UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
	*	
ENBRIDGE OIL SPILL, MARSHALL, MICHIGAN	*	Docket No.: DCA-10-MP-007
	*	
	*	

Interview of: ALLISTER EWING

Crowne Plaza Hotel
Edmonton, Canada

Wednesday,
December 15, 2010

The above-captioned matter convened, pursuant to notice.

BEFORE: MATTHEW NICHOLSON
Investigator-in-Charge

APPEARANCES:

MATTHEW NICHOLSON, Investigator-in-Charge
National Transportation Safety Board
Office of Railroad, Pipeline, and
Hazardous Materials Investigations
[redacted]

RAVINDRA CHHATRE, Accident Investigator
National Transportation Safety Board
Office of Railroad, Pipeline, and
Hazardous Materials Investigations
[redacted]

KAREN BUTLER, Supervisor
A ns
[redacted]

JAY JOHNSON, Senior Compliance Specialist
Enbridge Energy Company, Inc.
[redacted]

CURT GOESON, Control Center Supervisor
E c.
[redacted]

BRIAN PIERZINA, Engineer
PHMSA Central Region
[redacted]

I N D E X

P R O C E E D I N G S

MR. NICHOLSON: Good afternoon. Today is Wednesday, December 15, 2010. My name is Matthew Nicholson. I am an investigator with the National Transportation Safety Board in Washington, DC. We are currently in Edmonton, Canada, at the Crown Plaza Hotel. We are meeting in regards to the pipeline spill in Marshall, Michigan that occurred on July 25, 2010. This is Case Number DCA-10-MP-007.

Before we begin, I'd like you, Allister, to please state your name and whether we have permission to record this interview.

MR. EWING: My name is Allister Ewing; and, yes, you do have permission to record this hearing.

MR. NICHOLSON: Okay. Thank you. Also, if you'd like, you're permitted to have one other person present during these interviews. That can be a person of your choice, supervisor, friend, family or nobody at all. Please confirm for the record whom you have chosen to be present during these interviews?

MR. EWING: I've chosen Curt Goeson (ph.).

MR. NICHOLSON: With that, I guess we'll go ahead, and we'll start by going around the room, have each person introduce themselves, state your name, the spelling of your name, the organization you represent, and include a business e-mail or phone number we can contact you at. I'll start. We'll go around to the left.

My name is Matthew Nicholson, M-a-t-t-h-e-w, N-i-c-h-o-

l-s-o-n. I am with the NTSB, I'm a IC on the Marshall, Michigan accident. My contact information is [redacted].

I'm Ravi Chhatre. That's R-a-v-i, last name Chhatre, C-h-h-a-t-r-e. I'm with National Transportation Safety Board, accident investigator. My contact information is [redacted] And I'm here to assist IC Matt Nicholson.

MR. PIERZINA: And I'm Brian Pierzina, B-r-i-a-n, P-i-e-r-z-i-n-a, and I'm an engineer with PHMSA, [redacted], out of [redacted] and my contact e-mail is [redacted]

MR. EWING: And I'm Allister Ewing, A-l-l-i-s-t-e-r E-w-i-n-g. I'm with Enbridge Pipelines. I'm a CCO shift lead, and I can be reached at a-l-l -- or [redacted]

MR. JOHNSON: Jay Johnson. I'm senior compliance specialist for Enbridge Pipelines and the Pipeline Safety Compliance Group. I'm a party member to this investigation. My contact information is [redacted]

MR. NICHOLSON: Karen.

MS. BUTLER: I'm Karen Butler. I'm from PHMSA, [redacted] My contact information -- I'm the supervisor of accident investigation there. My contact information is [redacted]

MR. NICHOLSON: Okay. Right now Curt's not with us so -- and I think that's by design for some of the questions we have to Allister. And for that, I think what we'll do is we'll

start with Karen at this time. Your questions are sensitive in that nature. So, Karen, why don't you lead us off, and we'll go --

BY MS. BUTLER:

Q. Okay. Great. Well, Allister, just so you have a concept of why we might be doing this. We want to talk about supervision and some leadership aspects of what you do. And as a result of that, we didn't really think it would be fair to have your supervisor directly in the room as we ask you these questions. It doesn't mean that it would change your answers one way or another. It's just we're trying to be sensitive to that.

A. Okay.

Q. We also want you to know that anything we ask in this regard, we're really only about one thing, and that is we want to make sure that we walk away with enough understanding that whatever we would come out of -- or whatever would come out of the facts in investigation is something that we can make sure would enhance public safety. And, you know, you as a controller, we don't want the controllers that are not involved in this or shift leads not involved in this particular investigation to not also be served in some way as to influence the public. So with that, we're out just to get details. Okay.

A. Okay.

Q. All right. So as we've reviewed some of the interviews and some of the logs, it's become clear to us that people look at

shift leads and people look at MBS alarm involvement a little differently from one another. And so we'd like to have your take on it. From the authority and responsibility angle, do you view the MBS analysts as experts in the leak detection system?

A. Yes.

Q. When they provide information back to you on a particular event, do you question it or do you just accept because they're the experts that they know what's going on?

A. It depends.

Q. Okay. What does it depend on in your mind?

A. I would never question something to do with the model, but if I had something else that would lead me to believe that it was -- that what they were telling me was wrong, then I would question what they were saying.

Q. Okay. So if they told -- as they did on the beginning of this event that it was a column separation alarm and when it cleared it went away, would that have given you any reason to question it?

A. No.

Q. Okay. If they had told you upon review that several MBS alarms are truly false, would you have reason to question that?

A. Are truly false. What do you mean by that?

Q. Meaning that they've identified those alarms as being a false alarm.

A. Oh, yeah. I would not question that.

Q. Okay. All right. Has it always been that way? I don't know how long you've particularly been in your position, but has it always been that way to your knowledge?

A. Yeah.

Q. Okay. And so you as a shift lead, are you usually contacted by the operators when they have an MBS alarm?

A. Usually, yes.

Q. And then your job is to contact the MBS analyst, is that right?

A. Correct.

Q. Okay.

MR. NICHOLSON: Could I break in here? I'm sorry, officer. We've had problems with people that don't speak loud enough for the reporter. If you --

MR. EWING: Sure, yeah.

MR. NICHOLSON: -- could just project a little bit. Thanks.

BY MS. BUTLER:

Q. Okay. So I would take it then that the shift leads have quite a few conversations with the MBS analyst, is that correct?

A. That is correct.

Q. Okay. So in the context of those conversations, are there certain things that usually raise more questions than others? Certain types of things?

A. A two-hour alarm would raise more questions than a five-

minute alarm.

Q. Okay. So like the longer the event, the more questions you begin to dive into?

A. Yeah.

Q. Is that --

A. Yes. Sorry, yeah.

Q. Okay. All right. And so what do you view your responsibility is regarding a shift lead?

A. Regarding MBS alarms?

Q. You can -- let's just start there, and then we'll open it up to other subject areas.

A. Sure. So regarding MBS alarms, the operator would inform me that he has an MBS alarm, and I would inform the MBS analyst to take a look at it. And if the operator had anything out of the ordinary that he has experienced on his line, he would also let me know at that point, and then we could work as a team to investigate what was happening, if there was anything out of the ordinary going on.

Q. Okay. Do you traditionally have those MBS alarm discussions without the operator or are they a lot of times in the call?

A. We sometimes just have the discussion with the MBS analyst.

Q. Okay. Has there ever been miscommunication as a result of it being handled that you're aware of?

A. Has there any been miscommunication?
Q. Yeah. Have you ever -- can you think of an event or a time when because maybe the operator wasn't in on the call there could have been a miscommunication?
A. Well, the operator will always be in on the call eventually.
Q. Okay.
A. Yeah.
Q. All right. And so if it's not in regards to MBS alarms, can you explain to me what you think your role is as a shift lead outside of that?
A. Yeah. I'm there to help people solve problems.
Q. Okay.
A. So if an operator has a question or a concern or I can coach that operator to try to find the right answer.
Q. Do you ever take their problem or their concern to other technical people in the control room?
A. Yes.
Q. Okay. So was that like the other operators?
A. Yeah, more experienced operators, for example.
Q. Okay. Do you have like an ace in the hole that you usually use?
A. Depending on what shift I'm on.
Q. Okay. Can you give me some of those names?
A. On my shift right now, I go to Jeff Amundson for a lot

of things.

Q. Okay.

A. I go to --

MR. NICHOLSON: Can you spell those names?

MR. EWING: Yeah. J-e-f-f, A-m-u-n-d-s-o-n.

BY MS. BUTLER:

Q. You can name some on the other shift.

A. Yeah. Well, my previous years, there's been Dean Casavant. I go to --

MR. NICHOLSON: I'm sorry, Karen. Curt's wondering if it's time for him to come into the room.

MS. BUTLER: We can shift back to other types of things. It's up to you, Matt.

UNIDENTIFIED SPEAKER: In all honesty, Karen, I did that.

MR. NICHOLSON: I thought you were finished too, Karen. I'm sorry.

MS. BUTLER: Okay.

UNIDENTIFIED SPEAKER: Were you not done with your --

MS. BUTLER: No.

UNIDENTIFIED SPEAKER: Okay. He's leaving. Sorry.

MR. EWING: My fault. I also, if it's a day shift, I can also get technical services people involved, which I do often. So that would be James Sigurdoson, J-a-m-e-s, S-i-g-u-r-d-s-o-n. Or Jim Chipchar, J-i-m, C-h-i-p-c-h-a-r. We also have a couple of

new guys there, Kameil Shank, K-a-m-e-i-l, S-h-a-n-k, and Robert Spaans, R-o-b-e-r-t, S-p-a-a-n-s.

BY MS. BUTLER:

Q. Okay. So anybody else you would list as an operator ace in the hole?

A. Yeah. Well depends -- for terminal operations on our shift this year, we often go to a guy by the name of Rex Vader, R-e-x, V-a-d-e-r. And for pipeline I go to Jeff and I go to Shane Gummow, S-h-a-n-e, G-u-m-m-o-w.

Q. Okay. Anybody else?

A. Not that I can think of off top of my head.

Q. Okay. So right now what are you shift lead over? Are you shift lead over terminals or pipeline?

A. Everything in the room.

Q. Okay. It's our understanding that you kind of split it up.

A. Yeah. So --

Q. And how did you split it?

A. It's split between the feeder and connecting pipelines.

Q. Okay.

A. So the Athabaska Group, the Edmonton Terminal, Mid Continent is one group.

Q. Okay.

A. And then the other side would be the main line system.

Q. Okay.

A. The main line terminals.
Q. So which side do you have?
A. We switch. So my partner, Bob Donald, is -- would work the days on the main line system, and I would work the days on the feeder and connecting system.
Q. Okay.
A. And then we would switch off.
Q. Okay.
A. I'd work nights.
Q. So you rotated --
A. We rotate, yeah.
Q. Okay. Sorry. I didn't understand it that way.
A. Okay.
Q. Okay. So in your process of doing that, do you feel that training has prepped you for the majority of what you do when you're flipping roles as well?
A. Yes.
Q. Okay. And is there any training that you would recommend you get that you don't have now?
A. It depends on what the role is going to be in the future, I guess. I can't really speak for the future, but.
Q. Okay. Well if it were just to say the same, let's just say that it were to stay the same, what training would you request?
A. None that I can really think from the top of my head.

Q. Okay, all right. And I can't remember, so I'm not asking this for any reason other than I can't remember. Did you have a gas or liquid background or both?

A. I have both.

Q. Okay, all right. Thank you. So when you were promoted to shift lead, did they pretty well explain to you what your role was going to be and where your responsibilities started and ended versus the operators?

A. Yes.

Q. Okay. So where do you think that responsibility does stop and end?

A. In what context?

Q. To where, you know, whatever they would have covered with you when you took the job with where your responsibilities ended and where the --

A. Okay, so my -- yeah. So my responsibility is to help the operator make the right decision.

Q. And was that from no matter whether it was dealing with personnel matters or non-technical matters or was that mainly geared towards technical application in the control room?

