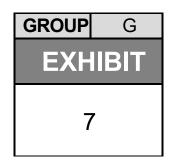


NATIONAL TRANSPORTATION SAFETY BOARD Investigative Hearing

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



Agency / Organization

NTSB

Title

# Interview Transcript – Steve Smith, VCM Technical Manager, Oxy Vinyls, LP, April 27, 2023

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
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Via Microsoft Teams Thursday, April 27, 2023
FREE STATE REPORTING, INC. Court Reporting Transcription D.C. Area 301-261-1902 Balt. & Annap. 410-974-0947

### APPEARANCES:

MARC DOUGHERTY, Investigator National Transportation Safety Board

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RUBEN PAYAN, Investigator National Transportation Safety Board

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PAUL CAREY, Retired Fire Chief and HAZMAT Chief International Association of Fire Fighters

KARENANNE STEGMANN, Vice President Supply Chain Oxy Vinyls

ROBERT WOOD, System Manager Hazardous Materials Norfolk Southern Railway

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ITEM			INDEX	PAGE
Interview	of Ste	ve Smith:		
	By Mr.	Dougherty		6
	By Mr.	Stancil		15
	By Mr.	Keltz		24
	By Ms.	Stegmann		25
	By Mr.	Carey		26

	4
1	INTERVIEW
2	(10:02 a.m.)
3	MR. DOUGHERTY: Good morning. Today is April 27, 2023, and
4	the time is 10:02 a.m. Eastern Time. This is a Microsoft Teams
5	interview that is being conducted in connection with the Norfolk
6	Southern railway train derailment in East Palestine, Ohio which
7	occurred on February 3rd, 2023. The NTSB number is RRD23MR005.
8	This is an interview of Mr. Steve Smith of Oxy Vinyl's.
9	Mr. Smith, if you could spell your last name and state your
10	current job title.
11	MR. SMITH: S-M-I-T-H, my current title is technical manager.
12	MR. DOUGHERTY: Great. Mr. Smith, do you understand that
13	this interview is being recorded?
14	MR. SMITH: I do.
15	MR. DOUGHERTY: So, for the purpose of this investigation is
16	to improve safety, not to assign fault, blame, or liability. Our
17	sole mission is to improve transportation safety and prevent
18	accidents. As such, the NTSB cannot offer any guarantee of
19	confidentiality, immunity from any legal proceedings by any other
20	agency whether it's local, state, or federal.
21	So, before we start this interview and questions, let's go
22	around the room and introduce ourselves. If you could please
23	spell your last name, who you are representing, and your work
24	title. I would like to remind everyone to speak clearly for the
25	recording and transcription.
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I'll start off myself and go around the room. My name is 1 2 Marc Dougherty. The spelling of my last name is D-O-U-G-H-E-R-T-Y, 3 and I'm an NTSB Hazardous Materials Accident Investigator. Mr. 4 Stancil. 5 MR. STANCIL: Yes, Paul Stancil spelled S-T-A-N-C-I-L. I'm a 6 Senior Hazardous Materials Accident Investigator, National 7 Transportation Safety Board. 8 MR. DOUGHERTY: Mr. Payan. MR. PAYAN: Good morning, Ruben Payan. I'm the -- with the 9 10 NTSB. I'm assigned as the investigator in charge for this 11 accident. Last name is Payan, P-A-Y-A-N. 12 MR. DOUGHERTY: Okay. Mr. Lawler. 13 MR. LAWLER: Carl (ph.) Lawler, Trinity (ph.) Leasing, 14 Mechanical Services, and the last name is L-A-W-L-E-R. 15 MR. DOUGHERTY: Okay. Mr. Keltz. 16 MR. KELTZ: Randy Keltz, K-E-L-T-Z. I'm the manager of Tank 17 Car Safety Programs with the Federal Railroad Administration. 18 MR. DOUGHERTY: All right. And Pete, I think, from GATX. 19 MR. MANYEK: Yes, Pete Manyek. I'm Senior Manager Design 20 Development (ph.) for GATX. 21 MR. DOUGHERTY: Okay. Chief Carey. 22 MR. CAREY: Hi, my name is Paul Carey. I'm a retired Boston 23 District Fire Chief and HAZMAT Chief and I'm here representing the 24 International Association of Fire Fighters. Last name is C-A-R-E-25 Υ. FREE STATE REPORTING, INC. Court Reporting Transcription D.C. Area 301-261-1902 Balt. & Annap. 410-974-0947

MR. DOUGHERTY: Okay. Ms. Stegmann. 1 2 Yes, Karenanne Stegmann, spelling S-T-E-G-M-A-MS. STEGMANN: 3 N-N, and I'm Vice President of Supply Chain for Oxy Vinyls. 4 MR. DOUGHERTY: Great, thank you. And looks like Mr. Wood 5 has joined. 6 MR. WOOD: Yeah, Robert Wood, System Manager Hazardous 7 Materials Norfolk Southern Railway, last name W-O-O-D. 8 Thank you. And is there anyone that I MR. DOUGHERTY: 9 missed? 10 MR. FARLEY: Yes. My name is Mark Farley, F-A-R-L-E-Y, and 11 I'm Mr. Smith's personal representative. 12 MR. DOUGHERTY: Okay. And what is your title, sir? 13 MR. FARLEY: I'm a partner with Farley & Partners LLP. 14 Okay, thank you. One second, please. MR. DOUGHERTY: Okav, 15 Mr. Smith, if any question is unclear or you don't understand the 16 question, please ask the questioner to clarify or restate the 17 question. And if you don't know the answer to any questions, it's 18 okay to tell us that you don't know. We don't want you to 19 speculate. 20 And, again, a transcript of this interview will be placed in 21 a public docket for this investigation which will be available via 22 the NTSB website. 23 INTERVIEW OF STEVE SMITH 24 BY MR. DOUGHERTY: 25 So, to start off, Mr. Smith, if you could tell us a little Ο. FREE STATE REPORTING, INC. Court Reporting Transcription D.C. Area 301-261-1902 Balt. & Annap. 410-974-0947

bit about your background and education and expertise, please.
A. Sure. I have a BS in chemical engineering from Texas A&M
University. I graduated in 1986. I had a job with Vista Chemical
in Lake Charles, Louisiana for seven years as a chemical engineer,
part of that was in a vinyl plant, part of that time was in a
vinyl plant.

