

If you poke a hole in the trailer, a portion of the tank, of the material contained in the tank is going to flash from a liquid to a gas because that's what it wants to be. It wants to be a gas. It doesn't want to be a liquid. But now as soon as that pressure drops off to atmospheric or what we call flat, then the remaining liquid, what hasn't already flashed to a gas and escaped, the remaining liquid is at a -- it's sublimed if you will or what we consider auto refrigerated. It is super, super cold,

and it's just a liquid because looking at you, it's just waiting to turn back to a gas as soon as it warms up. You apply a little bit of heat, whether it's atmospheric heat or gentle heat from a boiler or some kind of heat source, that liquid will get agitated, and it'll start flashing more liquid to a gas because that's what it wants to do. It's warming up, and it's flashing to a gas.

So, anhydrous ammonia has an expansion ratio, depending on who you talk to, somewhere between 800 and 850 to 1. So 1 gallon of liquid makes between 800 to 850 gallons of vapor. It's a shit load of freaking vapor.

Q. Yeah.

A. So, the remaining, let's just say slightly under half a tank was sitting there at minus 30, and as long as it was able to breathe, it would have stayed there for a long time. It would have very slowly gassed off. So within the fire department responding and putting a patch on it, that's a fantastic idea. We teach, you know, patch -- plugging and dyking and patching in all the first responder classes that we put on. But, as soon -- with these types of materials, with compressed gasses, as soon as -- you've got to have a plan for patching. Okay. Great, fine and dandy. But you better have a plan -- A is the patching, C, D, E, F and G plans already prepared so when this happens, we go this direction. If this happens, we go this direction. So they got on scene, saw they had a problem. So it's like, okay, let's patch it. Okay. Great. But that's as far as they planned. Patch it.

So they went in, threw the MagPatch on, stopped the leak, which was fantastic. But, they didn't have an avenue for what to do next when the material begins to warm up because that -- as soon as they patched that hold, now again you have a pressure vessel. So this material starts to feel a little bit of pressure as it's gassing off, and it's going, humm, I feel pressure. Let's start warming up.

Q. Right.

A. Then that material will actually continuously build pressure, build pressure, build pressure, until it's either, you know, back to equilibrium, you know, it builds pressure back up to, you know, let's just say 100 PSI, 120 PSI, depending on what the temperature of the day is, and atmospheric events. It's either going to pressure up and then stabilize or it's going to blow the patch apart or blow the patch off the container. And that's what I did not want to have happen is allow that thing to keep building up.

So when they walked around and took the videos and had to do kind of detailed damage assessment, when they got, I would say probably 60, 80 feet from the trailer, I could hear the gas releasing. So I knew that they had done a pretty damn good job of patching the trailer. And then when they walked around the front, I could actually see it, and that's when I told the chief, I said, get ready to take the patch back off or vent, open the vapor valve on the trailer and let it breathe. So what they should have done is had a tank truck of or several tank trucks of water with a

sponge bar or a hose that they could have thrown in and when they patched it, just hooked up to the -- thrown a hose over into a tank truck and as that pressure was building up, it would have been released into a tank trailer of water making aqua ammonia and it would have stayed there pretty much steady until the equipment got on scene to do the actual transfer.

Q. Okay.

A. Does that help you a little bit?

MR. KAMINSKI: Yeah. Well, how did this idea of flaring it? How did that come about?

MR. DAY: Okay. So anhydrous ammonia is -- has a very narrow flammable range from 13 to 26. I forget the exact range, but it does have a flammable range. It's kind of cantankerous to get started but that is another option for getting rid of anhydrous ammonia vapor. They could have hooked on -- once they put the patch on, plan C or plan D could have been flaring it. So basically we would take, you know, leave the patch on place. As the pressure was building up, we draw that off, send it over to a ground flare or a thermal oxidizer or whatever we have available to us, you know, in short order. Then we could have burned off all the ammonia vapors and all the liquid. Granted, it would have taken a lot longer but -- because we have to take that liquid from an auto refrigerated state, we had to move it to a gaseous phase to get it into a -- onto a -- or into a hose to go to a flare.