A. Yeah, that's towards technical.

Q. Okay. Is there any other aspect of that?

A. Yeah. The majority of our job is dealing with people issues. We do the e-performance.

Q. Okay.

A. So we're judging the operator's performances.
Q. Okay. And your supervision --
A. Um-hum.
Q. -- has your supervision provided you with adequate direction?
A. Yes.
Q. Okay. And when you go to them with a problem, do they pretty quickly respond or do they -- they give you some aspect of I'll get back to you and it should be a short issue or it should be a long issue or we'll just have to see? What type of response do you typically get?
A. In technical matters?
Q. Yeah.
A. We'll get a response right away.
Q. Okay. All right. And has that response been pretty concise?
A. Yeah.
Q. And has it ever caused you any problems?
A. Not that I can think of right now.
Q. Okay. And if you were to structure the control room in the future based on what you've learned or how you think things best operate, would you keep the shift lead position?
A. Yes.
Q. Okay. Would you change any of their roles or responsibilities?

A. I'd have more technical support within the control room.
Q. Okay. And when you say that, would that mean like directly for each operator and the shift leads or does that just mean more controllers? Or how does that look?
A. No. That would mean like the people I listed before.
Q. Yeah.
A. They would be the people who would be supporting the entire shift.
Q. Okay.
A. So they would always be free to help support --
Q. Okay.
A. -- both shift leads and operators.
Q. Okay. And is that because it would just give you more resources to have technical experts available to look at?
A. Right. It would give me resources to -- with people that have actually run the system.
Q. Yes.
A. Help make decisions.
Q. Is it sometimes hard when you haven't ran the system to make the right decisions?
A. Yes.
Q. Okay. Is that mainly based on uniqueness of each pipeline or is that other things?
A. Uniqueness of each pipeline.
Q. Okay. Does elevations factor into that?

A. Does elevations factor into?
Q. The uniqueness --
A. Uniqueness -- yes.
Q. All right. Sorry. Should have phrased that better. All right. If you were going to make a recommendation to your supervisor to enhance the control room besides what you've just mentioned, would there be anything else you would recommend?
A. Yeah. I'd recommend a better balance of workload within the room.
Q. Okay. Have there been some workload studies?
A. I'm not sure.
Q. Okay, all right. Has there been any recent conversation about changing how things are assigned to consoles?
A. Yes.
Q. All right. Are you currently in the control room?
A. Yes.
Q. Okay. And so has it ever been explained to you why certain other operators are not in the control room?
A. Not clearly, no.
Q. Okay. Was there general information provided?
A. Yeah. I would say the information we got was they're not to be making any decisions that would affect the pipeline until the investigation is over.
Q. How do you think the rest of the control room responded to that?

A. With a little bit of fear and stress.
Q. Okay. Did it put more pressure on the leads?
A. Definitely.
Q. Okay. Do you believe that was done before anything was investigated?
A. The people being taken off shift?
Q. Right.
A. Do I believe that was done before anything was investigated?
Q. Okay.
A. I'm not sure.
Q. Did anybody ever say anything about somebody violating procedures?
A. No.
Q. Okay, all right. And in the types of things that have gone on in the control room, have you seen any changes in the control room since the Marshall event?
A. Yes.
Q. Okay. Besides people being removed currently from being in shift rotation, is there anything else that's occurred?
A. Just a heightened awareness of what we're doing.
Q. Okay. And have they made any changes in procedures or alarming or priorities or anything like that?
A. Yeah. We're doing more column separation calculation procedures now.

Q. Okay. Have they made any changes to start-up or shutdown procedures?

A. I think we're in the process of doing that right now, but I'm not 100 percent sure.

Q. Okay. For some of the controllers that are no longer in shift rotation, how would you view their performance? Were they a mix of high performers and medium performers or low performers?

A. The people, the operators or the controllers?

Q. Yes.

A. So we have Theresa, Tim, Dave, that's it.

Q. Right.

A. How would I rate their performance? They would be low to medium performers.

Q. Okay. Is there any common element they all struggle with in your mind as a shift lead?

A. A common element?

Q. Yeah. Is there anything that's kind of common amongst them that you've noticed?

A. No.

Q. Okay. And the reason I ask that is it's my understanding that you guys are kind of people persons, right?

A. Yeah.

Q. And so if you're kind of people persons then there may be traits that you've noticed and that sticks out to you. So that's why I asked.

A. Nothing comical.

Q. Okay. So as we go through this, when you do evaluate performance of controllers because I think that was part of the ship lead's responsibility, right?

A. Yes.

Q. Okay. What are some of the things you rate them on? What are the things you know you've discussed with controllers?

A. Some of the things that I rate controllers on are their -- is their performance at their job, their core job. So that's about 80 percent of their overall rating at the end of the year.

Q. Okay.

A. So how they perform their core job. We have a what and a how rating for those people.

Q. Okay.

A. So the what is, you know, what you've accomplished throughout the year, and the how mark would be how you're doing that. So if you've got a positive attitude and if you've helped others and, you know, looked to achieve your best every day, those kind of things.

Q. So what are some of the core things that you would look for?

A. In the core job?

Q. Yes, right.

A. Knowledge of the system or the system they're operating.

Q. Okay.

A. Ability to handle problems on their own.
Q. Okay.
A. The ability to help others around them.
Q. Okay. Do you have some specific controllers in the control room that would go directly to other operators before coming to you?
A. Yes. We would encourage that.
Q. Okay. So you kind of encourage them to get other operators viewpoint?
A. Yes.
Q. Do you encourage that from only people that have been cross-trained on that console or previous experience or does it matter?
A. It doesn't matter.
Q. Okay. Is there any other aspect of performance you would typically be evaluating?
A. Attitude is a big one for us in the control room.
Q. Okay. All right.
A. So --
Q. Anything else?
A. Well, I think like any boss, just the ability to help you make your job easier, right?
Q. Okay.
A. So this person is helping me make my job easier, they're probably going to be a higher performer.

Q. Okay. So when you're evaluated --

A. Yes.

Q. -- what are you evaluated on?

A. My objectives for the year.

Q. Okay. And what are some of those?

A. I worked on a region and district on-call database this year.

Q. Okay.

A. My other objective was to increase learning from other operators. So between operators. So I encouraged numerous people to do PowerPoints on their separate consoles or things that impact (indiscernible). So quality issues or effects of degradation on refineries. I worked hard to create a weekly meeting for our shift to build, you know, sense of team and to increase communication between management and the operators.

Q. When controllers are building the PowerPoints or participating in those team meetings, are they still operating or are they like given extra time to do that off their operational shift?

A. No. They're still operating. But we also have what's called D Days. Those are extra days when they're not operating, and they can also work on that.

Q. Okay.

A. So they would do both. They would work on shift and on their extra days.

Q. So if we wanted to know say what a specific controller was assigned to do by their shift lead, would that all be documented somewhere in like a performance plan or --

A. Yeah. There's an e-performance document that we're just in the processing of filling out. So now would be a good time to look at it.

Q. Okay. All right. And so is your performance criteria tied in any way to say your boss's?

A. Is my performance tied to my boss's performance?

Q. Yeah. Like for example, is there common goals or objectives that --

A. Oh, yeah.

Q. -- your boss is being given, and so that, therefore, translates to your performance review?

A. Yeah. I think that would be true for all the way down to the operators.

Q. Okay. If there are a couple of those that you can name.

A. Reduction in errors.

Q. Okay. And what's that look like? What does that mean?

A. We had 56 errors last year.

Q. And how is an error defined?

A. We have three different -- quality, administrative and safety errors or events we call them.

Q. Okay. And so explain those a little bit.

A. A safety event for example would be if somebody closed a

valve on a running line, caused a blockage.

Q. Okay.

A. A quality event would be if someone made the wrong cut on batch, caused degradation to the batch.

Q. Okay.

A. And an administrative event would be say you over injected a batch.

Q. Okay. So are all those automatically tracked like through this data system for you so you get like a monthly report or something?

A. No. We would -- the shift leads would investigate that.

Q. So are you doing that on an ongoing basis?

A. Yep.

Q. And are you doing that by reviewing historical alarms and -- what all would factor into that review?

A. Well --

Q. Like the types of data.

A. Yes. An operator would call up and say, Al, I've made a mistake, and this is what happened, and then we would review with the operator, and then we would review SCADA and we would review pi data to see exactly what happened.

Q. Okay. And is that on the honor system mainly?

A. Yes.

Q. Or do you get like customer complaints from --

A. If we -- if it's on the -- yeah. If we don't hear about

it, if the operator does not tell us about it, it would affect their performance for the year.

Q. Okay. And so --

A. If we found out about it later on from a customer or.

Q. Right. Do you learn about things sometimes from other sources?

A. Yes.

Q. Okay. Would those sources be something -- can you explain what those sources would be besides customer complaints and the alarm log?

A. The Quality Department.

Q. Okay. Anything else?

A. The complaints from the field.

Q. Right.

A. So an over pressure that wasn't reported to -- by us.

Q. Okay.

A. Noticed in the field. Would come back to our Technical Services Group, and then we'd be -- we'd look into it after that.

Q. Do those all come in to you eventually on a standard form? Like do you write those out as you get them?

A. Complaints or --

Q. Yeah, anything that would like be a note that you want to remember for that particular controller's performance.

A. We would get an e-mail.

Q. Okay. You do. Okay. Are they usually subjected a

certain way?

A. It would be like please look into this --

Q. Okay, yeah.

A. -- event.

Q. Okay. That's it. Thank you. So that would basically be your beginning documentation, and then you would start to do your own homework --

A. Yeah.

Q. -- what happened?

A. Right.

Q. Okay.

A. And then we -- sorry. Then we do an information package it's called.

Q. Okay. So on an information package, would there usually be an information package associated with each one of those?

A. Not always, but usually.

Q. Okay, all right. Okay.

A. And all right. So as we go through this, since we've talked a little bit about how you would rate other controllers, are those same types of things because of how the controllers split, are they like totaled and that's how you're rated as well?

A. No.

Q. Okay. So how are you rated?

A. I'm rated similarly to the operators on my attitude, my ability to influence people, ability to solve problems.

Q. Okay. So is there any specific metrics like the things you just talked about or the controllers that apply to you?

A. Yeah. I listed them earlier.

Q. Okay. So there's --

A. Those are my objectives, yeah.

Q. Okay. All right, all right. And so do all those weigh into a bonus package of some type or a portion of them or not really or?

A. Yep. Your rating at the end of the year factors into your bonus.

Q. Okay. Are there some that weigh heavier than others?

A. So are there -- my rating?

Q. Yeah. In your -- the elements that you're evaluated on --

A. Yeah.

Q. -- you mentioned like three categories, I think.

A. Yeah. So my job profile, my core job would be the biggest weight.

Q. Okay, all right. And have you ever noticed any problems with the specific console operation going on on Line 6B?

A. No.

Q. That could be in general, like it could be field problems or it could be complaints or --

A. Or errors?

Q. Yeah.

A. Oh, yes, we've had errors on 6B.
Q. Is there any type of common category associated with that?
A. I couldn't tell you right now.
Q. Okay, all right. So there's nothing that jumps out at you --
A. No.
Q. -- when you answer that question?
A. No.
Q. Is that a fair statement?
A. Yes. Sorry. I need to speak up.
Q. I'll try to do that.
A. No, I -- it's my fault.
Q. Okay. And so as you go through looking at your control room performance and everything that happened with Line 6B over Marshall, is there elements that stand out to you now maybe you should have been tracking different?
A. No. Like I said in the previous one, I just wish there was a way to ensure that we ask that next question.
Q. Okay.
A. So if the operator would have told me that there was something wrong or told the MBS alarm that there was something wrong out of the ordinary then maybe we would have pursued it a bit more.
Q. Okay. So can you see everything the operator sees or

can you only see a subset of it?

A. No, I can see everything he sees.

Q. You see everything the analysts see?

A. No.

Q. Okay, all right.

A. I don't think so.

Q. Do you see a similar subset as the operator does regarding the MBS screen?

A. Yes.

Q. Okay. All right. And so do you guys traditionally check historical trending or current trends, the pressures and flows?

A. If an operator tells us there's something --

Q. Okay, so --

A. -- unusual.

Q. -- you're waiting for them to bring it to your attention?

A. Correct.

Q. Is that something you've always understood is the way it's supposed to be or is that something that's kind of evolved over time?