7 Then in 1993 I moved to our -- I changed companies to 8 Occidental Chemical but to the inside plant, worked in the vinyl 9 plant there and then -- as a chemical engineer and then I was 10 promoted to a technical superintendent at the chlor-alkali and 11 cogent (ph.) facility that they have there (indiscernible) so I 12 spent some time doing that.

In 2010, I moved to Houston as a technical manager for our Deer Park VCM plant and (indiscernible) VCM plant, and then some years later we decided to start --

16 Q. One second, please.

17 A. Looks like I've been muted. Can everybody hear me?

18 Q. Yeah, sorry, go ahead.

19 A. Okay. So, we segregated some management and then I was just 20 -- had just been technical manager at the La Porte VCM plant since 21 that time, but since 2010 I've been technical manager at the La 22 Porte VCM plant.

Q. Okay. Thank you for that, you answered actually my next
question. So, how long have you been in your current position?
A. Since 2010.

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1 Q. Okay.

2 A. July of 2010.

3 And so, what are your current duties in this position? Okav. Ο. 4 So, as technical manager I have responsibility for our Α. 5 process engineering group, our distributor control engineer 6 reports to me, the laboratory group reports to me, our process 7 safety management group per individual engineer reports to me, and 8 the capital group, our capital management group, so I have 9 responsibility for all those groups.

10 Q. Okay. And so, who do you currently report to?

A. I report to Todd Benny (ph.) who is the plant manager.
Q. Okay. Thank you for that. So, just to move on to the East
Palestine incident, if you could tell us what you were advised
when you received the call regarding the vinyl chloride monomer
which has also been known as VCM, the tank cars involved in the
East Palestine derailment.

A. So, I was advised to provide technical support information.
I was advised to not participate in the managing of how to address
it or provide recommendations in how to address it.

Q. Okay. And so, when you arrived on scene can you tell us what information was discussed with you and your team regarding what was happening with the VCM tank cars?

A. Sure. They had a listing -- the SPSI trailer had a listing
of the railcars in order from -- I think it was from east to west,
but they had that listing in their order they discussed, in

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particular the five railcars and what had been going on since they had gotten -- had arrived there or had assessed the situation had been monitoring it.

They had provided us with some temperatures and on the TILX car my recollection there is that they -- I had marked down in my notes some pressures on the TILX car. The other -- so TILX car was the eastern most car, then there were two OCPX cars. Going from east to west following the TILX there was two OCPX cars and then a GATX car farther west as the other car.

The middle cars they gave us temperatures of those, as well as -- and I don't know if it was in that particular meeting or if it was later on, but there was discussion of the western most car in relationship to its temperature.

Also, the -- there was concern brought up regarding the potential for polymerization. There was a discussion about possibly moving the TILX car, actually rerailing that one. It's my recollection there was discussion in regards to that. There was discussion regarding the middle of three two OCPX plus the GATX.

The middle car that had gone off for like seven straight minutes, there was discussion around that, how that behaved, concern regarding it stopped relieving, and then there was just general observations of what they had seen on those cars as far as the fire.

25 Q. Okay. And so, I guess going back, so then on scene what were

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1	your responsibilities as an Oxy Vinyl representative on scene for	
2	these cars?	

3 Well, I had no responsibility in relationship to the cars. Α. 4 My responsibility as Oxy rep was to see if there were any 5 questions they had regarding the characteristics of vinyl, I could 6 provide answers in relationship to that. Also, you know, if there 7 were things that I thought that they should be aware of from standpoint of the characteristics of vinyl or things that they 8 9 should consider I felt that I could offer those as things for them to consider. 10

11 Q. Okay. And so, can you give us some information regarding 12 what was conveyed regarding the VCM product information or 13 polymerization in the discussions that led up to the vent and 14 burn?

A. Sure. There may be multiple that were -- so I may get some of my meetings merged with SPSI and SRS but initially -- I'm

17 trying to get my timing right here, so --

18 Q. Take your time.

19 A. -- pause for a second.

20 Q. No problem.

25

A. It was -- the initial meeting with SPSI was more for me -since I was coming fresh it was more me trying to grasp the situation to understand it. I don't know what specific information I offered at that time.

We met later on in the evening when vent and burn was

1 definitely a route that they were planning on going, and so a 2 concern regarding the vent and burn it was a potential for a vapor 3 cloud explosion and -- that I brought up.

The other was the fact that when you burn vinyl you're going to make, hydrocholoride HCL would be the acronym that we used, so you make HCL and hydrous (ph.) HCL but -- and so I had concerns regarding, you know, there's going to be a fair amount of HCL made. For roughly every 62 pounds of vinyl that you burn about 36 pounds of HCL would be made, so it's a fair amount. So, those were two particular things that -- issues that I brought up.

When there were questions regarding polymerization, that was not an area that I had experience in so I couldn't really offer anything of value until I had discussions with personnel in Dallas. So, when there were questions regarding that I just couldn't, I couldn't really offer anything regarding polymerization.

