UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
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FATAL FIRE AND SINKING OF THE	*	
DREDGE *WAYMON L BOYD* IN CORPUS	*	Accident No.: DCA20FM026
CHRISTI, TEXAS, ON AUGUST 21, 2020	*	
	*	

Interview of: EARL YOUMANS, Pipeline Controller
Enterprise Products

Via Microsoft Teams

Thursday,
October 22, 2020

APPEARANCES:

LUKE WISNIEWSKI, Investigator in Charge
National Transportation Safety Board

ANDREW EHLERS, Marine Accident Investigator
National Transportation Safety Board

PAUL STANCIL, Rail and Pipeline Accident Investigator
National Transportation Safety Board

ROGER EVANS, Pipeline Accident Investigator
National Transportation Safety Board

LCDR [redacted], Senior Investigating Officer
U.S. Coast Guard

LT [redacted], Senior Field Investigator
U.S. Coast Guard

ALVARO RODRIGUEZ, Pipeline Accident Investigator
Pipeline and Hazardous Materials Safety Administration

RON PEREZ, Inspector
Railroad Commission of Texas

GRAHAM KENYON, Vice President of Risk Management
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MATT PISERELLE, Marine Maintenance Manager
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NHAN TRUONG, Compliance Manager
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JIMMY PASSMORE, Contractor Safety
Enterprise Products

MARK FARLEY, Attorney
(On behalf of Mr. Youmans)

I N D E X

I N T E R V I E W

(10:05 a.m.)

MR. STANCIL: This is Paul Stancil. I'm an NTSB hazardous materials accident investigator and pipeline group chairman for the investigation of the August 21st, 2020, fire and sinking of the dredge *Waymon L Boyd* in Corpus Christi, Texas. This is an interview of Mr. Earl Youmans, who is employed by Enterprise Products. The NTSB accident reference number is DCA20FM026. Today is October 22nd, 2020, and the time is 10:05 a.m. Central Time.

Mr. Youmans is located in a conference room at Enterprise's offices in Houston, Texas, and the NTSB team and several others participating in this interview are doing so via a videoconference call.

Mr. Youmans, would you please state and spell your name, please?

MR. YOUMANS: My name is Earl Youmans. It's going to be E-a-r-l, Y-o-u-m-a-n-s.

MR. STANCIL: Thank you, sir. And make sure you speak very loudly and clearly so we can pick up that audio for our recording. This interview is being recorded, and I would like to know if we have your consent to record this conversation.

MR. YOUMANS: Yes, sir.

MR. STANCIL: Thank you. All right. And we're going to -- please also let me know if you have any issues with our audio

quality, and we'll address that immediately.

So, let's introduce our interview panel, and we'll go through it. State your organization, title, and spell your last name, please. Again, my name is Paul Stancil. My last name is spelled S-t-a-n-c-i-l. I am an accident investigator with the NTSB. Next, my NTSB colleagues.

Mr. Wisniewski?

MR. WISNIEWSKI: Hi. Good morning, Mr. Youmans. My name is Luke Wisniewski, W-i-s-n-i-e-w-s-k-i, investigator in charge from NTSB.

MR. STANCIL: Thank you.

Mr. Ehlers?

MR. EHLERS: Good morning. My name is Drew Ehlers. I'm with the NTSB. Last name is spelled E-h-l-e-r-s. And I am the operations group chairman.

MR. STANCIL: Mr. Evans?

MR. EVANS: Yes, Roger Evans, E-v-a-n-s. I'm a pipeline accident investigator for the NTSB.

MR. STANCIL: Thank you.

U.S. Coast Guard?

LCDR [redacted]: Good morning. Lieutenant Commander [redacted] and I'm the lead investigator for the Coast Guard.

LT [redacted]: Lieutenant [redacted], [redacted]. I'm the assistant senior investigating officer.

MR. STANCIL: Thank you.

PHMSA?

MR. RODRIGUEZ: Good morning. My name is Alvaro Rodriguez. Alvaro, A-l-v-a-r-o, Rodriguez, R-o-d-r-i-g-u-e-z. I am a pipeline accident investigator with PHMSA.

MR. STANCIL: Thank you.

Railroad Commission of Texas?

MR. PEREZ: Good morning, sir. My name is Ron Perez. My last name is spelled P-e-r-e-z. I am inspector out of Region 7.

MR. STANCIL: Thank you.

Orion Group?

MR. KENYON: Yeah, this is Graham Kenyon. I'm the VP of risk management. Kenyon is spelled, K-e-n-y-o-n.

MR. PISERELLE: Good morning. This is Matt (audio drop). I'm the marine maintenance manager for Orion.

MR. STANCIL: Matt, your audio was cut off. Would you repeat your name and spell it, please?

MR. PISERELLE: Matt Piserelle, P-i-s-e-r-e-l-l-e. And I work for Orion Marine Group.

MR. STANCIL: Okay, thank you, Matt.

Enterprise Products?

MR. MORTON: Yeah, this is Jeff Morton, Enterprise Products, senior director of transportation compliance. Last name is spelled M-o-r-t-o-n.

MR. TRUONG: This is Nhan Truong with Enterprise Products,

spelled N-h-a-n, last name is T-r-u-o-n-g, and I'm the manager of compliance.

MR. PASSMORE: Kenny Passmore, Enterprise Products, contractor safety. I'm filling in for Joe Kohler. Last name is spelled Passmore, P-a-s-s-m-o-r-e.

MR. STANCIL: Thank you. Is there anyone else on the conference call or in the room with Mr. Youmans that I have not called?

MR. FARLEY: Yes. My name is Mark Farley, M-a-r-k, F-a-r-l-e-y. I'm an attorney with Farley & Partners on behalf of Mr. Youmans.

MR. STANCIL: Thank you, Mr. Farley.

Anyone else?

(No response.)

MR. STANCIL: Okay. So, Mr. Youmans, you're free to have a representative of your choosing to consult with during this interview, but that person would not be able to speak for you or ask or answer questions. Do you understand?

MR. YOUMANS: Yes, I do.

MR. STANCIL: And I understand that Mr. Farley, who represents Enterprise Products, is in the room. Is that the person who's representing you today?

MR. YOUMANS: Yes, sir.

MR. STANCIL: Okay. Thank you very much. So, we'll move on. The purpose of this investigation is to improve safety, not to

assign fault, blame or liability. Our sole mission here is to improve transportation safety and prevent accidents. The NTSB cannot offer any guarantee of confidentiality or immunity from any legal proceeding by other agencies, whether local, state or federal.

A transcript of this interview will be placed in the public docket for the investigation, which will be available through the NTSB website. Mr. Youmans, do you understand?

MR. YOUMANS: Yes, sir.

MR. STANCIL: Okay. All right, I will start off with a few questions, and then I'm going to pass to my NTSB colleagues, and we'll continue until everyone has had an opportunity to ask you questions, okay?

MR. YOUMANS: Okay.

INTERVIEW OF EARL YOUMANS

BY MR. STANCIL:

Q. All right. So, Mr. Youmans, would you tell us about your background? And if you would, begin with your education, and then continue with what your employment history has been.

A. My education; I graduated from Ozen High School in Beaumont, Texas. I went on to Lamar Institute of Technology in Beaumont, Texas. And after that, I did contract work in the refineries. And in 2006, I started with Enterprise Products. I started off in the field at the Almeda terminal. In 2016, I started at the Houston control center.

Q. Okay. What is your current job title
A. Pipeline controller at pipeline control center.
Q. And how long have you been in that position?
A. Five years.
Q. Great. All right. Tell us about your job duties and responsibilities. What is required of a pipeline controller?
A. To monitor and operate pipelines, follow procedures, safety. I also take orders from scheduling to make pipeline (indiscernible) I talk on the phone regularly. I do safety classes to help me become a better pipeline controller.

MR. TRUONG: Paul, this is Nhan. Are you guys able to hear him okay on the line?

MR. STANCIL: Actually, he's dropping on and off a bit.

If you could move a little closer to the microphone, it would be helpful.

MR. TRUONG: Yeah, I was kind of noticing your body language, so --

(Pause.)

BY MR. STANCIL:

Q. Yeah, if you would, Mr. Youmans, just repeat what your responsibilities and duties are with the -- as a pipeline controller for Enterprise.
A. Okay. I monitor and operate the pipelines. I monitor pressures, flows; following pipeline procedures, following safety procedures. I also follow orders from my scheduling department

getting the tasks done on the job.
Q. Okay, that's great. And the audio quality is much, much better. I appreciate that. So, how many years of SCADA operating experience do you have?
A. About 5 years.
Q. And if you would, tell us, for the record, what a SCADA, or supervisory control and data acquisition system is and how it's used to control pipelines.
A. SCADA is used to monitor the pipelines from getting it from point A to point B. It's a helpful tool to help us keep the public safe by us operating the pipelines and monitoring pressures throughout the pipeline. And we have alarms that help us better do our job, you know, to get our -- to keep -- do the right tasks.
Q. Okay. All right. And have you received training from Enterprise specific to your operating experience?
A. Yes. We receive annual training.
Q. Tell me a little bit about that. What does that entail?
A. It's going over the procedures, new procedures that are coming out, just helping us be better controllers. It's annual training, classroom exercises that we do, go over things in pipeline control.
Q. Okay. And that's a recurrent type training?
A. Yes.
Q. Do you have any certifications, either through Enterprise or any other professional certifications?