A. I think in the past when I was an operator, the shift lead was more involved technically. But since my -- since I've been in shift lead, it's been evolving into this -- more of the operators responsibility.

Q. Okay. Is that -- is there like a clean-cut line as to when that started?

A. Not that I know of.

Q. Okay. All right. If you were to think about all the different aspects of what have come into play on 6B and how that impacted the control room at large, what do you think we could do to make sure that we never put a controller in that position again? It can be more than one thing, and it doesn't have to be complicated.

A. Ask me the question one more time.

Q. Okay. If we were going to try and prevent this from happening again in the control room and we could implement one thing or more than one thing that could definitely help this, prevent it happening to any other console or any other controller or any other controller just running 6B, what would those things be in your mind?

A. Well, more technical support like I stated earlier.

Q. Okay.

A. Just a way of ensuring that the operator raises that question when he sees something unusual. I don't know how you, I don't know how you do that, but.

Q. All right, so would anything change for you on behalf of the management structure?

A. Would anything change for me on behalf of management structure?

Q. Right. Would you see if there had been say a change in management structure in the following, you know, then I think it could have helped what happened.

A. Not directly, no.

MR. JOHNSON: When you say management -- this is Jay. With management or supervisor or personnel in the control center above the operator. Maybe I didn't understand your question.

MS. BUTLER: No, that's -- I was just speaking to management structure at large. Like for example, sometimes we've seen in control rooms where a supervisor will attempt to make a technical call, okay, and they really don't have the technical background to make that call. And so as a result of that, the investigation discovers that a supervisor interjected and directed and really shouldn't have because they didn't have the technical expertise. Or we've also seen examples where say there had been a requested problem to be fixed for the last year and a half or two years I think it actually was, and that particular request happened to be a field piece of equipment that was malfunctioning, but it really came down to a management decision as to whether they changed that or not. So those are types of management things that can impact a control room at large. And I just wanted to give the opportunity to report anything like that. And if there isn't, there isn't.

MR. EWING: Yeah. I would like to see the control center have a bit more influence on what happens in the field.

BY MS. BUTLER:

Q. Okay.

A. So --

Q. Can you give me a couple examples?

A. I think there's -- I think like any company there is silos within the company, right?

Q. Right.

A. So we have our control center, the field has their things they want to get done. And I think sometimes what we need to get fixed and what need to get done doesn't happen as quickly as it could just due to those silos being (indiscernible).

Q. Okay. So do you think that's systemic from any one thing, just the size of the operation or the way managers get along or just the way information is communicated? Or could it be just a whole bunch of things and it just needs some time?

A. Definitely the size of the company, and definitely the way it's grown from remote operations in the field --

Q. Okay.

A. -- to now being one big control room.

Q. Okay. All right. Regarding supervision for you, is there anything that you feel you weren't told or should have been told regarding this Marshall 6B event?

A. No. Did you hear me?

Q. Uh-uh, no.

A. I said no. I'm sorry.

Q. That's fine. I was just being patient.
A. Okay.
Q. I didn't hear you, so.
A. Okay.
Q. If we had alarms that controllers set on low, low pressures or low pressures in the control room for various stations and those never moved, if those were considered absolutes, would that be helpful at all?
A. If you had a -- like an alarm set at zero and --
Q. Right.
A. -- every time you got zero it would come in?
Q. Right.
A. I think we do have that right now.
Q. Okay. So apparently when we see like a Marshall low pressure --
A. Um-hum.
Q. -- is that point set somewhere that we really don't have a good understanding of where that's set? Do you know where that's set?
A. That can mean at the PLC level or the --
Q. Right.
A. -- level or --
UNIDENTIFIED SPEAKER: We're maybe -- let me jump -- I think we're -- when it changes color from green to blue on the --

MS. BUTLER: Well, actually I wanted -- he was headed down the right path.

BY MS. BUTLER:

Q. PLCs to data. Is it set in the PLC or the scale?

A. I couldn't answer that 100 percent. I would think the PLC.

Q. Okay. And so if we got an alarm registering actually in the alarm log that says Marshall load section, if you wanted to know what that value was set at, where would you go look?

A. For low suction pressure/

Q. Yes.

A. My station allowables.

Q. Okay. So on your station allowables is that something you enter?

A. Yes.

Q. Do you enter those daily or as needed or?

A. Any time a change is made.

Q. Okay. So you get a notification by someone a change needs to be made?

A. Yeah. An engineer would send us an e-mail and say we need to change the limits on such and such.

Q. And you would change it at the first available opportunity?

A. Correct.

Q. Okay. So is all of that done at a typical time during

the day or just whenever?

A. It depends what the e-mail says.

Q. Okay.

A. If the e-mail says has to be done immediately, we'll do it immediately. But typically it says to be done by the end of the day.

Q. Okay.

A. And we --

Q. So you as a supervisor, do you typically call the operator that you could be impacting when you do that?

A. I would check to see if the change in limits would have an effect on the operator.

Q. Okay.

A. And majority of the time I would call them, but not all the time.

Q. Okay. So if the line's down, would you call them?

A. Probably not.

Q. Okay, all right, I think --

UNIDENTIFIED SPEAKER: How often --

MS. BUTLER: -- all of my other questions, you know, Curt could be in the room for. Because that was all about supervisory relations and how you communicate things so.

UNIDENTIFIED SPEAKER: So I mean I'd like one follow-up question. How often do you get pressure allowable changes ballpark?

MR. EWING: We do the whole system, I might get that to do a few once (indiscernible) once a set. So once every five shifts.

BY MS. BUTLER:

Q. Okay. So do you see it more frequently on Line 6B than others?

A. Prior to the incident or after the incident?

Q. You can say either. You can say one thing prior and one thing after.

A. No. I see -- oh, I see way more pressure limit changes after the incident than prior to the incident.

Q. Okay. So prior to the incident, if you were to compare 6B to anybody else did you see any more fluctuation on 6B?

A. I'm not sure.

Q. Okay. We'll bring Curt in.

A. Okay.

MR. NICHOLSON: You can, you can continue. No, I sent Curt a note.

UNIDENTIFIED SPEAKER: Oh. I'm going to get a coffee, if that's --

MR. NICHOLSON: Yeah.

UNIDENTIFIED SPEAKER: That's better than taking the elevator.

UNIDENTIFIED SPEAKER: Yeah. I just did it a little premature last time I found out.

MR. CHHATRE: Line 50 go down for last two days.

UNIDENTIFIED SPEAKER: I know.

(Simultaneous comments.)

MR. EWING: So I have a question.

MS. BUTLER: Sure.

MR. EWING: Like when you're asking me stuff about the supervisor --

MS. BUTLER: Uh-huh.

MR. EWING: The supervisors will read all the transcripts afterwards, won't they? They can't read transcripts?

MS. BUTLER: (indiscernible) but if they (indiscernible) depending upon the answers, there's certain things that it's possible that, you know, depending upon how it went --

MR. EWING: Right.

MS. BUTLER: -- we would have some passivity to that.

MR. EWING: Okay.

MR. NICHOLSON: The transcripts can be shared within the company.

UNIDENTIFIED SPEAKER: The transcripts have (indiscernible) historically, but they are redacted under our current policy. So what Allister is getting at, and Karen is saying if there's something sensitive that Allister said, we'd probably redact it.

MS. BUTLER: So the key point to anyone, and we probably should have emphasized that to begin with, is if they had

something regarding a supervisory response, it that (indiscernible) to cause them problems internally --

UNIDENTIFIED SPEAKER: Right.

MS. BUTLER: -- we would have been sensitive to that and made sure that that had some conscious thought before being released.

UNIDENTIFIED SPEAKER: Okay.

MS. BUTLER: And that's not any different for you, is it, Matt?

MR. NICHOLSON: I'm sorry?

MS. BUTLER: Matt, that's no different for you, is it?

MR. NICHOLSON: No. That's what I was saying. We would -- I would treat that as sensitive information when the transcripts went out.

MR. CHHATRE: I mean (indiscernible) we have internal checks and balances. So Matt would redact almost everything that he will -- he feels is sensitive. Especially will typically redact names and contact information (indiscernible), and then somebody else will QC that. So if -- we're all humans, and sometimes the information gets missed, and the QC person should be able to catch that.

BY MS. BUTLER:

Q. So, Allister, I apologize. We should have emphasized that to begin with.

A. That's fine. I just wanted to --

MR. CHHATRE: There will be a way (indiscernible) to redact all the pertinent information.

MR. NICHOLSON: That change any of your answers?

MR. EWING: No, but it may change someone else's answers is what I --

(Simultaneous comments.)

MS. BUTLER: And I appreciate the question because we should have made that clear from the beginning.

MR. NICHOLSON: Okay.

UNIDENTIFIED SPEAKER: And I think -- I know I can go on record saying that Enbridge senior management wants to know all of this information, you know, pretty or not pretty. They want to know what it is so we can move forward and correct deficiencies.

MS. BUTLER: As we do everything (indiscernible) you guys too, Jay.

MR. JOHNSON: So, yeah, there hasn't been, if you will, any pulling of punches, and concerns over that. If something is incorrect or could be better, that's the approach that they've been taking.

MR. NICHOLSON: Okay, let's continue. We've got Curt in the room.

Karen, are you going to move on with your questioning?

MS. BUTLER: Whatever you want to --

MR. NICHOLSON: Yeah, let's --

MS. BUTLER: If you would prefer that I go on, that's

fine. If you want --

MR. NICHOLSON: That is my preference. Let's --

MR. CHHATRE: We don't want to break your chain of thought here.

MR. NICHOLSON: Yeah. You're on a roll.

MS. BUTLER: Okay, all right.

BY MS. BUTLER:

Q. So we had just gotten to the point where we were staring to talk specifics about the alarm logs and the system, okay.

A. Um-hum.

MS. BUTLER: So we are back on the record, right?

MR. NICHOLSON: Yes.

MS. BUTLER: Okay.

MR. NICHOLSON: Well, we never were off the record.

MS. BUTLER: Okay, fine. I thought we had taken a break. Sorry.

BY MS. BUTLER:

Q. So on time discrepancies, I just want to make sure that if we -- have you ever noticed where there could be an alarm log printout that has particular time and date stamp and yet it might not show that on a screen at the same time?

A. Extremely low level alarm, so informational alarms don't always show up in the main alarm bin.

Q. Okay.

A. Because they're really just informational.
Q. Okay. So would that be S2 and below or S4 and below or what?
A. I think it's S2 and below.
Q. Okay. So you definitely have noticed it with that?
A. Yes.
Q. Okay. All right. So based on the prioritization and the descriptor input, have you ever had input into the priority that a particular alarm is assigned?
A. Not that I can remember.
Q. Okay. Have you ever had any input into the descriptor that goes beside an alarm or a command?
A. I may have, yeah. I can't remember exactly.
Q. Okay. And do you have the ability to acknowledge alarms and enter commands from your console?
A. I -- not if I'm not in control.
Q. Okay. So that would have to be what, officially switched to --
A. Right.
Q. -- you or something?
A. Yeah. Yes.
Q. Okay. When that would be officially switched to you, does that change the console designation that would get printed out on the command line?
A. I believe so, yeah.

Q. Okay. And what would yours look like?

A. It would just say a different console number.

Q. Okay, all right. So when that actually would switch, is that a verbal switch that happens and it's documented somewhere or is it a electronic switch or how does that work?

A. No. It would be an electronic. You would take control on the different console.

Q. Okay.

A. And then the alarms associated with it.

Q. Okay. And so that would actually print out in a log.

A. Yeah.

Q. Okay, all right.

A. We don't often print out alarms. So it's throwing me off for --

Q. All right. Sorry about that.

A. No problem.

Q. So when you -- when we talked to the operators associated with Line 6B, they tell us that there's like two environments that they have, right? The ones like Line 3, and that's one environment, and there's another one that handles the rest. And then they talk about the shift main which is next to them, and that's like Line 4 and another line, and they have two environments there. So can you see every environment in the control room?