Q. Okay. And so, can you tell me what information you were given when you arrived regarding what was happening with the cars and what, I guess what was understood and what was happening in those cars?

A. The cars were derailed. The -- I'll start from east to west, the TILX car, my notes indicate that I had documented that it was at 60 PSIG pressure and my recollection is that car was one that they felt was far enough away from the other cars that they could possibly put that one back on the -- put that one back on its

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1 wheels.

2 Q. Okay.

The other -- the three cars in the middle, again, that was 3 Α. 4 you had the large burn that occurred on the middle of the three 5 cars. They were concerned about pluggage (ph.) of that PFC (ph.) 6 because it stops burning. It had stopped relieving, we felt, had 7 stopped relieving. There were some -- there was a lazy fire on 8 one of the cars in the three. There may have been lazy fires in 9 some of the other cars, too.

10 So, by the time we got there, there was nothing -- it was not 11 what you guys had experienced prior to us being there in terms of 12 observations and that. So, they were concerned about 13 polymerization, that was definitely a big concern. And so, you 14 know, that was, that was the primary concern is if it's 15 polymerizing how do they handle it.

16 And at some point there was discussion in regards to the vent 17 and burn, but -- so those are the things that I recall in 18 relationship to information that was conveyed to us. 19 Okay. So, regarding the polymerization, under what Q. 20 circumstances would -- could that have occurred on scene that --21 with the information that you were given? 22 So, again, I did not have experience in the polymer side of Α. 23 our business so I really couldn't answer that information. Thev 24 did communicate that the chemical in -- the vinyl in their 25 hazardous response guys I'll say, and I apologize I don't have the

	13
1	right perhaps the right terminology there, but the guys
2	indicated there was a it was a polymerization potential.
3	Q. Mm-hmm
4	A. The SPS (ph.) also talked about polymerization, so that was
5	why they had those concerns.
6	Q. Okay. So, are you considered a VCM expert?
7	A. I would not consider myself a VCM expert. I do have
8	experience in VCM, though.
9	Q. Okay.
10	A. So, again, VCM is different than PVC. So, VCM is the
11	precursor to PVC, so PVC is the polymer and vinyl is the monomer
12	that is used to make PVC.
13	Q. Okay. So, but there are are there VCM product experts on
14	site at the Oxy Vinyls La Porte plant from which these cars
15	A. Yeah.
16	Q originated (ph.) from?
17	A. We have it depends on how you define expert, but we have
18	experience. We I mean, I've got a fair amount of experience.
19	There's at the plant there's people that are very experienced
20	in loading railcars. There's people that have operational
21	experience, a fair amount of operational experience. Again, this
22	is the monomer side, this is the vinyl side.
23	Q. Mm-hmm.
24	A. And then there is in our corporate group there are experts
25	in relationship to they're called stewards in relationship to
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1 vinyl manufacturing.

Q. Okay. So -- and I understand there were discussions with a team of Oxy Vinyls representatives that was relaying information to you on scene. Were there VCM product experts on that call or chemists or someone that's could give you that information as to the potential of polymerization or what may be occurring in those cars as a product expert?

The -- when we had our calls we had our director of 8 Α. 9 technology present, we had various manufacturing people. I don't 10 believe that our PVC product steward was part of those calls. We 11 had manufacturing people that had been -- had experience in PVC 12 manufacturing, so when we had our calls they -- the communication, 13 the consensus there was that there was no obvious indication of polymerization that was occurring because there would be a runaway 14 15 reaction if that was occurring.

16 Q. Okay.

17 A. That was, that was after I met with SPSI first and then after 18 I met with the NTSB and Norfolk Southern, so that's when that 19 communication -- when we had that dialogue was after those two 20 meetings.

Q. Okay. So, can you give me some I guess examples or what would cause a polymerization within a car or within a tank car in that particular scenario that was discussed or what -- how would a polymerization in those cars have occurred?

25 A. Yeah, so I can't really -- again, that's an area -- so,

	15
1	again, I want to make sure that you understand, VCM, vinyl
2	manufacturing is a distinct manufacturing process from the
3	manufacture of PVC. So, we ship our VCM to PVC plants where they
4	make the polymer out of it.
5	So, I can't, I can't speak with significant insight into the
6	polymerization reaction, but you do need to have the email that
7	I had sent to Mr. Stancil kind of summarizes that you needed to
8	have an initiator.
9	Q. Okay.
10	A That would be what you would need to have based on, based on
11	I communicated that in that particular email.
12	MR. DOUGHERTY: Okay. Okay, I'd like to open it up for some
13	additional questions, if we could. Mr. Stancil?
14	MR. STANCIL: Yes. Thank you, Marc.
15	BY MR. STANCIL:
16	Q. Good morning, Mr. Smith. Just a few follow-ups here, you
17	mentioned when you got on scene you met with SPSI first. Is that
18	correct?
19	A. Yes, sir.
20	Q. Who would that have been?
21	A. That was Drew McCarty.
22	Q. Okay. And at that time what time did you arrive on scene
23	and what day was it?
24	A. So, we arrived on scene on Sunday, which I believe was the
25	5th. We flew into Pittsburgh around noon, so we got there I
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	16
1	don't know the exact time, but I'm going to say some time between
2	2:00 and 2:30 we got on scene. On scene means at their trailer,
3	doesn't mean at the railcars. Their trailer, we arrived there.
4	Q. And so, you met with Drew McCarty. Was there anyone else?
5	A. Yes. There were I mean, SPSI had its personnel there. I
6	don't know all the people. My recollection is that there was an
7	SRS, one or two SRS personnel also there on the at that
8	meeting. Other than that, I can't recall who else was there. I
9	mean, other than I mean, we had both all three Oxy people
10	there.
11	Q. Okay. And you mentioned the purpose of that meeting was to
12	get a handle on what was occurring on scene?
13	A. Yeah. So, we were told to touch base with Drew, so that's
14	what you know, that was our first initial contact was to
15	understand what's happening.
16	Q. Okay. And what did they ask of you?
17	A. They, they who do you mean by them?
18	Q. Anyone, railroad contractors, SPSI, SRS, Norfolk Southern,
19	what questions were they asking you at that time?
20	A. At the first meeting I'm not I don't recall questions that
21	were being asked, it was primarily communications as to what's
22	going on.
23	Q. Okay. And they you mentioned they had concerns about
24	polymerization at that time?
25	A. There was, there was concern in relationship to, yes, yes.
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1 Q. Okay. Did the topic of venting and burning come up at that 2 meeting?