A. Yes. I'm a qualified controller.
Q. Okay. And do you work shift work or just straight salary?
A. I work shift work, 12-hour shifts.
Q. Four-hour shifts?
A. Twelve-hour shifts.
Q. Twelve-hour shifts, okay. And how many days per week?
A. We work the Dupont schedule. We go to work four sets of nights, then we're off 3 days, then we work three sets of days. We'll work a set of days, 3 days, then we're off one, and then we'll come back and work a set of nights, and it'll be 3 nights. Then we're off for the weekend, then we start 4 days again. So, it's rotating from days to nights.
Q. Okay. And on August 21st of this year, the day of this incident, what shift were you working then?
A. I was working dayshift.
Q. And what time did you come into work?
A. I got there at 5:50.
Q. Okay. And where is your office physically located?
A. Here in Houston, Texas.
Q. Is that headquarters for Enterprise?
A. It's our control center office.
Q. Control center. Okay.
MR. STANCIL: All right. So, at this point, I'm going to turn it over to one of my colleagues who is fairly adept at pipeline, and we'll take it from there. And I'll have some

additional questions for you at the end, okay?

So, I'm going to hand it off to my NTSB colleague Roger Evans at this point.

BY MR. EVANS:

Q. Good morning, Mr. Youmans, and thank you for agreeing to talk to us today. Hopefully this is a short interview, actually, because we -- I know it's not a very involved pipeline, but we do need to get an overview of the operation and all that. So, you said that you did training annually. Do they do mock exercises within that training where you would actually have situations on pipelines and try to solve what's going on? Is that part of your training?

A. Yes, we have tabletop exercises.

Q. Okay. And do any of these tabletop exercises include the pipeline for the -- the accident pipeline?

A. No, we do it on, like, different pipelines.

Q. Okay. Okay, just a question I had. So, how many years have you been working on the 219 pipeline as a SCADA controller?

A. About 5 years.

Q. Okay. So, this is your initial assignment that you had and you've been with this, then; is that a true statement?

A. Yes.

Q. Okay. And the training you had to be a standalone left -- like flying left seat like a pilot, let's say, are you -- how many weeks were you training with someone by your side?

A. I was training, it was like 6 to 8 months.
Q. Okay. And during that 6 to 8 months of training, did you have, did you experience any alarms or emergency type situations for this pipeline?
A. Yeah, PLM alarms, but that's --
Q. Okay. And by the way, if you use an acronym, can you tell us the acronym, what it stands for, for the benefit of everyone else, please? PLM?
A. Repeat your question?
Q. I said if you're going to be using acronyms like the one you just used, PLM, can you make sure that you tell us what PLM stands for, for the benefit of everyone?
A. Pipeline monitor.
Q. Okay. Okay, good. So, on the SCADA control in Houston where you sit and that has this pipeline on it, are there other pipelines that you control simultaneously to this?
A. Yes.
Q. Okay. And how many other pipelines are you controlling?
A. Maybe 5 to 10. Between 5 and 10.
Q. Okay. And each one of those other pipelines has its own screen; is that correct?
A. Yes.
Q. Okay. So, this pipeline in particular, is it on your screen constantly as a suppressed window or is it something that you have to log into to look at? How does that work?

A. It's on my screen.
Q. Okay. So, you can flip between all the screens on your monitor and see all the action of all the pipelines; is that correct?
A. Yes, sir.
Q. Okay. And on any given evening, are you constantly going between these 5 to 10 pipelines, looking at what's going on between each pipeline?
A. Yes, sir.
Q. Okay. So, on this particular pipeline, I know there were a couple of pipeline techs out there. How do you typically communicate with the pipeline technicians, let's say for this pipeline? If you need assistance out in the field, how would you -- monitoring the pipeline, how do you communicate with your technicians?
A. I communicate with them. I know that's their area, so I'll call them if I have any issues on that pipeline.
Q. Okay. And you're calling from a landline to a cellphone; is that correct?
A. Yes.
Q. Okay, thank you. So, when you -- if you're controlling 5 to 10 pipelines, you must have a changeover kind of turnover period between the second controller and the first controller; is that correct?
A. Yes.

Q. And how long is that period of time?
A. Between shifts?
Q. Yes.
A. Twelve hours.
Q. Twelve hours between shifts, and then how many minutes of overlap would you have when you talk to your incoming controller?
A. It all depends on what we have going on that day.
Q. Okay. Are there standard forms you fill out for the interim period of time there, like a turnover log or something, logbook or something like that?
A. Yes, when we're logging into SCADA. And we have to -- we look over the log entries.
Q. Okay. Okay. So, just a question, with 5 to 10 lines, have you received multiple alarms on multiple lines in one evening? Has that happened before?
A. Yes.
Q. Okay, just curious about that. I won't go any further with that. I just wanted to find that out. So, describe the screens and the events that -- you know, the event logs that you have on your -- on the 219 pipeline. What can you see and what kind of items, alarms, and what are the alarms like, audibles, colors, flashing colors? Can you kind of go through that for us, please?
A. They're flashing colors. We have red alarms, we have yellow alarms, we have magenta alarms. The alarms come in with sound, noise to alert us that there is an alarming.

Q. Yeah, can you go through each one of those colors and give us a description of what that color represents, please?
A. Like, a yellow alarm would detail, like, a low state, and a red alarm would be critical, a critical alarm.
Q. Okay.
A. And a magenta alarm would come in as something far as like an OPI alarm.
Q. And an OPI is again?
A. Over pressure indicator.
Q. Okay, yeah. And does that cover all the colors, red, yellow, magenta; is that correct?
A. Yeah, the ones (indiscernible).
Q. And each one of the alarms as a unique sound; is that correct?
A. Yes.
Q. Okay. And for each type of alarm you have, do you have a set of instructions to how to respond? I mean, you're training, I'm sure, basically gives you, you know, the background to respond to alarms because they happen all the time, but do you actually have a set of responses per pipeline? So, if you're running 5 to 10 pipelines, if you receive a red critical alarm, the actions that you take, are those kind of via training or are those something that are written down and you can respond that way?
A. It's via training.
Q. Okay. Okay. And can you access the system via internet?

A. Access it via internet?
Q. Yeah, can you access your control center via internet?
A. I only have access when I'm here.
Q. Okay, I was just curious about that. Okay. Does the -- I mean, I know 5 to 10 pipelines, there must be leak detection on some of them, but do you have leak detection systems on the 219 pipeline?
A. Yes.
Q. Okay. And can you sort of describe that for us?
A. Whenever there's a change of flow and there's something that's not looking right, it picks up and it'll show that there's something going on, on the system, on the pipeline.
Q. Okay. Okay. Now, as far as movements that can be made on the 219 pipeline, what action can you control from within your SCADA center?
A. Could you repeat that question?
Q. Yeah, I'm just trying to figure out what can be controlled from your SCADA center, like how many valves on this -- you know, it's only a 5-mile pipeline, but off the top of your head, do you know the moves that can be made to open and close valves on that particular pipeline?
A. Yeah. We have two MOVs at our site, and we have a control valve.
Q. So, as far as monitoring that pipe, the only actions you can take are the two MOVs and the control valve; is that correct?

A. Yes. And we have -- yes.
Q. Okay. On the evening -- excuse me, on the morning of the accident, was this screen active on your desktop or were you monitoring other pipelines at the time?
A. It was active on my screen and I was monitoring pipelines at the same time.
Q. And did you get an alarm on this, for this pipeline, 219?
A. Yes.
Q. And can you describe that alarm, please?
A. I had a Viola incoming pressure alarm.
Q. Okay. And the alarm that came in, what color was that?
A. Yellow.
Q. Okay, so that was a low state. So, did that alarm -- if it went to critical, it would turn red. Did it go critical with you on this one?
A. Yes, it did.
Q. Okay. And what's the timing between the time it turns yellow to the time it turns red? I mean that evening. That morning, excuse me.
A. Three minutes.
Q. Three minutes, okay. And then when you saw the yellow alarm, you know, the low state come up, and then it went critical, did you make the move on the commodity at that time for the, you know, for the valve actions? When the red critical hit, were you making a move at that time or were you involved with other items on

trying to find what happened?
A. The pipeline was down at the time because -- the pipeline was down. And when I got the critical alarm, that's when I started to sense that something was going on, so I dispatched my local tech to check out the situation.
Q. Okay. And when you -- I guess you contacted the tech; is that correct?
A. Yes.
Q. Okay. And can you describe that discussion for us?
A. I gave him a phone call and I let him know that I got this alarm and something didn't seem right. So, I dispatched him to go check it out.
Q. And what was his response?
A. He was going to be heading that way.
Q. And what were his actions?
A. His actions? He drove over there. And when he got there, we closed two manual -- two remote valves and some manual valves at the Viola site.
Q. Okay. Can we go back a little bit? When we talk about the -- I'm sure you have a timestamp for this, but just to reiterate, the yellow alarm came in at what time?
A. It came at 8:02.
Q. Okay. And something I didn't ask you, I know the pipeline is coming from a refinery, is there any communication between you and the refinery at all? Or your control takes place after a, I guess

some sort of a battery limit valve or something that says that this is your pipeline now. So you had no communication with the refinery; is that right?