A. Yes.

Q. Does it pull up the same way for you as a shift lead?
A. Yes.
Q. Okay. So if you wanted to see all the alarms associated with a particular 6B feed, you would conceivably be looking at eight displays because they have like acknowledged and unacknowledged or active and a couple of others. Is that the way it works for you too?
A. Yep.
Q. Okay. So you conceivably to help out on multiple issues, you would be looking at quite a few strings, wouldn't you?
A. Yes, if we had multiple issues going on.
Q. Okay, all right. So do you multi-task or even have the freedom to do it with your position? Like or are all the issues so intense that you're usually working on one at a time?
A. No. We definitely multi-task.
Q. Okay. So when you multi-task, have you ever ran into circumstances when say the system's slowing down or you're seeing data updates slowing?
A. Yes.
Q. Okay. Do you know what causes that?
A. Depends on what's -- could be many things.
Q. Okay. Can you throw out a couple?
A. Communication failure.
Q. Okay.
A. From the field.

Q. All right. So if you have a communication in the field, does it typically just affect that one console or do other people sometimes get impacted by that as well?

A. If you have a telecom issue --

Q. Yes.

A. -- other people would be affected. So --

Q. Okay.

A. -- at each -- a lot of operators operate the same stations but on different lines.

Q. Okay.

A. So there would be multiple people affected by one telecom issue.

Q. Okay. Do you think they're overloaded?

A. At times, yeah.

Q. Okay. So as we go through this and we see these system alarms, have you ever seen the specific alarm descriptor where it says system, and then it will say something like R trap and follow up with something like too busy to process?

A. Yep.

Q. Do you know what's causing that?

A. Some sort of SCADA problem.

Q. Okay. Is this -- is it typically always happening at certain times? Have you ever noticed that?

A. No.

Q. Has that ever been trended?

A. R top failures?
Q. Yeah.
A. Not that I know.
Q. Okay, all right. Have you ever see an alarm in command two when say you're seeing a valve in travel stage that should have had an associated command with it to move, and you don't see one in the lock? Have you ever had that happen?
A. Yes.
Q. You have?
A. Yes.
Q. And what caused that?
A. What caused an alarm or a valve to move?
Q. Yeah. What caused the type that you've seen --
A. Actually, you know, I haven't seen a -- I was just thinking about an alarm, a valve moving without a command being sent.
Q. Okay.
A. So what could cause that would be someone in the field --
Q. Okay.
A. -- moving it.
Q. Okay. You guys routinely go through your commands and alarms and make sure they match up? Meaning, you know, if this valve is in travel we should have known something or we should have sent the command or I did send the command and I'm not seeing

it.

A. Yeah. Only if there's a problem brought to us would I --

Q. Okay. So that would only be after the fact.

A. Yeah.

Q. That -- okay. All right. Does the field talk to you pretty well or not?

A. Pretty well?

Q. Yeah. Like when they've got maintenance issues going on or when they're about to do something, are they good at giving you heads up?

A. For the most part.

Q. Okay. Is there any particular thing that doesn't happen routinely?

A. I think terminals.

Q. Okay.

A. Often don't phone in for to do work as much as the people working on pipelines.

Q. Okay. Well, what about data locking up? Do you see that periodically?

A. Data --

Q. Or like (indiscernible) just sit at the same value for an extended period?

A. Yes.

Q. Okay. Is that always the communications issue or have

you found other things to be?

A. Most of the time it's transmitter failures. So frozen transmitters or --

Q. Okay. Do you -- have you noticed transmitter like disparity alarms when you get that?

A. Yeah.

Q. Okay. Have you seen data lockup without that?

A. Yeah. Our SCADA system can freeze sometimes.

Q. Okay. Do you know why that occurs?

A. No.

Q. Okay. Do you know if anybody in the SCADA group monitors the SCADA load or system load?

A. I'm not sure.

Q. Okay, all right. So can you reboot the system too?

A. Yeah.

Q. Okay. Do you do it very often?

A. Very rarely.

Q. Okay. All right, and what would cause you to reboot the system?

A. The system freezing up.

Q. Okay, all right. So when the system freezes up, is there also a lock in time and day or is it just kind of -- pointing to not be changing?

A. Yeah, most of the time the mouse stops moving.

Q. Okay, all right.

A. So that's when the operator notices it.
Q. Thank you. All right, so pressure control valves.
A. Yes.
Q. Do you see a lot of problems with pressure control valves operation?
A. Yes.
Q. And is that prevalent on 6B?
A. Before or after the --
Q. You can do either. You can state.
A. It's more prevalent after the new pressure restrictions.
Q. Yeah. So you're thinking lower pressures have caused those to operate differently?
A. Yes.
Q. Okay, all right. Were there any concerns with that before that you're aware of?
A. Not that I'm aware.
Q. Okay, all right. I'm sure that there's a lot of things that they're going to ask you such as are you familiar with O cube requirements?
A. Um-hum.
Q. And do you know what it means when we say span of control?
A. Span of control?
Q. Right. If that's not a term that means anything to you, that's fine.

A. No, that doesn't mean anything to me.
Q. Okay.
A. I could guess, but --
Q. That's fine. You're fine. So on VFD alarms?
A. VFD?
Q. Yeah, V as in Victor, Variable Frequency Drives.
A. Yes.
Q. Are you seeing a lot of that alarming going on?
A. Yes.
Q. Does it chatter quite a bit no matter what system you're on?
A. More often on the Athabaska system.
Q. Okay. So there are certain systems that chatter more than others?
A. Correct.
Q. Do you guys review as shift leads the control and alarm log and look for things that are chattering?
A. Not formally, no.
Q. Okay. Can you guys as shift leads take points off scan?
A. No.
Q. Okay. So if an alarm like that continues to chatter, do you just tolerate it and then call out eventually?
A. Yeah. We would phone SCADA.
Q. Okay. So this LPM system, what's your understanding of how it works?

A. Fair to good.

Q. Okay. What's it designed to do? Sorry. Should have asked my question better.

A. Protect the pipe.

Q. Okay. From what?

A. Over pressure and large pressure waves traveling down the line.

Q. Okay. So how does it do that?

A. If it sees a pressure, a high pressure at one location, it will try to reduce the pressure upstream.

Q. Okay.

A. In order to protect that downstream piece of pipe.

Q. So tell me what would happen if you happen to be inputting a maximum allowable value on pressure change because you've received an e-mail notification, and you're inputting that change, and something else triggers an LPM system to go into effect, do you know what would happen?

A. So if I was making a set point change or a --

Q. An -- I thought you said the limit on --

A. Oh, the limit change.

Q. Yes.

A. If I set a limit change and LPM was triggered?

Q. Yes.

A. What would I do?

Q. Well, no. What I meant to say is if an LPM has been

triggered by a previous value, all right, it saw discharge was too high --

A. Okay.

Q. -- and you were in the process of entering your allowable limit changes, and it happened to be on a point that was in common with both, do you know what would happen?

A. So if I entered a limit change that was higher than the LPM was allowing to go?

Q. Yes.

A. LPM would react and slow down the line.

Q. And what if you entered one lower?

A. Lower than previous --

Q. The LPM activation point. No impact at all?

A. Yeah.

Q. Okay. So that would be on discharge, right, I take it?

A. Right.

Q. What -- do you have section limitations too?

A. Yeah.

Q. Yeah, okay. So if the LPM was in effect, and it was trying to modify the section pressure limitation, and you were changing a limitation that it was trying to modify, have you ever seen there be a conflict?

A. Never.

Q. Okay.

A. I don't -- I'm not 100 percent sure, but I don't think

it would let me.

Q. Okay. But you think it might just hold you up until --

A. Yeah.

Q. -- it had done its thing. Okay.

MS. BUTLER: That would be an IR request we'd want to make, Jay.

MR. JOHNSON: Okay.

MS. BUTLER: To know the answer to that question.

BY MS. BUTLER:

Q. Okay. So then from that little bit of discussion, when you see LPM invalid alarm pressures, do you see that very often?

A. Not that I can remember.

Q. Okay.

MS. BUTLER: So, Matt, could you show him the alarm log that we received?

MR. NICHOLSON: For which day, Karen? For the 25th?

MS. BUTLER: For the 25th, I think it was, of July.

BY MS. BUTLER:

Q. We just want to see if you remember (indiscernible) before.

MR. NICHOLSON: Double-sided. So he's got the entire set here on the 25th, Karen.

MS. BUTLER: Thanks.

BY MS. BUTLER:

Q. I'm showing a 1625 as an event number. Can you find it by that?

A. 1625?

Q. Yes.

A. Yep. I see it. LMP invalid pressure. LPM may not be able to detect over pressure.

Q. Right. Do you see those very often?

A. Typically only when the pressure would go to zero, I'm thinking.

Q. Okay. So have in this in the past have you linked this type of alarm with a low pressure?

A. Yeah. I'm not 100 percent sure. I don't think I can answer that.

Q. Okay. All right. So prior to me asking that, if it hadn't said Marshall and it said a different location, would you think low pressure or would you just think you had some problem with your pressures?

A. Yeah. I'm not sure.

Q. Okay, all right, well, that's fair.

A. Yeah, probably seeing Marshall probably led me to say what I said.

Q. Yeah. Okay. You caught my drift --

A. Yeah.

Q. -- in question there. So thank you for that --

A. Yeah.

Q. -- clarification. Okay. Have you ever recommended enhancements? Did I ask you that already?

A. I think so. To SCADA?

Q. Yes.

A. Yes.

Q. Okay. All right. So if -- with that, I think I'm going to turn it over to other people ‘cause I think I've checked off my list. So thank you for bearing with me.

A. Okay.

MR. NICHOLSON: Next let's go to you, Brian.

MR. PIERZINA: I don't have anything for Allister.

MR. NICHOLSON: Ravi.

MR. CHHATRE: Yeah, I have a few questions.

MR. EWING: Will I need this or do you want this back?

MR. NICHOLSON: Go ahead and hold on to it.

MR. EWING: Sure.

BY MR. CHHATRE:

Q. You want to take a break?

A. No. I'm good.

Q. Before I ask my questions, I just want to continue what Karen was asking you about your duties. I think you mentioned something about people issues at start. I'd just like to go back to that, and can you describe what your duties typically are on a routine day?

A. Okay. I think I said it in my initial transcript too,

but dealing with problems that people have throughout the day. So if they have problems with their -- with shipper services.

Q. With?

A. Shipper services.

Q. Okay.

A. So scheduling problems. I'll help them organize that. Problems with their SCADA, I help them organize that.

Q. Okay.

A. Problems with any of the applications that they're using such as CMT or PI or any computer program they're using. Help them out and try to get the right people involved to help fix it.

Q. Okay. And what else?

A. What else?

Q. Other problem, what else (indiscernible).

A. Yeah. Well, there's a few administrative duties that we do.

Q. Like time cards or --

A. No. We do the schedule.

Q. Okay, schedule.

A. Do all the scheduling.

Q. Okay. But is it done on daily basis or you are kind of --

A. We can do the whole year, and then we make adjustments throughout the year.

Q. Okay. And what else?

A. That's probably the hardest question you guys ever ask, what do I do during the day? I'm very busy.

UNIDENTIFIED SPEAKER: Do you want Curt to leave?

MR. EWING: No. Well we do e-performance stuff. E-performance.

BY MR. CHHATRE:

Q. Okay. What is that?

A. That's how we're grading people, how they're doing their job.

We do --

Q. That will be your daily kind of routine.

A. But we'd be taking notes on how people are performing and --

Q. Okay.

A. -- throughout the year.

Q. Okay.

A. We're really just there to assist the operator.

Q. (indiscernible) come back to -- you can come back.

A. Yeah.

Q. I know you may not (indiscernible).

A. Yeah.

Q. Can you just briefly give some kind of breakdown like solving problems takes so many percent of your day and just a (indiscernible) change on daily basis.

A. Okay. Yeah. So currently a lot of the things we do are

dealing with over pressure situations.

Q. Okay.

A. That's part of our day.

Q. Right.

A. Liaison with management, that's part of our day.

Q. (indiscernible) what percentage of your time goes to like for example solving the problems you said like (indiscernible), SCADA, that kind of thing that part goes to administrative scheduling and some part goes to --

A. Yeah.

Q. -- e-performance. So what percentage of your average --

A. I'd say 50 percent of my time goes to dealing with helping people --

Q. Okay.

A. -- solve their problems. I'd say 20 percent of my time goes to dealing with technical things like over pressures column separation calculations, and things like that. I'd say a lot of my time goes to reading e-mails.