3 A. I believe it did. We had -- there's -- I don't know the 4 scope of that topic. It was definitely more solidified at the 5 later meeting that we had that evening, so.

6 Q. Okay. And in your recollection what was the urgency for 7 conducting a vent and burn? What were the circumstances that led 8 to that discussion or decision?

9 A. So, I can't, I can't remember how we -- how the topic was 10 brought up at the, I'll say, the 2:00 to 2:30 meeting, whenever we 11 arrived there, I'll say 2:30. So, I can't remember the specifics 12 there.

At the second meeting that we had with SPSI we talked through concerns regarding venting and burning, which would be vapor cloud explosion, HCL emissions, and Drew walked through his logic in relationship to why he was leaning in that direction.

So, there was discussion about could he just layer the -- or could he just take the vent, a vent off of the top of the railcar and just get the vapors off the railcar. There was concern in relationship to the mechanical integrity of the metal on the railcar.

So, Drew kind of outlined steps that he would -- that they would take ways to mitigate this issue and he outlined why he felt that those steps were not suitable, which was leaning into vent and burn.

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1 Okay. Did they ask your opinion as to whether or not that Q. 2 would be the proper choice? I don't recall them asking our opinion on that. 3 Α. 4 Okay. Going back to -- well, maybe it came up at this Q. 5 meeting or an earlier meeting where you asked about or was the 6 topic of the pressure relief device, which apparently stopped 7 Did that come up? operating. 8 So, that came up, I believe, in the first meeting that Α. Yeah. 9 we had with them because it stopped there was concern that maybe 10 there was polymer inside the relief device and that caused it to 11 stop. 12 The dialogue that I had with the personnel in Dallas was --13 and vinyl has got certain temperatures and certain pressure, so 14 when it's in equilibrium we're going to be at -- depending on what 15 your pressure is in your railcar, it could be a lower pressure. 16 So, the, the explanation regarding that is that you very well may have been pretty much relieved, fully relieved, pretty close 17 18 to relieving most of your contents in that railcar just based on 19 the PRD (ph.) capacity. 20 And so, it -- and the temperatures were, again, they were 21 pretty low so they were not indicative of any type of runaway 22 polymerization reaction occurring. 23 And did you convey that information to SPSI and SRS and 0. Norfolk Southern? 24 25 So, when we had our meeting with you, Mr. Linum (ph.), Α. FREE STATE REPORTING, INC. Court Reporting Transcription D.C. Area 301-261-1902 Balt. & Annap. 410-974-0947

1 Mr. Paul (ph.) with NTNS (ph.) after we -- at that first meeting 2 that we had at the fire station, you had asked how we would convey 3 information in relationship to the polymerization questions that 4 were brought up.

5 I believe the Norfolk Southern gentleman's last name is 6 Williams (ph.) so if I get that wrong please correct me, but 7 Mr. Williams had communicated that we would -- that we should 8 communicate, we as in Oxy, should communicate with SPSI then SPSI 9 would get with Norfolk Southern and then Norfolk Southern would 10 get with you.

So, we communicated that evening that we did not see any type of obvious polymerization that was occurring because there would be a runaway reaction which would be seen by large temperate increases.

Q. Okay. Was there any mixed messaging on that or was that a solid message that you did not feel polymerization was occurring? A. I don't think there was any mixed messaging. That was not the intent to give any type of mixed messaging.

19 Okay. Let me ask you for your reaction to the following Q. 20 statements that were given to us. I'm going to read the first one 21 here. Okay, the temperature in one tank car had risen to 138 22 degrees Fahrenheit, whereas 185 degrees Fahrenheit is the critical 23 temperature for runaway polymerization reaction. If a vent and 24 burn is not conducted, the likely outcome will be a violent 25 How would you react to that statement? explosion.

	20
1	A. So, my response to that is that the temperatures that when we
2	talked with Norfolk Southern, you (ph.), Norfolk Southern,
3	Mr. Linum, I brought out my vapor pressure curves and 185 degrees
4	corresponds to the vapor pressure of VCM at 247.5 PSIG, which is
5	the relief set forming, at least looking at the curves that I had.
6	So, there somehow there was a so, my reaction is I
7	don't know where we got where, not we, but where whoever made that
8	statement got the polymerization part in there.
9	Q. So, the 185 degrees Fahrenheit is the vapor pressure which
10	the pressure relief device should operate. Is that what you're
11	saying?
12	A. Yeah. So, if you have pure vinyl and you heat it up, the
13	vapor pressure of the vinyl is going to 185 degrees Fahrenheit,
14	using the curves that I had at the time, and it's really between
15	185 and 190, but that at that temperature it's going to exert a
16	pressure on the vapor side of 247.5 PSIG.
17	So, it's the pressure it's going to cause the that's when
18	the PSE (ph.) could release. At that temperature you would expect
19	the PSE to release.
20	Q. Okay. So, would you consider that statement accurate or not
21	accurate?
22	A. I would consider it inaccurate based on the information I
23	tried that I was communicating that day, as well as what we
24	communicated in the email on polymerization to you.
25	Q. Okay. All right, here's the next statement I'd like to read
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1 to you. Okay, here it goes, the highest temperature detected in 2 one tank car was 139 degrees Fahrenheit suggesting the product was 3 undergoing a polymerization reaction. How would you react to 4 that?