A. Repeat that question again?

Q. Do you have any communication with the refining people, with the Flint Hills people?

A. Yes, we have communication.

Q. Is that on a routine basis that you are talking with them?

A. Yeah. Whenever they're ready to start doing a batch, we talk to them.

Q. Okay. And that batch that they're doing is supplying propane to a storage tank; is that correct?

A. Yes, sir.

Q. And once that tank is charged, then they turn it over to you, and then you dispense the product to a truck-loading area, correct? Is that pretty much it in a nutshell?

A. Yes.

Q. Okay. And when you're not transferring product, what type of pressure do you keep on the line?

A. It's average, maybe 200 pounds.

Q. Okay. And at the time of the accident, when the pipe failed, was there a pumping operation going on, or was there not?

A. No, the line was down.

Q. Line was down, okay. Okay, thank you. Okay, so we have the low state alarm at 8:02. And the red alarm was -- what was the

time for that?
A. 8:05.
Q. 8:05, okay. And the call you made to your technicians out there, what time was that?
A. I called George Ford at 8:09 a.m.
Q. Okay. Okay, thank you. So, after George Ford made those moves on those valves, what happened next?
A. On those valves? Well, I talked with -- between 8:15 and 8:30, I had Mike Goldsmith close valves at origin station.
Q. And origin station, that's near the truck-loading area, correct?
A. Yes, sir.
Q. Okay. So, the valves that Mr. Ford closed were on -- let me get my diagram here. They were up near Cantwell; is that correct?
A. No, that's Viola station.
Q. Oh, Viola, okay. So, Mr. Ford did Viola, and then the other valves with the 8:30 call, they were done at the origin area?
A. Correct.
Q. Okay. So, after those valves were closed, what happened next?
A. Mike Goldsmith went to Cantwell at 9:05 and closed those valves.
Q. Okay. Okay, thank you. Now, according to what occurred that evening and for what your script is for a breach, did it go per the instructions or was it not per instructions? Or do you have a

checklist for a breach on this pipeline?
A. Repeat that question, sir?
Q. Well, let me ask you this first: Do you have a checklist for a breach on this pipeline?
A. A checklist?
Q. Yeah, if you have a failure on the pipeline and you start losing product, do you have some sort of a checklist that basically tells you what's supposed to be done and in what sequence?
A. No. We have an EPC-143 form that we fill out.
Q. But that's the form that's after the fact, though, right?
A. It's the form that we start filling out when we are detecting we're having an incident, situation.
Q. No, I guess what I'm asking is, before a failure occurs, you know, do you have something at your side that talks about the failure on all your pipelines, you know, what you're supposed to do if you have a failure on pipeline 1 or pipeline 5 or pipeline 8, whatever pipeline you're working on? Do you have some sort of a cheat sheet that says, okay, I've got a pipeline problem with pipe number 7 and I need to -- you know, I've got these alarms, I need to do this? Do you have any sort of a document that talks about that, or do you go by the alarm situations themselves?
A. Yeah, we go -- so, are you asking do we have, like, different procedures for a breach on different pipelines?
Q. Yes, that's what I'm wondering.

A. No.
Q. Okay.
A. We have procedures for --
MR. EVANS: Okay. I think that's all I have for right now. I'm sure I'm going to have more questions later. But I appreciate your answers here. Thank you very much.
MR. STANCIL: Okay, thank you, Roger.
Let's move next to Mr. Wisniewski.
BY MR. WISNIEWSKI:
Q. This is Luke Wisniewski. Just a few follow-up ones based on what you talked about. So, you indicated you logged into this SCADA system. What's the name of that system?
A. Texas NGL.
Q. And you have a unique username and password?
A. Correct.
Q. Okay. And in that system does it log all of these different alarms that you get?
A. Yes.
Q. And does it -- and just to clarify, like you indicated the red, the magenta, the yellow. So, does it have a timestamp when the alarm comes in, and then also when you acknowledge it?
A. Correct.
Q. And then is there another alarm that goes, or at least -- if you provide a corrective action, is it also recorded to show when a corrective action or that condition has either been satisfied or

mitigated?
A. Yes.
Q. And does it let you know when those states change back to a normal condition?
A. Yes.
Q. Does it prompt you with an alarm or an audible, or is it just --
A. It'll say normal state.
Q. Okay. So up on your screen it just shows normal state?
A. Yes.
Q. And is that recorded in the log?
A. Yes.
Q. Okay. And so, from all these timestamps that go in there, as the operator there, do you have to synch anything up? How do you verify that that timestamp is synched up with, let's say, GMT, Greenwich Mean Time, the real time?
A. It has the timestamp on the alarm, when the alarm comes in.
Q. But do you have to do anything as an operator to verify that time is correct?
A. No.
Q. Okay. And if you don't know, maybe I'm not asking or phrasing it right, but what I was just trying to figure out is how is that synchronized up with GMT time. You know, is there anytime where you've seen it as an operator where it's gone out of whack, let's say 6 seconds, a minute?

A. No, I haven't seen that.
Q. Okay. All right, fair enough. And you indicated there were some procedures and I'm not sure if we got that. But I wanted to understand why you closed the valves in the order that you did, or how you made that -- so, I want to understand a little bit more of the why that you went through first with the Viola, and then your discussions with them. Can you go through that reason, rationale with us?
A. Well, the line was down and the control valve at the site at Viola was closed, so that's why I went through that over at Viola first, and then I talked to George and waited until he got there; then I called Goldsmith so that he could close the meter at origin. And (indiscernible) had the valves closed at, all the remote valves closed at Viola. And Mike Goldsmith went to Cantwell and closed the manual valve there.
Q. And I don't want to answer for you, but I just want to have you elaborate more. And I think you know this answer, but I want you to talk to us about it because, right, Viola, the plant is the source, you cut it off at the plant first; then you go down the line and cut off any where it could be back fed from your tanks. But can you walk me through that, or put it in your own words? Is that how you're trained to do that?
A. Repeat that one more time?
Q. So, from a generalized standpoint, I'm trying to determine, like, on-the-job training. How were you told, first, to do Viola?

Is that because you know that's where the source is or where it will be supplied from, the greatest volume that's going to flow through versus -- if you have, let's say, a check valve hung up at origin station and it's coming back through the line, that would be a smaller valve to close? Or how do you -- I'm just trying to figure out the priority.

A. Yes, Viola was the priority. Since the, by the control valve being closed there, that was the priority; then closing, making sure we close the valves at origin station.

Q. And when you close the origin station valves and the meter, does it flow backwards if there was an issue there? How do you determine if there's a backflow at origin station?

A. Determine the backflow? If we're seeing flow on the meter?

Q. Correct. Would it show you reverse flow? Is it set up to handle that?

A. I don't know offhand here.

Q. Okay, because what I'm trying to understand is if the meter, if it could sense that you still had a flow. I believe we're going to get drawings on it. And I haven't looked on this, but yesterday we heard that there was a check valve there. But I wanted to know from you if there's a way for you that's monitoring the system can see if there is a check valve that's hanging up that's allowing flow back out into Texas Pipeline 219.

A. Yeah, well, I have the meter that I can see flow on.

Q. And so the meter, would it show reverse flow?

A. We have a check valve there, it shouldn't. So, are you asking if the meter is capable of reverse flow? That's what you're asking me?
Q. Correct. Of monitoring and showing you as the operator if reverse flow is going on, that a check valve is hung open, hung up.
A. Yeah, I don't know right offhand.
Q. And that's good. Yeah, I don't want you to speculate. If you don't know, that's fine. I think that's all I have. I think I covered the questions about the different times when they came in. You indicated 8:02 and 8:05, and then -- but you're reading that from the log that's in the system?
A. Correct.
Q. Or is that from your EPC-143 form?
A. It's from my -- from both forms.
Q. Okay. So, talk to me a little bit more about this EPC-143 form. Is that like a rough log? Is that something that you fill out through the incident report?
A. Yes, correct.
Q. Okay. So it will have, basically, your rough work of what actions you took, who you called, and then show kind of like a checklist or follow up to close things out? Can you talk to us about it?
A. Say that again?
Q. Can you talk us through a little bit more what's on this

form? This is the first we've heard of this form, so I want to understand a little bit more what's on there.

A. It's just an emergency log questionnaire of things that happened on the accident and all the notes that I made far as logging my notes in the comments section.

Q. And does anyone come in with you at this time and put any of their notes in there, as well, or is this your own note taking?

A. This is my own note -- this is my note taking here.

Q. And if someone else gets involved, will they fill out another form? Let's say a supervisor or if you had someone else from your station, from your control station interact, would they be filling out their own form?

A. Supervision can -- they have a whole bunch of -- they have things on here that they need to fill out attached to this form.

Q. Can you discuss a little bit more what's attached to it? And just high level. We'll ask for copies if we haven't already received that. And we might have already received it.

MR. WISNIEWSKI: And please stop me, Nhan, if we already have this document.

MR. TRUONG: You have it.

MR. WISNIEWSKI: All right.

MR. TRUONG: Anything that has a Bates label already, except for the two SCADA, it's been submitted before.

MR. WISNIEWSKI: Sounds good. Thank you.

MR. TRUONG: Yes, sir.