Q. Okay. I guess that would be administrative --

A. Yeah. Yeah. A lot of my time goes to communicating things that are happening --

Q. Okay.

A. -- within the control center to external parties.

Q. Like about -- 20 percent?

A. Sure. I'm just guessing.
Q. Yeah, I'm -- that's all I'm asking..
A. Yeah.
Q. And I guess (indiscernible) limiting whatever --
A. Yeah.
Q. Okay. So since almost 70 percent give or take two percent goes (indiscernible) side of control room. Is that correct? I mean -- 20 percent about over pressure and those type of issues --
A. Yeah.
Q. -- 50 percent shipping and SCADA and that kind of issues that together 70 percent.
A. Yeah. But we're not really making a technical decision. We're coaching these people to --
Q. True, but on the technical side --
A. Yeah.
Q. So I guess my next question then is if this is a typical or most leads are give or take two percent?
A. Yeah, I would say.
Q. Does that mean that the lead really needs a reasonably good technical background?
A. Yeah. Not necessarily, but it does help.
Q. You lost me. If you are talking about dealing with over pressure and helping them with shipping and SCADA and all that --
A. Yeah.

Q. -- you are saying you don't need technical background might be helpful, but you don't need one?

A. I would say you don't need a technical -- you can be taught that, right. You can be taught how to deal with over pressure. You can be taught how to deal with --

Q. Okay. I'll leave that -- if you are taught then you have technical background.

A. Yes. Yeah. But we've had people in the position who haven't had technical backgrounds who can do the job just fine.

Q. Now are there any issues during your daily operations that you would elevate to your supervisor?

A. Um-hum.

Q. On a daily basis? Can you tell me typically what those would be?

A. Over pressure.

Q. Can you give me an example?

A. If you have an over --

(Simultaneous comments.)

Q. Since I'm not an operator.

A. If you have an over pressure of over 105 percent --

Q. Okay.

A. -- of our maximum allowable pressure, then I would notify my management as well as regional management in the field.

Q. Who your immediate supervisor will be (indiscernible)?

A. Curt Goeson is the supervisor.

Q. Operations what would the title be?

MR. EWING: What's your title?

MR. GOESON: Supervisor --

MR. NICHOLSON: Super -- let's just -- I'm not sure that got recorded. Can you repeat that, Curt?

MR. GOESON My title is Supervisor, Control Center Operations.

BY MR. CHHATRE:

Q. You informed your supervisor, which is Curt, and you mentioned somebody else?

A. Yeah, the regional managers.

Q. And would that be the same level as Mr. Curt or be one level up?

A. They'd be a level up, yeah, level up, yeah.

Q. Regional -- you say regional --

A. Regional managers.

Q. Oh, regional managers.

A. So these are the guys in the field who are in charge of --

Q. Okay.

A. -- certain sections of line.

Q. And would 105 percent MAOP would that be a violation or it will not be a violation?

A. Depends where -- in violation of what?

Q. (indiscernible)

A. No, no.
Q. That's why I'm asking.
A. It's a violation of our procedure. That's when we have to escalate it.
Q. So what percentage you have to exceed to qualify for violation?
A. I'm not sure. 110.
Q. 110. And then who investigates why the violation occurred? Would that be you or would that be your supervisor or regional?
A. No. It would be me as well as CCO Technical Services.
Q. And --
A. CCO Technical Services.
Q. What is CCO Technical Services?
A. It's the people, the technical people in our department who investigate technical issues.
Q. What does CCO stand for? I'm not --
A. Control Center Operations.
Q. I'm not --
A. Control Center Operations.
Q. Okay. So essentially you are like a medium. Once an operator comes to you saying, hey, I'm exceeding MAOP, then you take that issue and deliver it to your supervisor, regional people and try to get that solved?
A. Yeah.

Q. In the meantime what the operator will be doing?

A. Depends on the situation.

Q. Like I say, over pressure on (indiscernible).

A. Okay. So let's say it's an overpressure on 6B. If that pressure was over by -- there's procedures for that that we can look at. But if it's over by 100 to 105 percent, we would contact regional management --

Q. Right.

A. -- and inform them.

Q. That would be you?

A. I would contact regional management, yeah, and I would inform them that we had an over pressure situation.

Q. Right.

A. Two percent for example, and they would say do you notice anything out of the ordinary on the pipeline? Are pressures holding? And I would say, if pressures were holding, I would tell them that they're holding fine. And typically he would say if pressures are holding fine, continue to operate the line.

Q. Will do what?

A. Continue to operate the line.

Q. Okay. But then -- you don't want to be operating at 102 percent MAOP. So what actions -- who will be taking -- while this thing is going on, what happens on the line?

A. Okay. So I have to explain the difference between the -- so a lot of our over pressures aren't reaching MAOP. They're

over pressuring our self-imposed limits.

Q. Okay. So when you -- earlier question when you said over pressure 105 percent MAOP, you were --

A. I was wrong when I said that.

Q. Okay.

A. It would be over pressure of our limits.

Q. Okay.

A. Yeah.

Q. That would be below MAOP?

A. Yes.

Q. Okay. So what then is happening while you are contacting the field people? What is happening with that line? Is the operator doing something to drop the pressure or are --

A. Oh, yeah. He's -- so he's taking the -- he's returning the line to normal operating --

Q. And how --

A. -- standards within limits.

Q. How does he or she do that?

A. By stopping pumps upstream or closing pressure control valves upstream.

Q. So they can take that action independent of your guidance?

A. Yes, that is their procedure.

Q. Okay. So is it automatic or you got to tell them to

drop the pressure?

A. No. It's automatic.

Q. Automatic. So they just inform you and go back and start lowering the pressure

A. Yeah. They would lower the pressure before they even inform me.

Q. Okay. Now what are your triggers that you will suspect as the line may have a leak?

A. Sudden drop in downstream pressure.

Q. Downstream pressure. Okay.

A. Drop in upstream pressure.

Q. Okay.

A. Flow rate increasing upstream of suspected leak. VFD speed increasing of suspected leak.

Q. What is that?

A. VFD speed --

Q. What is --

A. The speed of the pump.

Q. Okay.

A. Would increase upstream of suspected leak.

Q. Okay. Upstream.

A. Yeah.

Q. Okay.

A. An MBS alarm is another trigger.

Q. Which one?

A. MBS alarm.
Q. That is not balance?
A. Yeah.
Q. What do they stand for?
A. System.
Q. (indiscernible) balance system, okay.
A. I think we call it Material Balance System.
Q. Okay.
A. Pumps falling offline, another leak trigger.
Q. Okay. Anything else or --
A. Not that I can think of right now.
Q. Okay. So any of these -- I mean how will these -- are these levels (indiscernible) serious potential problem, how many of these got to kick in or any one of those is extremely critical or they are all equally critical?
A. They're all equally critical. So if we have three of those leak triggers --
Q. Okay.
A. -- we'll be shutting down.
Q. So you need three to --
A. Yeah.
Q. -- take automatic --
A. Or if I'm unsure of what's happening, then we'd be shutting down.
Q. Okay.

A. Or if the operator is unsure what's happening.
Q. What does that mean?
A. If he suspects that there's a leak.
Q. Okay. I was pretty good up to this point (indiscernible) then you lost me.
A. So if he has two of those triggers --
Q. Okay.
A. -- and he doesn't feel comfortable operating the line, then we'd be shutting down.
Q. Okay. At what time of these triggers he or she comes to the lead, in this case you?
A. Depends on --
Q. But there is no guidance for them as to if you see at least one come to me or at least two come to me, is there a guidance for them?
A. Yeah. There's a procedure that tells them if --
Q. What --
A. -- they receive a trigger.
Q. What to do.
A. Yeah.
Q. Since the accident, you as lead, did you have any like a meeting or lessons learned or evaluating kind of situation? I will call lessons learned, if you would, for lack of any better term. with all your operators who reports to you?.
A. Not formally, no.

Q. Did you do anything informally?
A. Yes. Lots of discussion about what's happened.
Q. And discussions focused on what?
A. MBS alarms.
Q. Okay. Can you elaborate what was discussed?
A. Ensuring that if we have an MBS alarm we do not exceed the 10-minute rule.
Q. I'm sorry?
A. The 10-minute rule.
Q. Oh, 10-minute rule. Okay.
A. And column separation, ensuring we don't go past the 10-minute rule when we're dealing with column separation.
Q. And did anybody in your group question the 10-minute rule or did you question as supervisor 10-minute rule?
A. No.
Q. Do you know as a supervisor where the 10-minute rule comes from?
A. Yeah. I believe it comes from a former leak that we had on our system.
Q. Can you elaborate on that? Comes from that leak meaning what?
A. Meaning the same thing happened at a column separation occurred at a previous leak. I'm not sure how many years ago.
Q. Okay.
A. But many years ago. And it came from a lessons learned

from that incident. So they pumped into a column separation for quite a bit of time causing a leak, and from that the lessons learned from that leak they developed the 10-minute rule in order to try to --

Q. Who is they?

A. Whoever was developing procedures at the time. Probably the --

Q. You haven't seen (indiscernible) lessons learned (indiscernible) out of your tenure operator?

A. From that incident?

Q. I guess the 10-minute rule and this 10-minute rule appears to be quite common in your procedure. My question is as an operator or the supervisor have you read everything about that 10-minute rule from lessons learned or whatever the question may be?

A. Yeah. I think that in training we read about the incident that happened. I think it was in --

UNIDENTIFIED SPEAKER: March 3, 1991.

MR. EWING: Yeah.

MR. CHHATRE: I see it. I'm trying to find out since he's following the rule and is being implemented, do we know the background for the supervisor?

MR. EWING: Yeah.

BY MR. CHHATRE:

Q. I understand that operator may not.

A. No, I -- yeah --
Q. Okay.
A. I don't know the exact dates or the exact times, but I do know the --
Q. Okay. So you are saying this 10-minute came because, because of what? What would have happened beyond 10 --
A. Because if they would have shut down at 10 minutes, then they would have prevented the longer leak, running the pumps for longer than they should.
Q. Do you recall what line, what site? Was it liquid gas?
A. Was liquid.
Q. And do you know (indiscernible) applying that rule is it applicable to all different sites or applying to the products?
A. Yes.
Q. It is (indiscernible) applicable?
A. Yeah.
Q. And based on what? Why is it applicable (indiscernible) is it independent of the line size or pressure, operating pressure?
A. It's because it says in our procedure to not go past 10 minutes if we don't see column separation.
Q. Okay. Now I want to go back to training for a little bit. Dave was going through kind of a training with mentor Teresa.
A. Oh, Dave, yeah.

Q. Yeah.
A. Yes.
Q. And who assigned him with Theresa.
A. Training Department.
Q. That is different than the Control Center?
A. It's part of the Control Center, but it's -- yeah, a different area --
Q. And who is that?
A. Pardon me?
Q. Who heads the Training Department?
A. Jim Johnson.
Q. And have you got anything from Jim that Dave will be assigned to your unit or whatever your -- that you'll be training him and how long or anything like that?
A. Oh, prior when he came down?
Q. Yeah, before he came down.
A. Yeah, yeah. We heard that Dave's going to be training with Theresa, and --
Q. We meaning you and your supervisor or you meaning -- we meaning who?
A. Myself and my partner.
Q. Okay.
A. (indiscernible).
Q. Okay.
A. So we're the shift leads for that shift.

Q. Okay.
A. Yeah.
Q. You heard that he will be training with Teresa. Teresa told us that nobody came and told her that somebody will be training with her. That's why I tried to fill in the gap.
A. Okay.
Q. So did you go and tell Teresa that he will train with her?
A. I'm not sure. If she says no, then probably no.
Q. Okay. Do you know how long he'll be trained --
A. Indefinitely.
Q. How will you schedule him for work?
A. So we were -- initially he came back from leave, and he was on a different schedule. He was slowly coming back.
Q. Right.
A. So he was working -- I'm not 100 percent accurate, but he was working less of a schedule, half days kind of thing, and then he came back on straight days, and then he was moving into normal shift rotation.
Q. So as a part of the training, was he expected to kind of monitor or operate the lines?
A. Yes.
Q. So on the day of the accident, was he operating the line?
A. Yes.