5 A. So, when we sat in the -- when we were having that discussion 6 with Norfolk Southern, you know, the comment was made I received 7 text that the temperature had risen, and so I did have concerns 8 that maybe there was polymerization. But I want to -- I had 9 already made the comment that, you know, I didn't know much about 10 polymers. I wasn't -- I'd have to get information.

And one of my takeaways from that meeting was to find what is the critical temperature for polymerization to occur. And so, my reaction to that is that -- I guess can you restate the -- could you restate the statement again?

Q. So, the statement was, the highest temperature detected in one tank car was 139 degrees Fahrenheit suggesting that product was undergoing a polymerization reaction.

18 A. Yeah, so then we discussed that with the Dallas folks and it 19 was not indicative of a runaway reaction, therefore it wasn't 20 obvious that there was polymerization going on, which was what I 21 was to communicate and I did communicate that evening to SPSI.

- 22 Q. And again, who was that --
- 23 A. That was to Drew.
- 24 Q. -- which person?

25 A. That was to Drew.

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1	Q.	Anyone	else?

2	A. Yeah, I don't remember who else. I don't remember who was in
3	the room there besides the Oxy person along Drew.
4	Q. And you mentioned you conferred with some folks from your
5	Dallas office, who was that?
6	A. It was I don't recall all the people that were there, but
7	there was John Cummins (ph.) our director of technology, Waddel
8	(ph.) another one of our vice presidents, John Brennon (ph.)
9	another vice president. Those were some of the people that were
10	there.
11	Q. And did any of them speak directly to SPSI or SRS or Norfolk
12	Southern or was it all being funneled through you?
13	A. I don't know if they spoke directly outside of I know that
14	there was a meeting in the morning that I was not a participant of
15	and I don't know who all was in the meeting, et cetera, but if
16	there was any communication that occurred I'm not privy to that so
17	I don't know, but we were, we were basically the primary funnel to
18	them.
19	Q. Okay. And there was one other thing you said in your answer
20	that you were one of the takeaways from, from your meeting was
21	that you were going to research the temperature at which vinyl
22	chloride would polymerize. What did you find there?
23	A. So, the consensus from the meeting was that they didn't, they
24	didn't see any obvious indication of polymerization. So, some of
25	those questions around polymerization had stopped there.
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Q. Okay. And one last statement I'd like to read to you for your reaction. Okay, it goes this way, Norfolk Southern in consultation with Oxy Vinyls determined that a vent and burn technique was the best available option for mitigating the potential for catastrophic tank failure. How would you react to that?

7 A. I don't recall any consultation with us. There were 8 certainly discussions with us regarding the path forward. We 9 communicated concerns that we had in relationship to that. Drew 10 outlined his reasoning behind that and he seemed to have solid 11 reasons associated with that.

12 Q. But again, neither you or, to your knowledge, anyone else at 13 Oxy suggested that vent and burn would be the mitigating technique 14 to use?

A. Not that I know of. We -- our, our rule is not to recommend -- we weren't the experts and I made that clear at least, at least once, if not twice, that, you know, we were not, we were not the experts on that when it came to that. It had to be -- they were the ones that had to make (indiscernible) situation.

20 Q. So, is it accurate to say that you neither concurred nor 21 objected to the vent and burn?

22 A. It's accurate to say that -- yeah, I think so, yeah.

Q. All right. Just I know we had a meeting a little over a
month ago now I think where we discussed -- you and several other
experts with Oxy had discussed with us -- and I just wanted to

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1 kind of try to get it on the record now.

2	We discussed your post incident sampling and laboratory
3	testing of residues that were sampled from the five vinyl chloride
4	cars. Could you sort of summarize those findings just for the
5	record?
6	A. Yeah, the findings did not find any indication of PVC.
7	Q. Okay. And we went into a lot of detail there about the
8	laboratory work, so just tell us again what happened with those
9	samples you tested and what sort of techniques were used to
10	examine them.
11	A. Sure. The samples were collected by an Oxy representative
12	who went up to East Palestine. He delivered them to our Avon Lake
13	technical center in Avon Lake, Ohio. They did a series of tests
14	on those.
15	I can't really speak to the specifics of those tests and I
16	just don't have a lot of background knowledge regarding those.
17	So, they ran a couple tests to assess whether it had
18	characteristics of PVC and determined that those samples did not
19	have characteristic of that.
20	MR. STANCIL: Okay, thank you for that, Mr. Smith. I'm
21	I'll reserve any further questions for later, but I'll go ahead
22	now and pass to the next person. Thank you.
23	MR. DOUGHERTY: Does anyone else have any questions? If you
24	could just raise your hand, the virtual hand. Mr. Keltz.
25	BY MR. KELTZ:
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1 Good morning, Mr. Smith. Just curious, in your role and in Ο. 2 your capacity with Oxy, do you -- are you involved with any of the 3 actions regarding package procurement, package specification, 4 specking out the tank cars themselves for service, any of the 5 technical input into that process at all? 6 I am not. Δ 7 Okay. I had a series of questions based on if MR. KELTZ: 8 you had background in that or not, but since you're not involved 9 with that no further questions, Marc. Thank you, Mr. Smith. 10 MR. DOUGHERTY: Okay. Anyone else have questions? 11 Ms. Stegmann. 12 BY MS. STEGMANN: 13 Morning, Steve, thank you. Steve, I just want to clarify a Q. 14 few things going back to some of the questions that you've 15 answered of Marc and Paul. Was Oxy part of the unified command? 16 We were not. Α. 17 And did you ever speak with the incident commander? Ο. 18 Α. No. 19 And I think following up on a grouping of Paul's questions he Q. 20 asked regarding the vent and burn and did Oxy -- was anyone from 21 Oxy suggested it, I'd like to ask that a little bit differently. 22 Did you approve the vent and burn decision or did anybody from Oxy 23 approve the vent and burn decision? 24 No, I did not approve. It wasn't, wasn't my role to do that. Α. 25 And I'm not aware of anybody in Oxy approving that decision FREE STATE REPORTING, INC. Court Reporting Transcription D.C. Area 301-261-1902 Balt. & Annap. 410-974-0947