MR. WISNIEWSKI: I think that's all the questions I have, then. Thank you.

And I pass the floor over to my colleagues.

MR. TRUONG: Hey, Luke, just one more clarification.

MR. WISNIEWSKI: Yes.

MR. TRUONG: You also have the procedure for the control room response in an emergency.

MR. WISNIEWSKI: I'm sorry, say that one more time?

MR. TRUONG: The procedure that the controller uses to respond to emergencies you also have. That's what Roger was asking earlier.

MR. WISNIEWSKI: Okay, thank you.

MR. STANCIL: Thank you, Luke.

Let's go now to Drew Ehlers.

MR. EHLERS: Good morning. I have no further questions at this time.

MR. STANCIL: Okay, Drew.

Let's go to PHMSA. Alvaro?

MR. RODRIGUEZ: Thank you, Paul.

BY MR. RODRIGUEZ:

Q. Good morning, Mr. Youmans.

A. Good morning.

Q. What are the ranges for pressure in this pipeline? What is the threshold?

A. The threshold meaning you want the --

Q. So, what are the low pressures that it can go before it goes to an alarm (indiscernible) some high-high and low-low. So, do you have those numbers with you?
A. I don't have the low-low and the high-highs. When I get any lows, they will alarm at Viola at 156 pounds.
Q. Okay, I see. So, I'm looking at the SCADA that Enterprise provided, and that is an Excel spreadsheet, ENT-NTSB-PR-00836, and I can see the alarm at 8:02. I see the acknowledgment of the alarm; however, when the command to close the valve was sent, I see 8:41. I don't know if I'm missing some times. So, what time did you send the command to close the valve, and how long it took?
A. Okay, the MOV, at 8:41 MOV 20 was closed, but at 8:05 the control valve automatically shut in.
Q. And what is the difference between the 8:05 time and the 8:41 time?
A. The 8:05 time is, that is when the control valve went closed, the pressure controlled valves went closed.
Q. Oh, okay. I see. I didn't see it in the form, that's why I was asking. And you know, let me think if I have some other questions.
MR. RODRIGUEZ: That's everything that I have for now. Thank you.
MR. STANCIL: Okay, thank you, Alvaro.
Next, let's go to Texas Railroad Commission. Mr. Perez?
BY MR. PEREZ:

Q. Good morning, sir. How are you doing today?
A. Good morning.
Q. Some of my questions may be redundant. I'm going to try to word things a little bit differently. I may ask you some questions you've already answered. I know Nhan volunteered some information a minute ago, but I need some clarity on that. I want to start with your response. When you saw the initial alarm on the 219 line, what was your reaction in your training that you receive from Enterprise? I really would like a simplified answer. When you received the alarm, can you walk me through how you reacted and what tools and resources that you utilized to make your decisions up until you isolated the main line valves?
A. Well, I got the low pressure alarm and I got the incoming pressure low-low state alarm. And once I got that, I called, dispatched my pipeline tech out to go out there and check to see if he -- what was going on, if anything was wrong at Viola.
Q. Okay. And did you use your experience to make that decision or did you acquire a procedure and start going through your procedures?
A. I used my experience.
Q. Okay. What was your next decision that you made after you dispatched the operator?
A. My next decision is letting my supervision know and my manager know what was going on. And I called the origin station operator to go ahead and block in the meter at that site.

Q. All right. And you were using your experience or a procedure when you made that decision?
A. Using experience and procedure.
Q. What procedures that you were using?
A. Just our emergency response procedure that I've been trained to do.
Q. Okay. And what was the next step that your procedure told you to do after you notified the supervisor?
A. My next step was to have Mike Goldsmith go block in at Cantwell station.
Q. Okay. Do you happen to have that procedure in front of you that you're referencing?
A. No, I don't.
Q. Okay. We're probably going to need a copy and the name of that procedure that you specifically used that morning. I would appreciate that. You had mentioned a control valve closed at 8:05; is that correct?
A. Yes.
Q. And you said the line was not flowing at that time and you were not delivering from Flint Hills. Does that control valve typically stay in the open position when you're not making deliveries?
A. No, that control valve is closed.
Q. Is it closed all the time or did it close at 8:05? I'm trying to understand that.

A. It is closed because we were not flowing.
Q. Okay.
A. We weren't flowing at the time.
Q. This is probably a question you may or may not know the answer to, but do you typically use a control valve to isolate a line?
A. Typically?
Q. And if you don't know the answer, that's fine.
A. Yeah. We use MOVs and manual-operated valves.
Q. And you mentioned that Flint Hills was the supplier. Do you have control access to that MOV, or do you have to notify Flint Hills to control that valve?
A. The MOV is our asset.
Q. Okay. And so, you sent the logic (ph.) to MOV 20 at what time?
A. It was at 8:41.
Q. And is that the only MOV on that line, or do you have one downstream as well?
A. We have MOV 25.
Q. From your memory, MOV 20 is going to be the Viola MOV on the main line valve, and MOV 25 is located where, sir?
A. MOV 25 is located, is going to be on the 16-inch lateral.
Q. And who's that lateral connected to?
A. That lateral goes over to Cantwell, then over to -- yeah, it goes over to Cantwell.

MR. PEREZ: I think that's the only questions I have for you. Thank you for your time, sir.

MR. STANCIL: Okay, thank you, Mr. Perez.

Let's go next to the U.S. Coast Guard.

BY LCDR [redacted]:

Q. Hey there, this is [redacted] with the Coast Guard. I'm going to apologize in advance. I know nothing about pipelines, so I may have you kind of walk me through stuff, baby steps, if you don't mind. The first question I have is -- you said at one point the pipeline was down at the time. Does that just mean that it wasn't actively flowing, or what does a pipeline being down mean?

A. That means they were finished their batch, pumping their pipeline's propane batch. Because this is a batch line.

Q. And I'm sorry, what is a batch line?

A. It means they, whenever they're finishing a batch, the line is down until they're ready to start pumping us their next batch.

Q. Okay. So, the flow is kind of like they send you a certain number of barrels or gallons or whatever, that comes through, they shut that off as a batch, so the pipeline is down?

A. Yes.

Q. So, what is left? Is there some left in the pipeline then? Is that what was in the pipeline at the time, stuff that was left from the first batch that hadn't flowed through?

A. Yes.

Q. Okay. So, if the batch was finished, was the pipeline

secured at both ends, or was it secured at someplace to -- since there wasn't anything actively flowing through it? Like, where does it get shut off once a batch comes through? Does Flint Hills shut off?

A. Yeah, Flint Hills shut down their process.

Q. Okay. Do Enterprise's -- do, like, the MOVs that you've mentioned, do those remain open --

A. Yes.

Q. -- when the pipeline is shut down?

A. Yes.

Q. Okay. Okay. I think I'm tracking with you. I apologize. So, the only thing that was left in the pipeline was kind of residuals from the batch that had been completed?

A. Correct.

Q. Does that change your stance as far as what your monitoring? Like, I'm familiar with, like, air traffic control stuff. They have different targets and different ones are in different critical phases. So, you know, a pipeline that's down, would it be, like, three screens back and you're not as worried about it, or do you monitor them all simultaneously regardless?

A. I'm simultaneously monitoring my pipelines even though a pipe is down, when it's down.

Q. Okay. Okay. Thank you for clarifying. I don't know much about this. So, you said, at the time, it had -- 200 psi was on the line?

A. Yeah, that was -- bear with me.
Q. Sure.
(Pause.)
A. Yeah, it was -- at what point are you asking about the pressure on the line?
Q. Like, when the breach occurred.
A. It was 257 psi.
Q. Okay. Is that a normal pressure for a down pipeline?
A. Yes.
Q. Okay. And what time --
A. For this pipeline.
Q. For this pipeline. Understood. What time had the batch finished? Like, how long had the pipeline been down?
A. It's around 8:02.
Q. 8:02 is when the last batch had gone through?
A. Yes, around 8:02, yes, 8:02 a.m.
Q. Okay. So, they had just finished the pipeline, the batch coming through?
A. Correct.
Q. Okay. Okay. So, kind of backing up a little bit, when you get in, in the morning, do you review previous SCADA logs for each pipeline?
A. When we get in, in the morning, we review our logger from the previous shift. And when I login, I just, you know, go through simultaneously, looking at all my screens and just checking out

things. And we have an alarm page.
Q. Okay. How many alarms would you expect to see on a pipeline, like when you login in the morning? Is it normal to see none and one would make you nervous, or do you see 50?
A. It all depends on what we have going on far as alarming.
Q. Okay. On this pipeline, did you notice anything when you looked through the logs that looked strange?
A. Previous, before the accident, or after the accident?
Q. Yeah, previous to, like when you showed up in the morning and you looked through the logs, the previous alarms.
A. No, I didn't see anything out the ordinary.
Q. Okay. Were there any alarms earlier in the day during your shift, on that pipeline?
A. I got the alarm when I had -- at Viola when I got a low pressure alarm.
Q. Okay. Was that before -- it looks like maybe there was an alarm around 7 a.m. on the pipeline, if I'm reading this correctly.
MR. TRUONG: [redacted], can you explain what document you're looking at?
LCDR [redacted]: Oh geez. PR-000836. It looks like the alarm log for the pipeline.
MR. YOUMANS: Oh, at 7 o'clock?
BY LCDR [redacted]:
Q. Yes.