Q. And what Teresa was doing?
A. Sitting beside him.
Q. Just watching him, not doing anything?
A. I'm not sure. I was -- I'm not right there with them.
Q. I'm sorry. As a supervisor, you've got to assign the work to the employees, right? Or you are not assigning?
A. Not generally, not throughout the day, no. They have their own tasks to do.
Q. Right. So she has her own tasks.
A. Yeah.
Q. My question what were the tasks while she is training Dave?
A. The same tasks that she would have as a regular operator every day.
Q. Okay.
A. And then they would share the tasks.
Q. Okay, but no other tasks.
A. She may have been working on something else that she wanted to get done with an objective or something like that, but I'm not sure.
Q. But you wouldn't know that?
A. I wouldn't know exactly what she was working on, no.
Q. (indiscernible) ask that question because (indiscernible) how do you handle that if you do not know what she's working on? As part of your duty (indiscernible) taking

notes (indiscernible).

A. Um-hum.

Q. So how do you evaluate Teresa --

A. Because --

Q. -- if you do not know what she's doing.

A. Well, when she has -- at the end of the year when she's -- when she has an objective that she has to fulfill, if she's not been working on it, then it will show up in the -- in her work. So it won't be complete or it will be --

Q. Okay. As a supervisor, were you taking any (indiscernible) sort of lack of better word between any actions that (indiscernible) any employee that can -- somebody was under you or under as a probation (indiscernible).

A. Not that I can remember.

Q. Any of the employees that you were kind of looking at the performance problems?

A. Not that I remember, no.

Q. Okay. So how will you rate Dave's performance for whatever three weeks, a month he was with you?

A. Good.

Q. And were you watching him or how do you --

A. Yeah, I was --

Q. -- depending on the Teresa's input to you?

A. I was watching him, and what I could see was he was handling the majority of the work.

Q. Okay. I guess you started the training in the control room, and my question is who was your mentor at that time?

A. When I first entered the control room? Aaron Zimmel (ph.).

Q. Who?

A. Aaron Zimmel.

Q. And --

A. A-a-r-o-n.

Q. I'm sorry. Say that again.

A. Aaron Zimmel, A-a-r-o-n.

Q. Okay.

A. Zed-i-m-m-e-l.

Q. Okay. And is Aaron still on the control room or moved up or --

A. He's been taken off for this investigation. So he's still in the Control Center.

Q. He's still in the Control Center.

A. Yeah.

Q. Okay.

A. And --

UNIDENTIFIED SPEAKER: I didn't catch that. He was your mentor when you were an operator?

MR. EWING: When I was an operator.

MR. NICHOLSON: On a console?

MR. EWING: Yes.

BY MR. CHHATRE:

Q. And what's his current title, Aaron's current title?

A. Shift lead.

Q. So he's like, like you?

A. Yes. And I had another mentor, Larry Larsen.

Q. And he's still --

A. No. He's no longer with the company.

Q. And who was the shift lead at that time, if you remember?

A. I can't remember. Would have --

(Simultaneous comments.)

Q. (indiscernible)

A. Right.

Q. And one of the comment you made earlier was that you help people with their SCADA problem? And what (indiscernible) example?

A. Hey, Al, my upstream dense atoner isn't working.

Q. Okay.

A. I've called the field, and they said that everything should be working. So then I would say okay, I'm going to contact SCADA. I'd page SCADA. SCADA would get back to the operator.

Q. (indiscernible) problem that you are trying to pretty much fix?

A. Yeah.

Q. I thought (indiscernible) software problems.

A. No, no, no.

Q. Okay. Then you said one of the (indiscernible) you will help the operators balancing the line. Can you educate me on that? What is that balancing line? What it means in terms of your interaction or help to the operator?

A. I'm not sure what you mean by balancing line.

Q. I guess one of the (indiscernible) you will help the operators in balancing line issues.

A. Is that from CMT do you mean?

Q. I guess so. I'm not sure where the balancing, where those balancing line falls into.

A. I'm not sure of the question.

Q. Okay. Let me just try one more time (indiscernible) then we'll move on.

A. Sure.

Q. You said one of the tasks you do was like if the operators have problem in balancing the line. I'm not sure. I just (indiscernible) balancing lines. Does that make any sense to you?

A. Well, if it's, if it's CMT problems. So let's say they had --

Q. Maybe that's -- CMT and --

A. Yes, Commodity Movement Track --

Q. Okay.

A. That's the line balancing.

Q. Line balancing. Okay.

A. So the program, let's say is not working properly or they've entered a wrong number somewhere, I would help them try to solve that problem.

Q. Okay. To change the --

A. To make the numbers --

Q. Make discharge and --

A. No. Like what you've pumped out of a terminal at one end and what you've --

(Simultaneous comments.)

Q. -- receive?

A. Yeah.

Q. Now some of these, I guess going back to the (indiscernible) and flow, where are these sensors? Different locations or they are in each unit, pump station and --

A. Yeah, in each pump station. So --

Q. Okay. There's nothing in between the two pump stations, the (indiscernible).

A. It depends. There could be midline transmitters.

Q. There could be.

A. Yes.

Q. So the controllers would know when for example when the control room sees, guy sees what the operator sees pressure rise, the person will know where the pressure rise is or which sensor at what location --

A. Yes.
Q. -- in the line?
A. Yes.
Q. And how far apart are these sensors?
A. Each station is approximately 30 miles apart.
Q. Okay.
A. It depends on the line.
Q. And then maybe in between --
A. And then --
(Simultaneous comments.)
A. -- in certain locations they may have.
Q. And on those locations, how are those fixed?
A. Typically column separation locations. So post 580, post 7 whatever it is (indiscernible).
Q. Okay. And were those sensors, especially the column separation, near Marshall? Were there any sensors like that in the Marshall --
A. Not that I know of.
Q. No. Okay.
A. Off the top of my head. You mean like a discharge transmitter or a --
Q. Well --
A. -- or a midline transmitter?
Q. Well, I'm looking at -- you said each pump station will have one, I guess, inlet and one outlet, if you (indiscernible)

that term loosely.

A. Okay.

Q. Is that correct?

A. Yes.

Q. And then you said there could be one or more in between the two pump stations.

A. Yes.

Q. And my question was you obviously have one at Marshall Station.

A. Yes.

Q. Coming in and leaving.

A. Yeah.

Q. My question was before Marshall Station or after Marshall Station, are there any others between the two stations? At the Marshall location. Like before Marshall between Marshall and the previous station, is there in between, and is there in between Marshall and next?

A. Not that I know of. No, there's not.

Q. Okay.

A. There's -- it's Mendon, then Marshall. There's nothing in between. And Marshall and Stockbridge there's nothing in between.

Q. Okay.

A. There is after Stockbridge--

Q. Okay.

A. -- as you mentioned in the area where you -- we do experience column separation.

Q. So then the column separation alarm came in that I guess five-minute was it at Marshall, which sensor was it coming from?

A. Coming from the MBS. MBS was telling us that there was a five-minute alarm.

Q. And where that sensor will be?

A. I'm not sure --

UNIDENTIFIED SPEAKER: It's a combination.

MR. CHHATRE: Okay.

UNIDENTIFIED SPEAKER: And we'll talk to the MBS folks on that.

MR. CHHATRE: Okay.

UNIDENTIFIED SPEAKER: They get a variety of data from, you know, flow meters and the pressure transmitters that we're talking about and other data. They take accumulation of that, and then basically so their alarm is from a combination.

MR. CHHATRE: (indiscernible) you know, I'm still thinking that graph I saw that Matt showed me sometime ago about the topography of the station, and Marshall looked like it was (indiscernible) even the ground line. So I'm still trying to find out what the column separation and (indiscernible) coming from Marshall. And considering the topography of it, we know that the sensor sent that information to whoever.

BY MR. CHHATRE:

Q. Should that be unusual for that station or should not, should that not be? That's what I'm really thinking.

A. Yeah.

Q. That's the reason for all these questions. I'm trying to understand myself.

A. Yeah. And like I said before, I wasn't -- I'm not -- I wasn't an expert on that pipeline, so I didn't know the topography of --

Q. Okay. But would the, I guess, your specialist, the whoever you guys go to.

A. The MBS analyst?

Q. Would they know? They have access to topography.

A. Yes, I think so. I can't answer that.

Q. Okay. I will -- maybe it's a question I'll give for them.

UNIDENTIFIED SPEAKER: They each, the operators have access to the topography on their screens.

MR. CHHATRE: Right. Well, let me clarify.

UNIDENTIFIED SPEAKER: You should have access to topography because you get the same MBS screen that all your controllers get, right? And isn't elevation on that?

MR. EWING: Yes.

UNIDENTIFIED SPEAKER: Okay.

MR. EWING: Yeah.

UNIDENTIFIED SPEAKER: So you do have access?

MR. EWING: Yes. We have it there, and we have it in our SCADA.

BY MR. CHHATRE:

Q. (indiscernible) or is it reasonable to think that (indiscernible) topography and alarm that came in, that five-minute alarm to see if that is a usual location for that alarm to come in?

A. Yeah, I did.

Q. Okay, that's fine. Now column separation alarm. Does it get cleared by the program itself or does it -- somebody has to go and manually clear it or you are not right person to ask that question?

A. Right.

Q. Who is the right person to ask that question?

A. The MBS --

UNIDENTIFIED SPEAKER: Ted. He'll be here tomorrow.

MR. CHHATRE: Okay, all right, Jim?

UNIDENTIFIED SPEAKER: Ted.

MR. CHHATRE: Ted. Okay. Make a note.

BY MR. CHHATRE:

Q. So you really wouldn't know if that alarm can be cleared by overriding anything? Can override and say okay (indiscernible) is cleared? You wouldn't know that?

A. That would be a question for Ted.

Q. Okay.

UNIDENTIFIED SPEAKER: I'm going to interrupt for a second. That was Richard.

MR. EWING: Pocoma (ph.).

UNIDENTIFIED SPEAKER: Yeah. I sent him back to (indiscernible).

BY MR. CHHATRE:

Q. I guess you mentioned something about shift from the technical leads to using (indiscernible) use it wrongly people something.

A. People leaders.

Q. People leaders. I'm sorry. And so when you got your promotion, did that change already had occurred?

A. It was in the process of occurring, yeah.

Q. So you (indiscernible) in mid --

A. Yeah. The direction was that we were becoming people leaders, and that's the message we got.

Q. Okay.

A. That we wanted the operators to be more responsible for the operation. We were to be coaches and --

Q. (indiscernible) pretty much.

A. As an operator, yeah.

Q. Yeah. And I'm glad (indiscernible) what is your preference? What are your thoughts on those two different approaches?

A. I prefer the people leader side.

Q. You prefer the people leader.
A. Yeah.
Q. So if there's a technical issue --
A. But I do think there should be more technical people there.
Q. But you're really confusing me.
A. No. I like my job.
UNIDENTIFIED SPEAKER: He likes being a people leader.
MR. CHHATRE: Oh, okay.
MR. EWING: But there should be technical people like I've stated in the --
BY MR. CHHATRE:
Q. Okay. Between the two, if you had to pick one --
A. Yes.
Q. -- you would prefer technical?
A. Well, no. I prefer to be a people leader.
Q. You prefer people -- for organization. I thought you just said you would like more technical people in there.
A. Yes, correct.
Q. Okay.
A. But I don't want to lose my job.
Q. Okay. We're not talking about your job.
A. Oh, yeah.
Q. Now this column separation, that five-minute alarm, when did that occur? Do you know when that occurred on the pipeline

(indiscernible)?

A. Where the alarm occurred?

Q. Yeah, location. I mean the alarm came and (indiscernible) you guys can roughly estimate the location where the alarm came from, and my question is immediately somebody comes to you, do you know where the alarm came from?

A. Yeah. Usually they tell you between such and such a place and such and such a place.

Q. And I guess where was that at Marshall where the incident occurred? Was it before or after?

A. I can't remember. Oh, where on the pipeline?

Q. Right.

A. It was in that area. I can't remember off the top of my head. It will be in the phone records, but --

Q. I guess -- okay. I mean after the incident, did you go back and see if there was a column separation or not --

A. Yeah, it --

(Simultaneous comments.)