Q. Okay.

A. That's just one of the many things that -- options that we have that a lot of first responders don't realize that's why you've got to rely on industry on a lot of these types of events.

MR. KAMINSKI: Bob, do you have anything else for Mr. Day?

MR. CLATTERBUCK: Yeah, just a couple more things.

BY MR. CLATTERBUCK:

Q. Do you have -- can you provide the contact information to RMS, the people you talked to and then did you stay in contact with them after the incident and get any feedback from them?

A. Yeah, I'll give you the contact information. First name is Conner, and the last name is Schaeffer, S-c-h-a-e-f-f-e-r.

Q. I think we have one of his cards.

A. And his phone number is [redacted].

Q. And that's for Conner Schaeffer.

A. That's Conner Schaeffer. Yes, sir.

Q. Yeah, I think they might have shown us one of his business cards. And then that Paul you mentioned from EPA, was that Paul Sweeney?

A. No. Hang on just one second. Let me make sure I give you the right person.

Q. Yes.

A. Paul Ruesch, R as in Robert, u-e-s as in Sam, c-h. Paul Ruesch.

Q. Okay.

A. EPA Region 5. And his phone number, since you're a

government official, I guess I ought to give it to you, [redacted], and I think he's currently in Hawaii on a wild fire cleanup.

Q. Oh, that's gotta be tough.

A. Yeah, he said it sounded a lot more glorious than what it is.

Q. Sure, I imagine.

A. But those are the two folks that I dealt with. There was some other ones, you know, fire chief and stuff like that, but his name escapes me right now but I've got it in my phone book.

Q. Joe Holomy or Tim McMahon? Those -- Joe Holomy was the incident commander for the fire.

A. Yeah, Holomy.

Q. Holomy. Okay.

A. So I forget what the question was, but those are two guys that I spoke to and I kept up with kind of both of them on and off throughout the incident, just to make sure that it was all -- everything was going the right direction, and he'll -- I mean if you think about it, the transfer didn't take but -- once it was all set up, the transfer took probably 30, 40 minutes, and it was done.

Q. Right, right.

MR. KAMINSKI: Bob, did you have anything else?

MR. CLATTERBUCK: No, I think that's it. We really appreciate your time.

MR. DAY: Not a problem. The other thing, and I have to ask this after my [redacted] beating at East Palestine. This is not going to

a public hearing, correct?

MR. KAMINSKI: That is correct. There's no public hearing. We decided that within the last week.

MR. DAY: Thank you.

MR. KAMINSKI: Okay. Well, if you don't mind, this is the number we have for you, [redacted]. It's a good number if we have any follow up for you?

MR. DAY: Oh, most definitely.

MR. KAMINSKI: Okay. Well, I appreciate it and, Bob, if you don't have any questions, we can conclude the interview here, at 10:27 p.m. or a.m. Central Time. So --

(Whereupon, at 10:27 a.m., the interview was concluded.)

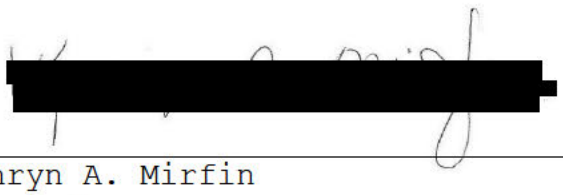
CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	FATAL CARGO TANK COMBINATION VEHICLE CRASH & SUBSEQUENT RELEASE OF ANHYDROUS AMMONIA NEAR TEUTOPOLIS, ILLINOIS, ON SEPTEMBER 29, 2023 Interview of Charles "Chip" Day
ACCIDENT NO.:	HWY23MR017
PLACE:	via telephone
DATE:	November 14, 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.



Kathryn A. Mirfin
Transcriber