A. That's when the tickets go in for keeping track of the volume for that day. That's for ticket, ticket purposes.
Q. Ticket purposes. Sorry, can you explain that to me, as well?
A. That's for volume. Keeping up the daily volume from the previous day at 7 o'clock.
Q. Okay. Okay. So, what about the ones that were, like, earlier, around like 4:30 a.m.?
A. That's when they started up.
Q. Okay. That's when they started the batch going through?
A. Yes.
Q. Okay. And then at 7, that's just an alarm to do -- like a reminder sort of, like a calendar reminder, take a pressure reading?
A. For the tickets?
Q. Yes.
A. No, that's for -- at 7 o'clock, that's for the daily volume for the previous day. For metering purposes, they keep track of the daily volume.
Q. So, does that alarm mean the daily volume was low?
A. No, that's just something that comes in for keeping up with the volume. It doesn't mean that the volume was low.
Q. Okay. So, it's not related to an emergency, it's just a routine tasker?
A. Yes.
Q. Okay. Thank you. Okay. And then, so, for the -- like, when

you -- it seems like there are quite a few alarms on here. So I assume that, you know, they correspond to various things, like you were saying with starting flow and stopping flow and stuff that would change the volume in there. But when you see a yellow alarm pop up, is your first instinct that it's an emergency or is your first instinct that, you know, it's just an anomaly that needs to be looked at more closely?

A. Yeah, that's something that I need to keep an eye on. It doesn't mean that there is an emergency, because there could be something -- a meter issue of some sort. So, it's something that we definitely -- I definitely keep an eye on.

Q. Are there any specific actions that you take when you just get a yellow alarm?

A. Yeah, I monitor it, and if I feel like there's something wrong, I can get my pipeline tech to go out there and check it out.

Q. Okay. How often do you get, like, false readings or false alarms? Is it a common occurrence or --

A. False alarms meaning emergency false alarms or --

Q. Yeah, you get, like, a yellow alarm or a red alarm and a sensor is bad or something like that.

A. I don't know how often. It just all depends on if we're having any issues with metering and equipment and things like that.

Q. Okay. When you see a red alarm, what's your first instinct?

Is your first instinct this is a really big emergency or this is just kind of something I need to take a look at?
A. This is definitely I need to take a look -- I definitely need to take a look at, and I'm going to send someone to go check it out.
Q. Would you ever get a red alarm that wasn't something as significant as a breach?
A. Yes. We have PLMs that come in if a customer shuts down. When a customer shuts down and the pipeline is, you know, trying to get back to a static state, we can get a PLM alarm, pipeline monitor alarm, which doesn't always indicate there's a leak on the pipeline.
Q. Okay. So, a red alert could just be that, for whatever reason, your supplier has shut down the line and they, presumably, wouldn't have told you they're planning to do that?
A. Say that again?
Q. If you got a -- if a supplier shut down the pipeline, would they tell you in advance that they're going to shut down the pipeline so you know to expect a red alarm?
A. Correct.
Q. Okay. Do you ever see red alarms that are unexpected that aren't like something as significant as a breach?
A. Yes, this incident here.
Q. Okay. So, but, for this incident there was a breach in the pipeline. I just, I guess I'm just trying to gauge --

A. At the time, I didn't know there was a breach on the pipeline. That's why I immediately dispatched George Ford to go, my pipeline tech, dispatched to see what was going on.
Q. Okay. Understood. Thank you. So, just to clarify a couple of the timeline -- just to make sure that I kind of have it correct here, the initial yellow alarm was at 8:02?
A. Yes.
Q. And then you received an alarm at 8:05. That was the red alarm?
A. Yes.
Q. And then you made your initial call to George Floyd at 8:09?
A. Yes, correct.
Q. Okay. What actions did you take between 8:02 and 8:05, if any?
A. I was just investigating on my -- investigating the alarms and getting my plan of action to go ahead and get George Ford out there.
Q. Okay. And then what about between 8:05 and 8:09, what did you do?
A. Between 8:05 and 8:09?
Q. Yes, sir. Between the red alarm and the call to Mr. Ford.
A. Yeah, between 8:05 and 8:09, I had more phone calls coming in.
Q. Okay. Who did those phone calls come from, like other people who noticed the red alarm?

A. 8:05 to 8:09. No, I had a phone call -- yeah. No, from 8:05 to 8:09 -- could you repeat the timeline again? I'm sorry.
Q. No, sure. It's really not specific to the timeline. I'm just curious what you did between getting the red alert and calling Mr. Ford. Just, you know, if you remember what you did or what you were thinking about or that sort of thing.
A. Yeah, I started writing, I started logging in my logger my plan of action and what I was doing at the time.
Q. Okay. And then you activated the control valve, you closed the control valve at 8:05, as well, correct?
A. No, the control valve closed on its own. It's automatic, the control valve.
Q. So, the control valve closes automatically?
A. Correct.
Q. And what psi does that control valve close at?
A. Yeah, I don't know right off the specific pressure that it closes.
Q. Okay. Do you know if it's more -- I mean, I guess it's less than the 256 psi? It's presumably less than the pipeline was operating at?
A. Yes.
Q. Okay. Do you know what psi's trigger the yellow alarm?
A. It was 150 -- I got the alarm at 156 psi.
Q. Okay. That's when you go the alarm, but you're not sure what psi it closes at -- or sorry, it triggers the alarm?

A. That's correct.
Q. Okay. And what about the red alarm?
A. It was at 149 psi.
Q. Okay. And it looks like the red alarm and the control valve closed simultaneously. Is that how that would work?
(Pause.)
Q. If you're not sure, that's okay. I'm just kind of curious how the system works. And then do you have to manually close the MOV valves?
A. No, I remotely closed 20, MOV 20 and 25.
Q. Okay. And how do you close them? Is there, like, a button you push?
A. Yes. I use my mouse to click on the valve and send a command, close command.
Q. Okay. And what time did you close those?
A. I closed MOV 20, I issued a command, a close command at 8:41. The valve went to trouble at 8:41, and the valve was in a closed state at 8:42.
Q. Okay. So, it takes a minute for it to seat itself?
A. Yes, it has to go through a sequence. MOV 25 -- well, SDB 25, I issued a close command at 8:43, and it went closed at 8:45.
Q. And where are 20 and 25 -- 20's at Viola, correct? Oh, I see, 20's at Viola and 25's at the -- is the Cantwell.
A. No, they're both Viola.
Q. They're both Viola?

A. Correct.
Q. Okay. And how did you know to close those? Is that part of a procedure or did someone tell you to close those?
A. When George arrived at the site, we -- I remotely closed the valves when he was there.
Q. Okay. Is there a reason why you waited until he arrived and you didn't just close them?
A. Well, the control valve, yeah, the control valve was already closed, and where I isolated at origin and -- isolated in origin. So, I was trying to figure out what was going on at the time, so waited to close them when he got there.
Q. Okay. Okay. So, you'd already isolated at origin. Are 20 and 25 closer to the point of the breach or farther away than the pipeline that was closed? If that make sense.
A. Yes.
Q. They're closer to it? They're closer to where the breach occurred or they're farther away?
A. They're closer.
Q. Okay, they're closer. Okay. And then, sorry, going back to the timeline again, the previous alarm document I was talking about, what are the alarms that are, like, subsequent, the ones that happen at 8:41, 8:42, 8:45? Are those indicative of the valves being closed?
A. Repeat that question again?
Q. So, there's some more alarm indications that occurred at

8:41, 8:42, 8:43, 8:45. Are those timeline entries indicative of the valves being closed?

A. Correct.

Q. Okay. And then what about the last two on this sheet, the ones that are at 10:46?

A. 10:46. That's when he put the manual -- the remote valves in local.

Q. Remote valves. Sorry, can you explain what that means?

A. That means he put it into local state so that me, as controller, doesn't have any control over that valve. So I can't open and close the valve.

Q. Okay. Is that, like, a safeguard?

A. Yes.

LCDR [redacted]: Okay. Okay. I think that's all the questions that I have for right now. Thank you very much for putting up with my lack of knowledge, sir. Appreciate it.

MR. YOUMANS: Thank you.

MR. STANCIL: Okay, thank you very much.

Let's move on to Orion Group. Mr. Kenyon?

BY MR. KENYON:

Q. Hey, good morning. [redacted] has covered the majority of my questions, so this should be fairly short. So, a couple of things. You advised that you informed or you called George Ford at about 8:09 that morning?

A. Correct.

Q. Did George at any point call you back, saying that he'd seen the fire or any indication of a pipe blowout?
A. He indicated there was an issue in the area, but we didn't -- that's all I was informed.
Q. Okay. Do you know what time he called you back saying that?
A. No.
Q. Okay. As I said, you called George at 8:09, asking him to close the valves in at Viola, correct, and then you called -- sorry, go ahead.
A. Go ahead again, sir.
Q. You called George at about 8:09?
A. Correct.
Q. And then you called Mr. Goldsmith at about 8:30?
A. Correct.
Q. To close in the valves at origin and then Cantwell, correct?
A. Correct.
Q. Can you advise why there's about a 20-minute delay? Is that normal practice or policy?
A. Can you repeat the question again, sir?
Q. Yeah. So, you called George at 8:09 to close in the Viola valves, and you called Mr. Goldsmith at about 8:30 to close in the origin, and then to move on to the Cantwell valves. I'm basically wondering why there's a 20-minute discrepancy between those two calls. Is that normal practice? Has that been the policies and procedures you were working with?