A. It was in that area.

Q. Near --

A. Yes.

Q. (indiscernible)

A. Yeah.

Q. Half mile, mile?

A. Well, so when MBS alarm we receive it would be from one

station to another station.

Q. Okay.

A. So I can't remember the exact stations that it was in.

Q. Okay.

A. But I know it was in the section where the leak occurred.

Q. Okay.

A. So within a 30, 60, 90-mile section.

Q. Miles. Okay. So there are no other sensor or pressure transmitter between those. In some cases there are. That's why I was asking that. Otherwise I would not ask. I know (indiscernible) the stations, but I thought there were some sensors between the two stations, and I was wondering where there was a sensor in between.

A. I don't think --

Q. Can you get back to us on that one, if there is one?

A. If there's a sensor?

Q. Yes.

A. A pressure transmitter?

Q. Yeah. Obviously there's a five-minute alarm.

A. Yes. So --

Q. Column separation.

A. So the -- like you said, the MBS alarm brings in all this data, right.

Q. Right.

A. From everywhere. So it's not one pressure transmitter that's causing the alarm. It's multiple things. A drop in flow, drop in pressure, drop in.

Q. There is not one sensor that will actually give you the alarm?

A. No. It's a bunch of different things that go into the MBS program, which create an alarm telling you --

Q. So there's --

A. Telling you --

(Simultaneous comments.)

Q. Based on whole bunch of -- so it's not just one piece of information the program is looking for?

A. Right.

Q. Okay. Understand.

UNIDENTIFIED SPEAKER: Maybe I can ask a, ask a question now, and I don't want to put you on the spot, Allister.

BY UNIDENTIFIED SPEAKER:

Q. When we get that MBS alarm, it -- column separation, does it say there's a column separation, a warning for column separation on Line 6B or does it say Line 6B between Marshall and Stockbridge?

A. It doesn't say anything about a column separation. It says MBS alarm, five-minute alarm between such and such a station ‘till let's say Stockbridge or let's say Griffith and Stockbridge.

Q. Okay.

A. And then what happened was the MBS analyst does what he does, and he comes back to us and says there's a column separation downstream of such and such a place, and we go okay.

MR. CHHATRE: So column separation is an analysis of (indiscernible) balances for the program tells you.

UNIDENTIFIED SPEAKER: And the MBS analyst makes the determination --

MR. CHHATRE: Right.

UNIDENTIFIED SPEAKER: If it's column separation. And communicates that to the shift lead and operator.

MR. CHHATRE: Now I understand little bit better.

MS. BUTLER: Just to clarify one point, and I want to make sure we have this right. You really can't tell from that whether it's 6B or 6A unless you know the specific locations it's referencing, correct?

MR. EWING: No, I think it -- I believe it says 6B. I'm not sure actually. The operator would tell me they have an MBS alarm on 6A or 6B.

UNIDENTIFIED SPEAKER: We can look at these alarm logs here. Let's see how it actually came in. Says Line 6 there.

MR. EWING: Yeah. So there you go.

MS. BUTLER: It says what?

MR. EWING: Line 6, alarms, five-minute alarm, Griffith to Marshall cleared.

MS. BUTLER: Right. So you have to know the location.

MR. EWING: Yeah.

MS. BUTLER: For a pipeline system to know whether it's 6A or 6B.

MR. EWING: Correct.

MS. BUTLER: Yeah, okay.

BY MR. CHHATRE:

Q. But the analyst cannot actually tell you what location in that segment (indiscernible) where the column separation is or began.

A. They would usually say within two stations, yeah.

Q. Okay, that's -- and who is your specialist (indiscernible)?

A. Ted.

Q. Ted again.

A. Is one. I think we have two of them, don't we, Curt? Ted is one for sure.

MR. GOESON: The engineer, and then there's an analyst.

MR. CHHATRE: And who that would be?

UNIDENTIFIED SPEAKER: Jim Knudson.

MR. EWING: Yeah. So we'll have two MBS --

MR. CHHATRE: Two chances to --

MR. EWING: Yes.

UNIDENTIFIED SPEAKER: I didn't think Ted was MBS.

UNIDENTIFIED SPEAKER: They have different roles within that department. Jim Knudson is an analyst.

MR. CHHATRE: Oh, Ted --

UNIDENTIFIED SPEAKER: Ted's -- yeah.

BY MR. CHHATRE:

Q. And who came and actually told you on the day of the accident that there was a column separation or mass balance alarm on line 6B?

A. Dave Scott phoned me on the phone.

Q. Okay. They'll phone you.

A. Yes.

Q. So you didn't see Teresa? Teresa was (indiscernible) on the phone.

A. No.

Q. And did you tell them to contact Bob at that point or not? I think from what I understand earlier you said that Bob was handling Line 6B.

A. Right.

Q. Okay.

A. So I answered the phone, and I told the MBS analyst.

Q. Analyst called Bob.

A. And then Bob walked back in the room, and I said, Bob, we have an alarm on 6B.

Q. Okay.

UNIDENTIFIED SPEAKER: And you ceased to be involved at that point?

MR. EWING: Correct.

BY MR. CHHATRE:

Q. The reason I ask this question was did Dave or Teresa knew that you are not the right person to contact but Bob is?

A. Well, yeah, but we often take calls for each other.

Q. So it's a one phone, anybody can pick up?

A. There's two lines. One is called 8877 and one's called 8899, and often times --

Q. But either --

(Simultaneous comments.)

A. -- can pick--

Q. -- pick up --

A. -- the phone yeah.

Q. So you won't even know that which line. Phone rings. You press a button and pick up the phone. So you --

A. No, I do. It says -- one phone says 8899, one says 8877.

Q. Oh, so the phone did come to you.

A. The phone -- I'm not sure which number rang in, but I picked it up.

Q. That's (indiscernible) asking.

A. Yeah, I picked it up.

Q. Yeah. You picked it up, but you didn't know whether they actually called you or called Bob.

A. Right. And they didn't know whether they were call me or Bob.

Q. Okay. That helps. Because I was trying to figure it out why would they call you and then you direct them to Bob. Instead they should be calling Bob. So that -- now you --

A. Yeah. I didn't direct them to Bob.

Q. Right.

A. I just told Bob --

Q. Yeah, yeah.

A. -- about the alarm. That's all.

Q. In the shutdown mode, what kind of pressure you expect in the line? I mean (indiscernible) no leaks, you know, (indiscernible).

A. I can't really -- I don't know. For that line or for any line?

Q. Could be any line, and then we'll come back to that line.

A. Okay. Shutdown 150 pounds.

Q. Okay. Now with zero psi be normal shutdown point?

A. In some locations, like I answered in the previous transcript. Some locations it would be normal.

Q. And what other locations will be so different than the most locations?

A. It would be on big hill. It's a column separation.

Q. So it has to be at a --

A. At a high point.

Q. High point, yeah. The next question is when you see a

zero pressure (indiscernible) in shutdown, should that not be a cause for alarm?

A. Yeah.

Q. (indiscernible)

A. In hindsight definitely, but at the time I wasn't aware of that.

Q. And is that written down some place, a guidance to the operators that you should (indiscernible) column separation in this location is okay. Other location not okay?

A. No. I would say zero is probably not okay.

Q. But I mean -- I could be wrong on this one. I'm going by my memory, but that Dave felt that zero -- in the shutdown mode is normal and I believe so also Teresa, and both have 30 years plus experience. So I'm just trying to find out why they big disconnect. To me (indiscernible) --

A. Right.

Q. -- now on the hill makes lot of sense.

A. Right.

Q. So you have training or some place, some of these (indiscernible) features are not mentioned to your knowledge? Or has it been discussed in your group meetings or whatever? (indiscernible)

A. If zero pressure is abnormal?

Q. Yeah. (indiscernible) location --

A. Yeah.

Q. -- except, on these exceptional cases. At other locations zero is really not a problem in a shutdown mode or --

A. Yes. Well, it would be looked at as a possible leak trigger, and we have a procedure for that. So an unexplained drop in pressure could be looked at as a possible leak trigger.

Q. But that is not mentioned by anybody so far as a leak trigger.

A. Well -- when I say -- or zero pressure, yeah, an unexplained drop in pressure.

Q. Oh, I thought unexplained drop in pressure while the line is running, not in -- I mean could be unexpected pressure drop (indiscernible) psi --

A. Right.

Q. -- line --

A. Yeah.

Q. And (indiscernible). But this line as it was coming down read zero.

A. Um-hum.

Q. Then they raise it to three, came back to zero. And from the trigger that everyone informed me so far this has not been mentioned. I'm just kind of thinking whether that should be or should not be a trigger discussed in training like --

A. Yeah.

Q. -- unusual circumstances.

A. I guess, yeah.
Q. (indiscernible) group goes through the basic training.
A. Yes.
Q. You understand my thinking.
A. Yes.
Q. (indiscernible) about this one, but are unusual situations explained the training (indiscernible) not just the pressure drop.
A. Yes. We talked about column separation in the training process --
Q. Okay.
A. -- throughout the training process. Yeah.
Q. One little question, then I'll call it quits, and (indiscernible) so I'm just going to go to my page number and (indiscernible) if not, we'll move on.
A. Okay.
Q. Page 21 (indiscernible) the question was zero pressure at the end of the normal shutdown is trigger and (indiscernible) this is your transcript --
A. Yeah.
Q. You said depending upon the way it was in the line some places when we shut down they are typically (indiscernible) based on the revision profile. And are there any other exceptions where you would get your pressure besides the elevation?
A. We sometimes get low pressure at the injection location.

Q. Like delivery?

A. No, like where we're -- yeah, delivering to the line or injecting into the line.

Q. Okay.

A. Depending on -- just because the pups may be left on longer and --

Q. Okay.

A. -- the booster pumps and drain the pressure --

Q. (indiscernible) sequence of the --

A. Yeah.

Q. Okay. Anything else that comes to mind?

A. Nothing.

Q. That's fine. You mentioned that again going back to earlier testimony here that SCADA you said only if an issue. On my 19, page -- let me pass that. Then we'll take (indiscernible) and I'll come back to that.

A. Sure.

Q. (indiscernible) thank you so much.

A. You're welcome.

Q. For your time and patience.

A. You're welcome.

MR. NICHOLSON: Okay, are you finished?

MR. CHHATRE: I'm done.

MR. NICHOLSON: Okay. Brian.

MR. PIERZINA: I did think of one question.

BY MR. PIERZINA:

Q. It has to do with the CMT and the balances that the operators do. Would you expect a short to be reported to you by an operator?

A. A short? What do you mean?

Q. If it's coming up short.

A. Yes. So if they are pumping 10,000 cubes in at one end and it was coming only in 8,000 cubes at the other end, definitely.

Q. Okay. Was anything reported on shutdown?

A. No, I don't think there was a short.

UNIDENTIFIED SPEAKER: They were in mid-batch, so they wouldn't have known a short at that time.

MR. EWING: But we would know what we pumped and what we lacked. So what time did the leak happen?

UNIDENTIFIED SPEAKER: 1458.

MR. EWING: Yeah. So at 1500, that's when we knew our report, our two-hour balancing report. So there wouldn't have been an out of balance because you only had two minutes of actual leak.

UNIDENTIFIED SPEAKER: Okay.

MR. EWING: And then the line was shut down until the next day.

BY UNIDENTIFIED SPEAKER:

Q. Why -- I don't understand. Just because you have two

minutes, your system relies on a five-minute window, is that what you're saying?

A. No. So every two hours, we --

Q. Oh.

A. -- get a gauge from the tank, and that tells us we pumped 10,000 cubes. So at 1300 we would have a gauge, and the at 1500 we would have another gauge. So at Griffith we would have pumped 10,000 cubes for example. We still would have landed 10,000 cubes at Stockbridge, but because it was -- that gauge came so closely to when the leak actually happened you -- we couldn't tell that it was there.