1 either.

2 Q. And then, how many railcars were involved in the final vent 3 and burn operation?

4 A. My understanding is that five were involved.

5 Ο. And were you aware that there was going to be five or --6 involved in the decision to vent and burn all five railcars? 7 By the morning it had been communicated to us they would do Α. 8 all five Monday morning. They would, they would attempt at least 9 on -- I don't know initially how many they were going to do, but 10 the eastern most, the TILX one, there was discussions regarding 11 moving that one, but by the morning they determined all five. 12 MS. STEGMANN: Okay, that's all, that's all I have. Thank

13 you for your responses, Steve.

14 MR. DOUGHERTY: Chief Carey, do you have questions?

15 MR. CAREY: (No audible response.)

16 MR. DOUGHERTY: Go ahead.

MR. CAREY: Good morning, Mr. Smith. How are you doing?MR. SMITH: All right.

19 MR. CAREY: Okay. Thanks for taking the time for us.

20 BY MR. CAREY:

Q. So, you initially said that you don't consider yourself anexpert on polymerization. Is that correct.

A. I don't have any -- I do not have any experience on the PVC,
PVC side of the business.

25 Q. Okay. So, who does at Oxy Vinyls that you communicated with

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1 during this event?

2	A. So, our I would say that one of our vice presidents that
3	worked in a PVC plant, as well as our director of technology had
4	some insight in the relationships in that. Those would be
5	definitely the two top people but there were multiple people that
6	were in part of that discussion.
7	Q. Okay. By phone, right, Dallas?
8	A Correct. Yes, sir, by phone.
9	Q. Okay, good. So, we still don't have a very clear answer on
10	the critical temperature of this vinyl chloride monomer. Is that
11	correct?
12	A. Our response is that since it was stabilized because it had
13	less than 200 parts per million oxygen it would not polymerize
14	under temperatures that
15	Q. So, there was no concern about getting to that critical
16	temperature?
17	A. So, that, that response was formulated post incident in
18	relationship to that. At the time of the incident we did not see
19	that it was obvious that polymerization was occurring because
20	there was no runaway reaction that was indicated that it would be
21	measured by the temperature.
22	Q. Right. But I understand the railcars, which we looked at,
23	were (indiscernible), so how were they able to provide any good
24	numbers as far as the temperatures on those cars?
25	A. So, my understanding is they, they removed the insulation to
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	28				
1	get skin temperatures off of the, off of the, the beneath the				
2	insulation, that's how they were getting temperatures. That's how				
3	I understood it. I don't know physically how they did it but				
4	that's how I understood they did it.				
5	Q. Okay. And you stated that there were no obvious signs of				
6	polymerization. What are obvious signs?				
7	A. Okay. You have a so, the PVC reaction is exothermic,				
8	meaning that it releases heat. So, if it was a runaway reaction				
9	you would continue to release heat and that temperature would				
10	continue to climb and it could go climb quite a bit. And as it				
11	climbs your rate of reaction likely increases and, therefore,				
12	climbs faster.				
13	Q. Okay, good. And, Karenanne, thanks for asking that question.				
14	I was going to ask the same thing, whether you were plugged into				
15	the unified command. You were not.				
16	A. Correct, we were not.				
17	Q. You were not. So, you were basically dealing with Norfolk				
18	Southern and SPSI.				
19	A. Primarily with SPSI.				
20	Q. Drew.				
21	A. And then we had communications with Norfolk Southern on				
22	Monday, more on Monday because we were all at the school, but				
23	those communications were really pertaining to modeling, modeling				
24	release and things like that.				
25	Q. All right. So, this wasn't the incident happened on				
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	29				
1	Friday, so you guys didn't get there until Sunday, right?				
2	A. Yes, sir, Sunday is when we got there, Sunday afternoon.				
3	Q. Do you know if there was any communications from				
4	(indiscernible) to anybody at Oxy Vinyls prior to Sunday?				
5	A. My understanding was that there was a conference call Sunday				
6	morning that occurred with some of our Oxy personnel.				
7	MR. CAREY: Okay, good. All right, thank you. No more				
8	questions.				
9	MR. DOUGHERTY: Okay. Thank you for that. Does anyone else				
10	have anything at the moment? Okay. I just have a couple of				
11	follow up questions. Oh, go ahead, Paul.				
12	MR. STANCIL: Yeah, I did too, I just was waiting for others.				
13	Yeah, just a couple of follow ups, Mr. Smith.				
14	BY MR. STANCIL:				
15	Q. So, you mentioned modeling the release. What role did you or				
16	Oxy have in that?				
17	A. Modeling I didn't have any role, other than trying to				
18	articulate, you know, you're going to have a fair amount of HCL				
19	that's released, that's released and wanted to make sure that				
20	somebody was looking at that.				
21	Q. Did you make any suggestions on what should be done with any				
22	of the gases generated from combusting vinyl chloride?				
23	A. We talked through it but, again, this would have to be				
24	controlled. There was, you know, if you would flare it you would				
25	want to shrub (ph.) it. It would be ideal to shrub it because you				
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	30			
1	could that way you minimize the HCL, but if you're venting and			
2	burning there's really nothing you can do regarding the emissions			
3	that occur.			