(Pause.)
Q. I mean, if you don't know the answer, that's fine.
A. Yeah, well, when we get a phone call, we have to get the techs dispatched out to the location.
Q. Right. So, did you wait to call Mr. Goldsmith until you got a report back from George?
A. No, I didn't wait for a call back from George. I already had called -- I called Mike Goldsmith at 8:15, sir.
Q. Okay. All righty. I thought earlier on you said somewhere between 8:15 and 8:30. Okay. That's fine then. I just think I have one more question on top of that. Oh, two actually. Who do you directly report to?
A. Who I directly report to far as?
Q. So, who's your boss, basically?
A. Brad Wells.
Q. And what's Brad's title?
A. Liquids manager.
Q. And is he situated in the Houston office?
A. Correct.
Q. Okay. And one final question: You indicated that the low pressure alarm, which was obviously the yellow, went off at 8:02, correct?
A. Correct.
Q. You also indicated that the last batch finished at 8:02, it was pushed through the line. Is that just a coincidence?

A. Yes.
Q. Okay. And do you know what the normal flow rate, the barrel per hour is of the pipeline is during the batch transfer?
A. Between 4 and 430, 400 barrels an hour and 430 barrels an hour.
MR. KENYON: All right, I appreciate your time. Thank you.
MR. STANCIL: Okay, thank you, Mr. Kenyon.
And let's go to Enterprise Products.
MR. MORTON: Okay, this is Jeff. Can you hear me, Paul?
MR. STANCIL: Yes, loud and clear.
BY MR. MORTON:
Q. Okay. I've got some distance between me and the mic. If it sounds like I'm yelling at you, I'm just trying to make sure you can hear me. I did want to ask some follow-up questions that [redacted] had asked about procedures of shutting the pipeline down in an emergency response. So, Earl, is it correct that we do not have specific shutdown procedures on every pipeline segment but that we have protocols that we follow to shut the pipeline down depending on the alarms received?
A. Correct.
Q. Because depending on the specific situation, it may vary how we isolate the pipeline and where we target to send the technicians; is that correct?
A. Correct.
Q. We talked about the low pressure alarms that were received at

Viola. During your investigation of receiving these alarms, were there any other alarms received at the control center that would indicate a breach?

Let me rephrase that. Is the low pressure alarm the only alarm you received during our investigation of this pipeline?

A. No, I received the Viola incoming pressure low-low state alarm.

Q. But only the pressure alarm is what we received, no other alarms to indicate a breach?

A. Correct.

Q. And we talked about the yellow alarm and the red alarm. A red alarm, it would not be -- if I understand correctly, a red alarm does not automatically indicate that we start isolating the pipeline?

A. Correct.

Q. We investigate what is driving the alarm?

A. Correct.

Q. I think to clarify Graham's question, because there was a statement made between 8:15 and 8:30. You contacted Mike Goldsmith at 8:15, and I think it took about 15 minutes to actually get the manual valves closed at origin station. So that's the 8:15 to 8:30 timeframe?

A. Correct.

Q. Okay, I just wanted to make sure my notes are correct.

MR. MORTON: I think that's all the questions I have right

now, Paul.

MR. STANCIL: Okay, thank you, Mr. Morton.

I just have a couple more and then we'll do a round two if there's any clean-up questions that need to be asked.

BY MR. STANCIL:

Q. Mr. Youmans, did the control valve close in response to the alarm or was it because of the batch being completed?

A. Repeat the question, sir?

Q. When the control valve closed automatically, was that in response to the alarm, the low pressure alarm, or was it in response to the batch being completed?

A. It's closing due to the -- I don't know right offhand, sir.

Q. Okay. Would it typically close on its own in an alarm condition?

A. Would it close in alarm condition?

Q. Right. Do you have to initiate the closure or would the alarm automatically initiate a closure of the control valve?

A. No, it's an automatic control valve.

Q. So, does that mean that you have to -- you do not have to initiate it for it to close?

A. Correct.

Q. Okay. And just to clarify, I'm a little bit confused, which valves -- how many valves on the line are you able to control remotely?

A. Two.

Q. And they are?
A. MOV 20 and 25.
Q. So, are you not able to control the control valve?
A. Far as opening or closing it?
Q. Correct.
(Pause.)
Q. You said it was automatic, but can you override that? Can you close it yourself or does it only operate in an automatic mode?
A. Yes, only an automatic mode.
Q. Okay. All right. And just to clarify, do you have the authority on your own to initiate a shutdown of these other valves or do you need permission from your supervisors first?
A. Which other valves?
Q. Well, you mentioned MOV 20 and 25. Are those valves that, if you determine that it's necessary to close them based on what you're seeing on your screen, do you have the authority to initiate that on your own?
A. Correct.
MR. STANCIL: Okay. All right, I think that's all that I have. We've been going for more than hour and a half. Mr. Youmans, would you like to take a break or would you like to continue and go on through round two at this time?
MR. YOUMANS: Take a break.
MR. STANCIL: Okay, very good. Let's take a break for 10

minutes and be back at 11:50. All right, so I'm going to pause the recording and we will resume at 11:50.

(Off the record.)

(On the record.)

MR. STANCIL: Okay, the recording is resumed. This is a continuation of the interview of Mr. Youmans. We're going to go to a round two of questions, and we will begin with Mr. Evans.

BY MR. EVANS:

Q. Thank you again, Mr. Youmans. And I apologize for that earlier statement I made that this was going to be a rather short interview. It obviously is not. Just a few more questions, actually.

MR. EVANS: Paul, you're going to display that flow diagram for us on the screen, please, if you can?

Okay, hopefully -- has everyone seen this? Or have a lot of you seen it?

MR. RODRIGUEZ: Yes.

BY MR. EVANS:

Q. Okay. So, hopefully, we can kind of settle some maybe misunderstandings here with some of this. So, if we look at these three boxes, the Viola meter station is over on the west side and the Flint Hills refinery is over on the west side, the Cantwell is over on the east side, and origin is in the east, as well. So, what we have here is we have a line to align that incident location with the location along the pipeline, and then we have

some of these timestamps of things that went on.

So, I just want to go over a few things that kind of confused me with some of the questions that came about. The first item is, Mr. Youmans, you stated that the valve at 8:05 that closed was an asset of Enterprise; is that correct?

A. Correct.

Q. Okay. And that closed automatically. And would you think from a low pressure or from an end of process? I want to make sure I'm clear on that. End of batch.

A. Yeah, I don't know the answer to that, sir.

Q. Okay, okay, that's fine. So, if we were to add another box on this sketch, to the left we could add a box that had Flint Hills refining, and we would have a propane line that goes into a tank, and then from the tank it goes to this meter. So, when Flint Hills shuts down their process for a batch, do you get indication on your board that says that that batch has been ceased?

A. Yes, there's no flow on the meter.

Q. Okay, so that's -- the only way you would know that is if you have no flow?

A. Yes.

Q. When that control valve closes, you don't get any sort of indication on that, on your SCADA system?

A. No.

Q. Okay. So, when they stop a batch, and we have the control

valve here at 8:05 closing, theoretically -- that control valve is over at the meter station, correct?

A. Correct.

Q. Okay. So, theoretically, we have stopped the flow and all we have in the pipeline is the residual product that has not been pumped out via the truck-loading station, which is down at origin station, correct?

A. Repeat that one more time?

Q. With that control valve closed at 8:05, theoretically, the only thing we have in the line is the product that's left in the product line that's going down to the truck-loading station, back to the control valves?

A. Yes, going to origin, that's correct.

Q. Yeah, okay. So, with that in mind, and this being -- and line 219 being 5 miles long, the steps you took -- I don't want to put words in your mouth, but what I understood from the previous answers is that you did not have a procedure for this particular pipeline for a breach; that is correct?

A. Correct.

Q. Okay. And the decisions you made on the day of the accident were decisions you made based on your own experience and opinion?

A. Correct.

Q. Okay. And then at your terminal that morning, was Mr. Brad Mills [sic], your supervisor, was he consulted before you made these decisions, or did you talk to him about it? Or were there

any other controllers that you, you know, walked over and said, hey, I've got this issue on this line and I'm thinking about doing this, or was this purely your own mindset that, you know, was the reason you made these movements?

A. Yes, it was me.

Q. Okay, just you. Okay. I just wanted to make that clear. And just to clear the air about other things, in your previous time on this, operating this line, had you ever had alarms that were the type of alarms where you had to actually call the techs in and say, hey, go check this out? Or is it one of these types of systems that is low maintenance in that regard?

A. Can you explain -- repeat it? Far as?

Q. No, I'm just trying to figure out if you have a history of issues on this pipeline where you've had to close MOV 20 and 25, where you actually have to go and tell the operators to go hit these valves. In your 4 years and 4 months -- from my best guess, because you said 5 years, and 8 months of training -- of operating this line, have you had many of those issues in the past?

A. Issues far as just --

Q. Movements. Movements that you had to make from alarms on the screen, on your SCADA system.

A. Current alarms or just alarms in the past?

Q. In the past. In the past.

A. I'm trying to recall here. Are we talking about the alarms, current alarms that I have far as these set of alarms that I'm

showing right now?
Q. No, let me rephrase it. Let's just say that for this pipeline in your SCADA system, in your past years of operating this system have you had to make these emergency type moves where you have technicians and you say, okay, I want you to do this, I want you to do that; I'm going to close these two motor operated valves? Has this happened before?
A. Not to my -- it hasn't happened on me personally.
Q. Okay.
A. But, yeah, I guess I'm just trying to understand the question a little bit more in detail.
Q. Yeah, what I'm trying to figure out is if you made these movements on this particular line because you had done it before and this was your -- in your own mind, this was what your standard operating mode would be for a situation like this. That's what I'm trying to understand. If it happened the first time in your career the morning of the accident or had this happened before and you had this experience and this is why you made movements.
A. Yeah, this was the -- this was my first time.
Q. Okay. Okay, great. Thank you for that. So, I want to give you a hypothetical and just get your opinion of something. You know, we have a breached pipeline and we have a fire. And you knew about the fire eventually, correct?
A. Correct.
Q. Okay. And once the fire occurred, was that part of your

discussions with Mr. Mills, or did you talk to Mr. Mills, your supervisor, about the fire on this line? Was that discussed on the morning of the accident?

A. Mr. Wells?

Q. Yeah, Mr. Brad Wells, I guess you said. Wells?

A. Yeah, Brad Wells.

Q. So that was discussed? On the morning of the accident, were you actually in discussions with Brad Wells when you found out there was a breach?

A. Correct.

Q. Okay. And did Mr. Wells have any input into what to do or how to guide you or to recommend anything with regard to your actions?

A. Yeah, I don't understand that question. Far as are you asking for like, did he give me input?

Q. Yeah, guidance on, hey, I think you should close MOV 20 and 25 and you should call your pipe techs. Did you get any guidance from him regarding that or was that all yourself?

A. That was me.

Q. Okay. And then once Mr. Wells knew of the actions you took, did Mr. Wells make any comments to your actions?

A. Comments far as?

Q. Like why did you do that, or I'm glad you did that, or those types of things. Or no comments at all. I don't know what may have transpired.

A. Yeah, I was in -- yeah, I don't recall any comments.
Q. Okay. Yeah, I'm just trying to get that clear for the record. Okay, thank you. So, now, here's my hypothetical on this: Let's just say that we know that the line is isolated at Fern Hills refinery, correct? Because they stopped the batch.
A. Correct.
Q. Okay. So, we know there's no flow in the line. So, all we have is a line that is charged with pressure on it and we have a breach. And we know that the breach is on fire and it's spewing material. And based on that, what was your logic? Did you see this as being -- the MOVs that you acted on and the valves that you had closed, were you looking at cutting down the amount of product that would actually make it to the fire so you could save product, or what was your motivation there?
A. Yeah, can you repeat that one more time, sir?
Q. You know, we have a pipeline that's charged, right? And you are actually making movements on valves that are at origin station. You made moves at Cantwell and the MOVs in Viola. These moves that you made, the logic that you used to -- why you closed these valves, was it to reduce the amount of product that was going to go and burn? Was that your logic?
A. Yeah, we're isolating valves to prevent any more product from getting to the pipeline.
Q. But the amount of product at the end portion of this pipeline, was it -- it's not miles, right?

Is it feet or -- well, I guess what I'm getting at, could you have done nothing that day and would there have been that much of a difference in the outcome? That's what my question is.

A. That's correct.

Q. So, had you opened the valves -- I mean, had you left the valves where they were or you had closed the valves, you think the outcome would have been the same?

A. Closed which valves, all the valves or --

Q. Yeah, all the valves that were closed. I'm just trying to figure out the logic that you used to take these actions if you don't have a set of instructions or an emergency procedure in your hand. The line's already isolated. I mean, the trucks are at a point where they -- that's an automatic system. I'm sure there was something going on with the loading operation. Was that isolated at that time, as well?

A. Well, yeah, at 8:03, meter 345 registered no flow, and at 8:15 to 8:30, the valves was manually closed at meter 345 at origin station.

Q. Okay. So, that valve closure was specifically for the truck loading; is that correct?

A. Yeah, I was just isolating the pipeline.

Q. Okay. Okay. Okay, I just wanted to kind of clarify that. I was kind of confused with the actions and the motivation for the actions, so I thank you for your input there.

MR. EVANS: Okay, I think that's all I have for right now.

Thank you.

MR. STANCIL: Okay, thank you.

Mr. Wisniewski?

BY MR. WISNIEWSKI:

Q. Yes, Luke Wisniewski, NTSB. Just trying to understand. And I don't think we've answered this, but who makes the determination that a batch is done? Is that you?

A. No, when the customer is finished pumping their tank out, that's going to be it. So, whatever they send to us, that's their batch.

Q. And so, take me through that, how that works. And let's get a little bit more particular. That morning, the one we're talking about that you said, you know, the line is done because the batch was finished. Is this batch called batch number 75?

A. Well, they call them a set of tanks. And whatever volume is it that's in those set of tanks they pump to us. And once their tanks are -- once the tanks are finished or empty, that's going to be the total volume they're going to give us.

Q. So, to clarify a little bit more, so batch -- are you familiar with batch 75? Is that what was going to origin?

A. Batch 75?

Q. Yeah, I have a -- I'll share my screen. It's Enterprise Number ENT-NTSB-PR-001442, and it talks about the batch information So, I just want to make sure we're all talking the same information here. And you may have this in front of you, you

know, if it's hard to see. It's an Excel file that was provided to us.

MR. TRUONG: I didn't print this one out.

BY MR. WISNIEWSKI:

Q. And it just shows us a batch 75. So, I want to make sure we're all talking the same -- can you see that information in front of you?

A. Yes, I can see it.

Q. So, these timestamps, I assume this is coming from the SCADA system, they logs? What we've received from Enterprise was like an Excel file, but is that the format? Because it just shows timestamp, flow rate, meter pressure, pipeline pressure, accumulator.

A. Yes, that's correct.

Q. Is that what you see as a SCADA operator?

A. Timestamps, flow rates, pressures and product, yes, sir.

Q. And this meter pressure, what -- for this batch 75, because this is what you've talked to us about. You said it started around 4 in the morning and it went all the way to about -- you said 8:02 is when it stopped?

A. Correct.

Q. So, this is the flow rate through the pipe. And where's this meter pressure that's listed here in column C?

A. That's going to be meter 1004.

Q. Okay. So that's leaving Flint Hills and that's your meter?

A. Yes, in Viola.
Q. At Viola, and that's 10004 meter?
A. Correct.
Q. This pipeline pressure here, where is that taken? Is that right by the meter?
A. Yes. That's going to be by meter -- it's going to be by SDB 25.
Q. Is the pipeline pressure?
A. Yes, that's going to be pipeline pressure.
Q. And the meter pressure is right by the meter?
A. By the meter, correct.
Q. Okay. And so, looking at the numbers, you know, it's looking like 460, and it's going through the pipeline at 260, 265, all throughout the time. Do you remember if there was any type of spikes or anything you received on your --
A. No, sir.
Q. For this batch now, I know you started at 5:55, so was there any turnover or any spikes, look out for spikes on this transfer?
A. No.
Q. Okay. And I'll just continue to scroll down here and go toward the end of the timeframe. And I highlighted here, but it wasn't highlighted when we received it, but I just want to bring these to your attention. You said you closed it or you stopped the batch at 8:02?
A. Correct.

Q. And the flow rate and the meter pressure. So, you still have flow rate of 420 at 8:02, and it looks like there's still a flow rate that continues all the way until about 8:06, according to these numbers here. Can you see that there?
A. Yes, I see it.
Q. Was there any discussion or anything that was brought up; hey, I'm still seeing flow rate on this, I shut it down? Or, you know, it was automatically shut down at this time that you indicated. And I assume that it's shut down when it dropped below the 150 as indicated. And I guess it was somewhere around here. And that timeframe would be about, you indicated, 8:03, or 8:02?
(Pause.)
Q. Can you see that information? I'm sorry, did I drop off?
A. Yeah, what is the question, sir?
Q. So, I'm trying to understand. You indicated that flow was stopped at 8:02, but there's still flow rate going well into 8:06 from this meter. Can you explain why there would still be flow rate?
A. Oh, that's the process of them shutting down.
Q. But I thought you said you stopped it, that it was shut in, or you got the alarm and it shut in at 8:03.
(Pause.)
A. Yeah, so the question is, you're asking about why we're still showing flow on that meter?
Q. Correct. Yeah, I would like you to -- for me to understand.

You indicated earlier 8:02, the last batch, that's when it was complete, at 8:02 a.m.

A. Yes, 8:02 is my incoming alarm. That's when they're shutting down.

Q. I'm sorry, so -- but the pressure here is showing -- I'm trying to -- that's why I was going back through these timestamps, because it shows at 8:02 you still have 257 pounds in the line and you still have pressure of 441, yeah, after -- meter pressure, and then you still have a flow rate of 420. What is this number? What units are we in here, 420 what?