4	Q. Okay. You mentioned you were at the school on Monday where			
5	the unified command had relocated to, correct?			
6	A. Yes, sir.			
7	Q. So, but you were not part of the unified command.			
8	A. Correct, we were not.			
9	Q. There was a point in time where the Ohio governor and various			
10	the incident commander from East Palestine and others were			
11	having discussions on timing and approval of the vent and burn.			
12	Were you in that room?			
13	A. I was not.			
14	Q. You were not part of that conversation?			
15	A. No, sir.			
16	Q. Okay. And with respect to temperature trends on the tank			
17	cars, were you receiving any reports on those?			
18	A. So, we had the 135 initially on the western most car and then			
19	the temperatures, like I mentioned, on the middle cars. Then when			
20	we were in the at the firehouse talking with Norfolk Southern			
21	and you and Shawn (ph.) Mr. Linum, the temperate increased so we			
22	got that information, it increased two to three degrees. And then			
23	by 8:14, we must have been in the room with SPSI, their trailer,			
24	at that time it had gone down to 130 degrees Fahrenheit.			
25	They were going to monitor the temperatures hourly, is my			
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	31			
1	recollection, through the night and that morning the information			
2	that was relayed to us was it was still at 130 degrees Fahrenheit			
3	So, there was no, no change in temperature. So, that, that was,			
4	that was the information that was relayed to us in that fashion.			
5	Q. Was that the last temperature reading that you were given?			
6	A. That's the last one I recall.			
7	Q. And that was the morning Monday morning?			
8	A. Yes, sir.			
9	Q. Did anyone mention to you whether the temperature went up or			
10	down from there?			
11	A. I don't recall any discussions about the temperature at that			
12	point. It was I don't recall any discussions after, after that			
13	point.			
14	Q. And my last question, did anyone ask whether the temperature			
15	indicated anything?			
16	A. Not on Monday, I don't recall.			
17	Q. What about prior to that?			
18	A. Prior to that so, prior to that was, like I said, that			
19	western most one was at a higher temperature, therefore, should			
20	we be concerned about things and the temperature rose, so that was			
21	there was concern regarding that particular one just because it			
22	was at a more elevated temperature than the other railcars.			
23	MR. STANCIL: Okay. And no one set any I'll retract that,			
24	neverminded. Okay, that's all I have. Thank you.			
25	MR. DOUGHERTY: Go ahead, Chief Carey.			
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	32				
1	BY MR. CAREY:				
2	Q. Mr. Smith, we've talked a lot about the temperatures. Do you				
3	know if they were if SPSI or SRS was able to get any pressure				
4	readings off of these cars?				
5	A. I have a note that indicates a pressure reading on the TILX				
6	car at 60 pounds. I believe, was what my note says.				
7	Q. Do you know how they obtained that because it looked like				
8	there was a lot of damage around the protective housing and those				
9	valves?				
10	A. I don't know.				
11	MR. CAREY: Okay.				
12	MR. DOUGHERTY: All right, Mr. Smith, I just have a couple				
13	follow-up questions and then we'll, I think, do the final round.				
14	Chief, do you have anything else there? No, I guess not.				
15	MR. CAREY: No, I'm good. Thank you, Mr. Smith.				
16	MR. DOUGHERTY: All right.				
17	BY MR. DOUGHERTY:				
18	Q. So, Mr. Smith, have you ever experienced a similar situation				
19	or incident within the plant regarding a VCM tank fire or				
20	surrounding area that may have been involved in a fire that would				
21	have threatened the integrity of a VCM tank?				
22	A. I'm not recalling any incidents where there was a fire around				
23	a viny tank.				
24	Q. Okay. So, can you tell me if Oxy Vinyl in the past, as a				
25	routine, has conducted any type of tabletop exercises or scenarios				
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	33
1	where a VCM tank or surrounding area catches fire in addition to
2	like a VCM tank car during loading or in transportation or other?
3	A. I don't know if we have or have not.
4	Q. Okay. And my final question, and I'm just going to share my
5	screen here if I could can you see my screen there?
6	A. Can you expand it?
7	Q. Sure.
8	A. Widen it.
9	Q. I can as much as possible here. So, what this is, is the SDS
10	that was given to us. The print date was 30 November 2022 and
11	it's the SDS for vinyl chloride monomer that was also used in the
12	decision making and also information given to responders and those
13	on scene regarding potential for polymerization.
14	So, can you tell us what Oxy Vinyls's position is regarding
15	the contents of the SDS in Section 10 regarding stability and
16	reactivity of violent polymerization and the reaction based on the
17	explosive or violent polymerization can occur when exposed to air
18	or sunlight or excessive heat if not properly stabilized? Can you
19	tell me if that's a correct statement?
20	A. I would have to defer to somebody that's got PVC and
21	polymerization experience, if I can.
22	Q. Okay. How about reacts with the following incompatible
23	materials and creates a strong exothermic reaction to oxygen,
24	moisture, polymerization additives, copper, aluminum, oxidizing
25	agent, strong alkalis and strong acids. Is that a correct
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1 statement?

2 A. I would have to, I would have to understand the context of3 that statement.

Q. Okay. So, incompatible substances, oxidizing agents,
oxidizing nitrogen metals, aluminum, aluminum alloys, copper,
metal alkyl complexes, alkaloid metal such as sodium, potassium
and their alloys?