A. Barrels per hour.

Q. So, could this be off? I mean, can you help me figure out --

A. Yeah, I don't know about those numbers there.

Q. Okay. Yeah, we have to -- I'll go back to Enterprise and have them -- because we're going to have to request the SCADA logs to show the timestamps because, like I said, we were given these Excel files. But something's off and I just want to make sure we identify it. Because the same thing on this one here; it's identified as batch 75 and the same thing. It talks about the batch volume, but it also has an end time of 8:06 a.m. on the 21st of August. Is this something you put together, this batch information?

A. No.

Q. Do you know where this comes from?

MR. TRUONG: That does come from our SCADA system. The

timestamp did come -- this is an output from our SCADA system. We'll have to get you an explanation on the reasoning on the flow rate. But I guess one point to make is the pipeline doesn't instantly shut down.

MR. WISNIEWSKI: Yeah, I understand that, but if this was available to the operator, I want to understand if he's still seeing the flow rate at 8:03, 8:06.

BY MR. WISNIEWSKI:

Q. So, were you seeing flow rate after, as indicated here, on your screen at the time? And I know you were getting bombarded with calls, so I'm just trying to figure out if you saw this.

(Pause.)

A. Yeah, I don't recall seeing any flow rate.

MR. WISNIEWSKI: Okay. All right. That's all the questions I have. Thank you.

MR. STANCIL: Thank you, Mr. Wisniewski. If you wouldn't mind taking down -- there you go.

Okay, let's go to Mr. Ehlers.

MR. EHLERS: I have no further questions at this time.

MR. STANCIL: Okay, PHMSA.

MR. RODRIGUEZ: Thank you. I don't have any questions. Thank you.

MR. STANCIL: Railroad Commission of Texas?

BY MR. PEREZ:

Q. Yes, sir, I have a few follow-up questions based on Luke's

questioning, and then going back to some of mine and Jeff Morton's comments. Let's start with going back to my follow up. My follow-up questions would be you used your training, knowledge and experience to make decisions on closing the valves, right? You were investigating?

A. Correct.

Q. How many procedures did you use that morning after you were investigating, or during your investigation of the loss of pipeline pressure?

(Pause.)

A. I don't recall how many procedures I had.

Q. Okay, do you know when you guys -- when you as a control center operator went into emergency mode, do you remember that?

A. You mean emergency mode far as when I'm getting alarms or when I dispatch?

Q. Well, Jeff mentioned you use emergency procedures, but at the beginning you were investigating, right? So, what procedure did you use to investigate this loss of pressure?

A. I just used overall general procedure on investigating a pipeline loss of pressure.

Q. Okay, thank you. And then follow up with Luke's questions. That control valve that closed, does that close on logic or is that a command when they end the batches?

A. Yeah, I don't know.

Q. Okay. Did you log what time Flint Hills called you and said

that they finished their batch?
A. It was around 8:05.
Q. At 8:05, you got a call from Flint Hills and they confirmed that they shut down the line or that they finished the batch?
A. Give me one second here.
Q. No worries.
(Pause.)
A. Yes, it was around 8:05.
Q. Did they say that they'd finished the batch or they shut down the line, or any other reason?
A. Their batch was finished. They were done.
Q. Okay. And do you know if you guys share SCADA logic information or line pressure information with that valve since it's a joint connection?
A. I'm not sure.
MR. PEREZ: Okay. That's all the questions I had. Thank you, sir.
MR. STANCIL: Okay, thank you.
Orion Group.
MR. KENYON: No further questions from Orion.
MR. STANCIL: Okay, thank you.
And finally, Enterprise?
MR. MORTON: Hey, Paul, this is Jeff. Can you hear me?
MR. WISNIEWSKI: Yes, we can hear you.
BY MR. MORTON:

Q. Okay. I've got one follow-up question. A lot of discussion about the control valve. And, Earl, there are a lot of automatic devices on a pipeline; is that correct?
A. That's correct.
Q. Is a pipeline controller involved in the design or programming logic of how these devices operate on the pipeline?
A. No.
Q. And these devices can be safety devices as well as just normal operating devices for controlling the pipeline; is that correct?
A. Correct.
Q. So, it's not unusual that a controller does not know what triggers a control valve, an automatic control valve to close? That's not uncommon that you wouldn't know that?
A. Correct.
Q. Okay. And Roger asked some questions about understanding why we closed the additional valves. And understanding this is a short pipeline segment of only 5 miles and the only valves to close are at the beginning and end locations, have you been involved with other pipeline in-service failures since you've been at Enterprise?
A. No.
Q. Okay. Is it your understanding that our normal protocol is, even on the longer pipeline segments, we close the automatic valves to isolate the pipeline, is it normal protocol then to

dispatch techs to go to the field and close manual valves?
A. Correct.
Q. Okay. But in this case, there were no more valves to close, so no need to dispatch additional technicians?
A. Correct.
MR. MORTON: That's all I have.
MR. STANCIL: Thank you, Jeff.
My apologies to the Coast Guard, I skipped over you. [redacted], did you have any further questions?
LCDR [redacted]: We did. We just had two follow-ups.
BY LCDR [redacted]:
Q. Sir, is it possible to -- is there a bleed off for that line? Is it possible to make that line zero psi, like as part of normal operations?
A. To bleed off far as whatever we're --
Q. Yes, when you're done with a batch, can you bleed it off to zero?
A. No.
Q. Okay. And what about, like, a vapor -- do you have a vapor purge system on that line? Or is that not something you deal with?
A. You said a vapor purge system?
Q. Like a vapor collection system.
A. That's something I don't deal with.
Q. Okay.

A. I don't know if one's there.
Q. And then our last question is, if you wouldn't have closed any valves, if you would have done absolutely nothing on the day of the incident, do you think that it would have changed the outcome in any way?
A. No.
Q. Okay. And why do you think that is?
A. The control valves, the -- yeah, the control valve at Viola was closed.

LCDR [redacted]: Okay. Those are all the questions that we have. Thank you.

MR. STANCIL: Okay, Mr. Youmans, I think this brings us to the end of this interview. I just had one last question for you. I know we've gone through a lot of questions, but was there anything else that, in your mind, that you think would be important for us to know about that we failed to ask you about this incident?

MR. YOUMANS: No, sir.

MR. STANCIL: Okay. Well, we appreciate your time and patience and all your valuable help to help us understand what happened on that day. And we very much appreciate it.

And now the time is 12:30 p.m. Central Time and this interview is terminated. We'll stop the recording now.

(Whereupon, at 12:30 p.m., the interview was concluded.)

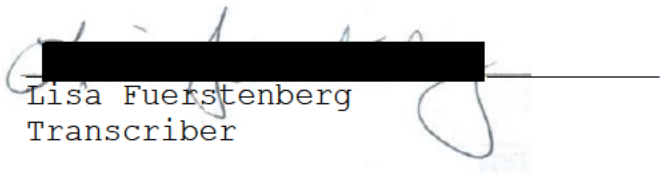
CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	FATAL FIRE AND SINKING OF THE DREDGE *WAYMON L BOYD* IN CORPUS CHRISTI, TEXAS, ON AUGUST 21, 2020 Interview of Earl Youmans
ACCIDENT NO.:	DCA20FM026
PLACE:	Via Microsoft Teams
DATE:	October 22, 2020

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.



Lisa Fuerstenberg
Transcriber

National Transportation Safety Board
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Transcript Errata

TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: EARL YOUMANS
RECORDED ON OCTOBER 22, 2020

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
Mult. pages		"origin station"	"Origin station"
8	24-25		"In 2015, I started at the Houston Control Center. I qualified on a desk at the Control Center in 2016."
9	9	"(indiscernible)."	"movements."
23	3	[the witness' answer was interrupted]	"We have procedures for abnormal conditions."
25	13	"(indiscernible)"	"George"
46	14	"Correct."	"Incorrect." [Mr. Youmans called Mr. Goldsmith at 8:15 AM. See p. 47, lines 7-8]
Mult. pages		"Mills"	"Wells" [On multiple occasions a questioner mistates the name of Mr. Youman's supervisor. See p. 54, line 24 and page 57, line 1]
Multi. pages			There appears to be confusion regarding the number of Enterprise procedures. To make the record more clear, Mr. Youmans offers a clarifying statement. Please see Attachment A]

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

Earl Youmans
Printed Name of Person providing the above information

[redacted]
Signature of Person providing the above information

11-25-2020
Date

TABLE OF CORRECTIONS FOR TRANSCRIPT INTERVIEW WITH: EARL YOUMANS
RECORDED ON OCTOBER 22, 2020

ATTACHMENT A

There appears to be confusion regarding Enterprise procedures. See, for example, page 48, Line 10; page 23, line 3; page 29, lines 9 – 11; and page 32, lines 5-6. The following two procedures are relevant to the NTSB's investigation: Enterprise Origin Station Receipt from Flint Hills West (TXL-CORPC3-FHW-REC-001) and Enterprise Emergency Response Procedure (HCC-PCOT-001). I understand that Enterprise has provided copies of both procedures to the NTSB in response to information requests.

I have been trained on the use of both procedures and they are available to me from my computer station in the Houston Control Center. I did not reference the procedures on the day of the incident, but my experience with the procedures guided my actions taken as part of the batch transfer from the Flint Hills Refinery. They also guided my response to the low pressure alarm on Line TX219.