8 So, again, down under hazardous polymerization, 9 polymerization can occur under the exposure of the following 10 conditions or mixtures with the following elements and materials 11 can cause explosive or violent polymerization of ECM, air, 12 sunlight, excessive heat, oxidizers, kind of like metals such as 13 copper, aluminum and their alloys, and certain catalytic 14 impurities. Is that a true statement? 15 Again, I can't speak to the polymerization --Α. 16 Okay. Q. 17 Α. -- part. From a polymerization standpoint I can't, I can't 18 speak to that. I don't have the experience. 19 So, in addition to that it says to avoid elevated Q. 20 temperatures. Do you know what type of elevated temperatures or 21 can you give a specific for elevated temperatures or what that 22 would entail? 23 Is this in regards to polymerization or --Α. 24 Correct. Ο. 25 Α. -- is it --

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1 Q. Under hazardous --

2 A. I'm sorry --

3 Q. -- polymerization.

A. I would have to defer back to, you know, what we talked about
at least in regards to when it's stabilized, but again I can't
really -- it's just not an area where I can speak with any type of
experience or authority on the polymerization side.

8 MR. DOUGHERTY: Okay, thank you. And that is all the 9 questions that I have. Does anyone else have any follow up 10 questions? Okay. Go ahead, Chief Carey.

11

MR. CAREY: No, I'm good. Thank you.

12 MR. DOUGHERTY: All right, great. Mr. Smith, I appreciate 13 the information today and your time. So, my last question --14 obviously we've asked you a lot of questions today. Is there 15 anything that we haven't asked you or information that we should 16 have knowledge of that would be important to our investigation? 17 MR. SMITH: Can't think of anything else top of my head. MR. DOUGHERTY: Okay. All right, fair enough. 18 So, if you 19 think of anything, obviously feel free to reach out to myself, Mr. 20 Stancil, or Mr. Ruben who is the IC for this incident. Again, Mr. 21 Smith, I thank you for your time and information. Thank you for 22 answering our questions.

This will conclude our interview. The time is 11:04 a.m.Eastern Time and I will now stop the recording.

25

(Whereupon, at 11:04 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 Steve Smith

ACCIDENT NO.: RRD23MR005

PLACE: Via Microsoft Teams

DATE: April 27, 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.

> Charlene Brown Transcriber



# **National Transportation Safety Board**

Washington, D.C. 20594

### **Transcript Errata**

Subj: Transcript Review Request for: Derailment of Norfolk Southern Railway Train 32N with Subsequent Fire and Hazardous Materials Release, East Palestine, Ohio, on February 3, 2023.

Accident No.: RRD23MR005

To: Steve Smith, Oxy Vinyls

Dear Mr. Smith,

The enclosed transcript of your interview on April 27, 2023, is provided for your review and comment to ensure its accuracy. It is not for public release.

The transcript is investigative information of the National Transportation Safety Board (NTSB) created as part of the NTSB's investigation into the derailment of Norfolk Southern Railway train 32N with subsequent fire and hazardous materials release in East Palestine, Ohio, on February 3, 2023. (NTSB Accident No. RRD23MR005).

NTSB regulations prohibit the public release of investigative information prior to release by the NTSB without the permission of the NTSB Investigator in Charge (IIC). See 49 C.F.R. § 831.13(b). The IIC has not approved public release of this information at this time. Therefore, we request that you refrain from any further dissemination of this transcript.

Kindly review this transcript for accuracy and provide corrections, if any, in the attached table. Please print, sign, and return it to me via email by close of business, **May 19, 2023**. Please return or destroy the transcript after providing your comments.

Requests for an extension of this deadline must be in writing and received prior to the due date. If comments are not received by the due date, we will consider the transcript to be final without comment.

Thank you in advance for your attention to this matter. If you have any question regarding the process, please feel free to contact me.

Thank you,

Marc Dougherty Hazardous Materials Accident Investigator (RPH-20) National Transportation Safety Board 490 L'Enfant Plaza East, SW Washington, DC 20594



# National Transportation Safety Board Washington, D.C. 20594

### **Transcript Errata**

### TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: Steve Smith RECORDED ON April 27, 2023

PAGE	LINE	CURRENT WORDING	CORRECTED WORDING
NUMBER	NUMBER		
7	8	inside plant	Ingleside plant
7	11	cogent	cogen
7	14	(indiscernible)	La Porte
8	5	distributor	distributive
8	7	per	(indiscernible)
8	11	Todd Benny	Todd Behne
9	20	seven	seventy
11	5	h <b>ydroch</b> loride	hydrogen chloride.
11	6	and hydrous	anhydrous
12	5	PFC	(indiscernible)
12	25	guys	guides
13	1	guys	guides
13	4	SPS	SDS
17	17	layer	(indiscernible)
18	25	Linum	Lynum
19	1	NTNS	NS
19	13	temperate	temperature
20	3	Linum	Lynum
20	5	forming	(indiscernible)
22	7	Cummins	Tummons
7	7	Waddel	Wade Alleman
7	8	Brennon	Brenon
23	15	rule	role
23	19	(indiscernible) situation	(indiscernible)
29	25	want to shrub	want to scrub
29	25	ideal to shrub	ideal to scrub
30	21	Shawn (ph.) Mr. Linum	Sean (ph.) Mr. Lynum
30	21	temperate	temperature



## **National Transportation Safety Board**

Washington, D.C. 20594

### **Transcript Errata**

ſ	32	23	viny	vinyl	
ſ	34	11	ECM	VCM	

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 NEED.

Initials

Steve Smith

Printed Name of Person providing the above information

Signature of Person providing the above information

5/1712023 Date