Q. Okay. (indiscernible) moved enough to really --

A. Right. And then the line shut down after that. So you wouldn't know until you started the line back up again.

Q. Well, at some point, you know, so let's assume the rupture happened right there at, you know, 1500 --

A. Um-hum.

Q. -- and if it was too soon when it, you know, on the shutdown for that one --

A. Yeah.

Q. -- wouldn't you expect the imbalance to show up on the next calculation or might not --

A. Yeah, but the line was shutdown. So there's no oil moving out of the tank at the top end, and no oil landing at the bottom of the tank. You wouldn't see it until the line was

restarted that night at 1:00 because all the oil's going onto the ground at that moment. It all -- the line's not moving.

Q. Okay.

UNIDENTIFIED SPEAKER: So when we did start the line, that is (indiscernible).

MR. EWING: That's when you would have seen it.

BY UNIDENTIFIED SPEAKER:

Q. Did you get a short in the next cycle?

(Simultaneous comments.)

A. Yeah. I wasn't on that shift.

Q. So the next CMT report wouldn't have been until startup?

UNIDENTIFIED SPEAKER: I can't answer that.

MR. EWING: We would have ran the CMT report, but the -- but since the line was shutdown, there's no tank movement --

UNIDENTIFIED SPEAKER: Right.

MR. EWING: To get a gauge on the other end. So it just stays at zero. We didn't pump anything.

BY UNIDENTIFIED SPEAKER:

Q. So you would continue to do them every two hours.

A. Right. Even though --

(Simultaneous comments.)

Q. -- zero.

A. Right.

BY UNIDENTIFIED SPEAKER:

Q. So and I know you weren't involved in these discussions,

but they talked about (indiscernible) 630 cube line drain --

A. Right.

Q. During the shutdown, with the line shut down. So were, you know, where those numbers have come from.

BY UNIDENTIFIED SPEAKER:

Q. They call it drain up. What is drain up?

A. It would be when they open the valve at one end. So they opened the valve at Stockbridge, and they would land so much oil into the tank before the oil coming from Griffith would actually get there. So if there's a hill upstream of Stockbridge, oil would -- when they opened the valve, oil would start coming in, and then they start the pumps at Griffith before (indiscernible) 630 cubes that they calculated was happening at -- when they started to try and start the line. So --

Q. How --

A. It didn't happen on our shift. We didn't see it.

Q. This kind of falls in line with the question I have. You said you calculate column sep, I think is one of your job functions.

A. Yeah. No we do, yeah.

Q. Now you do. Oh, that's a new job function?

A. Yes.

Q. So I think that kind of goes along with what the next shift was doing. They were -- I think they were trying to figure out how much drain down they had that they would have to back

fill.

A. Yeah.

Q. And how is that calculation done since you do it now?

A. Since we do it now?

Q. Yeah.

A. We figure out the (indiscernible) and --

Q. At the nearest discharge?

A. At the nearest discharge pressure. And find out how much distance we are at the top point.

Q. Okay.

A. And then calculate how much volume would be in that section of pipe.

Q. (indiscernible) volumes remains --

A. Right.

Q. -- pressure?

A. Yeah.

Q. Pretty straightforward.

A. Yeah.

Q. And did that change happen after the accident or before?

A. Oh, I've been doing it after the accident. I haven't done it prior to the accident.

Q. I thought all operators had been trained to do that?

A. They have.

Q. Okay. I mean prior to (indiscernible) I thought it was typical that this was something operators normally operators

normally do, calculate that.

Q. Yes. Typical we do -- they would do it in training, but not -- I never did it as an operator.

A. Oh, okay.

BY UNIDENTIFIED SPEAKER:

Q. Another question for you, Allister. So if I understand, you know, the shutdown and startups and everything situation. If you got an MBS alarm on a shutdown, you would expect that alarm to clear, right?

A. Yes.

Q. Because the pipeline shut down. But that doesn't mean that the problem goes away, whatever caused it. But am I understanding kind of correctly that because an alarm clears, it's -- an MBS alarm, because it clears on a shutdown it just basically is --

A. Yeah.

Q. -- disregarded or assumed that the problem doesn't exist?

A. Correct.

Q. And --

A. At that time.

Q. And that's -- is that just a function of the things that can happen on a shutdown, the uncertainty with, you know, how the shutdown --

A. Yeah. So like I said before, the MBS takes in all these

different pieces of information. And when you're shutting down, your flows aren't steady, your pressures aren't steady. So we often get alarms when we shut down. After that they come in (indiscernible) clear.

Q. So I guess the question or the problem that I see is that if you frequently get alarms on shutdown, so now you don't have flow, you MBS alarm is going to clear. How do you confirm that you don't have a leak? Because of the transience involved, you know, in the data. I mean so you get this, you know, I guess, and it occurred to me a little bit yesterday. I just don't know, you know, with everything that's been learned how in this shutdown you can determine you don't have the -- or determine that you do have a leak or you don't have a leak?

A. Right. So the MBS alarm would be one, and then if the operator notices an unusual pressure or three leak triggers, that would be the other one. And until the operator tells me that there's a problem, I'm assuming that everything is okay because the MBS alarm is clear, and the operator hasn't told me that anything's wrong with the system.

MS. BUTLER: Could you repeat that? I'm sorry. I couldn't hear you.

MR. EWING: Sorry. So I think I said the other way for the leak to be detected would be if the operator would have noticed an unusual pressure and would have reported that to me and we would have investigated it further. But when I hear that the

line is shutdown and the MBS alarm is cleared, I assume everything is okay.

MS. BUTLER: Okay. So did you previously mention another trigger prior to that? Or I'm sorry. Did I just think you did?

MR. EWING: No. I don't think I did.

MS. BUTLER: Okay. Thanks.

BY UNIDENTIFIED SPEAKER:

Q. (indiscernible) I think we could look at Marshall and say, you know, we couldn't see zero pressure there, but if you're -- if the same situation happen -- I'm familiar with Iverson, you know, on top of the hill there Strait of Superior. If you do a shutdown on Line 3, get a call, get a MBS alarm and you show column separation, how do you confirm -- I mean you probably (indiscernible) I mean so you've got all the information that you typically have. How do you say I don't have a leak or I do have a leak?

A. We can't say that. We would consider it a column separation, which could possibly be a leak if we had an MBS alarm and zero pressure aft this has happened. But in the past, we would -- we were assuming that if the MBS alarm cleared everything was okay.

Q. So okay, yeah.

A. Right now --

BY UNIDENTIFIED SPEAKER:

Q. I want to clarify that then while we're still talking about. I thought I heard you say that on a shutdown you understand the MBS alarm will always clear. That seemed to be --

A. No, not necessarily always clear, no.

Q. I mean you seemed to understand that a minute ago. I thought you said it would always clear on a shutdown, right, because there's no flow?

A. I don't think I said that.

Q. Okay.

UNIDENTIFIED SPEAKER: Well, I did, I think. I think we've heard that in past interviews, and I don't know anybody can feel free to interject, but I guess from what I've understood is that if the line is shutdown, there's no flow, any MBS alarm is going to clear it because there's no longer an imbalance.

MS. BUTLER: I think what they said actually, Brian, was that typically many of those do clear, if -- if a five-minute MBS alarm continued to stay in play and did not clear on a shutdown, then they would look at that as an unusual event.

MR. EWING: That's what I --

UNIDENTIFIED SPEAKER: Curt I think has some input.

MR. GOESON: I think you're referencing my interview.

UNIDENTIFIED SPEAKER: Okay.

UNIDENTIFIED SPEAKER: It's my understanding the functionality of the model that on a shutdown, a shutdown system MBS alarms will clear because they're a function of times. That's

what I (indiscernible) you're referencing.

UNIDENTIFIED SPEAKER: Right, yeah, so I'm -- I guess I -- if there's an occurrence where an MBS alarm would not clear on a shutdown, I'd like to know what that would be.

UNIDENTIFIED SPEAKER: I would recommend that we ask Ted.

UNIDENTIFIED SPEAKER: Okay.

BY UNIDENTIFIED SPEAKER:

Q. Well, you say because it's a function of time. Can you elaborate more? Is that outside your understanding of the system?

A. I'm not -- I don't know the system in depth.

Q. Okay.

A. I just know that on, you know, get a five-minute alarm based on an imbalance over five minutes. So that if there's subsequent (indiscernible) --

UNIDENTIFIED SPEAKER: Who do we have scheduled next? The reason I'm saying that is I got a note from Ted, and Ted has got to fly out on Friday morning. Where are we going to put him? We seem to be right smack-dab really hung up on MBS questions. So maybe putting Ted next would help us on some of the interviews with the shift leads after that. I'm just throwing it out there.

UNIDENTIFIED SPEAKER: All I'd ask, Jay, is that Bob, who is scheduled next, has been on a huge consecutive run of days.

UNIDENTIFIED SPEAKER: So do Bob next?

UNIDENTIFIED SPEAKER: Yeah. And then --

UNIDENTIFIED SPEAKER: (indiscernible)

UNIDENTIFIED SPEAKER: 3:00.

UNIDENTIFIED SPEAKER: Okay, I did have some questions actually. I'm sorry. There's not many of them. I'm just going to run through these. Most of them are follow-ups, Allister.

MR. EWING: Sure.

BY UNIDENTIFIED SPEAKER:

Q. Your first round of interviews I think was decent enough for me to put my story together. One thing you mentioned though is you would like to have more technical support?

A. Yes.

Q. In the decision making process. But then you also mentioned the CCO Technical Services group. Is that not a branch that you can go to for technical support?

A. Yeah, during dayshift.

Q. Okay. They're only 8 to 5.

A. Yeah.

Q. While we're on the subject of MBS systems, do you have a good understanding of how that MBS system works?

A. Slight understanding.

Q. Meaning?

A. Meaning I know that --

Q. You know what column sep means?

A. I know what a column sep means, but that's not just MBS.

Q. Okay.

A. I know that it's basically monitoring pressures and flows throughout the system. And if it's -- if we're landing, -- it's basically measuring what goes into the system and what comes out of the system.

Q. Is it performing its own pressure drop calculations based on real time SCADA pressures at stations?

A. I'm not sure.

Q. You talked about adding midline pressure transducers where there's no column separation. What does that do for you?

A. Allows us to see what the pressure is closer to the column separation.

Q. So you can pinpoint column separation?

A. It would be --

Q. Tighter?

A. Yeah.

Q. Is that --

A. So our calculations would be much tighter, yeah.

Q. Okay. Is a leak one of several valid explanations for a column separation?

A. Yes. In our training, we're taught that a column separation can be masking a leak.

Q. But in this instance, it looks like people went out the way to explain it very differently.

A. Yeah.

Q. Would there be -- you see any hindrance if the procedure

just simply said start with the assumption it's a leak, look for your other leak triggers? Start with the assumption that your call (indiscernible) to leak, look for your other leak triggers. If you don't find those, then you can move on to another explanation?

A. Right.

Q. You wouldn't --

A. That would be good, yeah.

Q. I mean there's really no penalty in assuming it's a leak.

A. We should always assume that something is a leak. That should be our first thought.

Q. You talked a little bit about overpressures. This is kind of off the subject, but I'm curious how does an over pressure occur when you have an LPM system?

A. Pressure control valves don't always hold the pressure too well. Well, we're asking the equipment to do -- to hold a certain pressure, and with transient waves, pressure control valves don't just --

Q. Okay.

A. -- stop that pressure. They often exceed.

Q. That was one of my questions.

A. Yeah.

Q. So LPMs do cannot react quick enough to a transient?

A. No.

Q. Yeah. I want to confirm something. I hear this a lot. that one shift lead is over FMCC and the other one's over at pipelines. But as I understand it, that's not a formal split. That's something you guys kind of figured out amongst yourselves.

A. Yeah. We figure that out just to split the workload up.

Q. You talked a little bit about multi-tasking. You said you often multi-task. Was that an issue on the 25th?

A. No.

Q. So you were able to focus on the MBS alarm when it was --

A. Yeah.

Q. -- called into you.

A. Yes.

Q. There's been a lot of talk about people persons versus technical backgrounds. Which one are you?

A. I'm a people person.

Q. You're a people person.

A. Yeah. I try to be anyway.

Q. You're a people person, but you do have a background as a liquid line operator.

A. Yeah. I have a good background. I have 10 years experience in both liquids and gas, so.

Q. So doesn't that define you as a technical person?

A. It could.

Q. Where is that line drawn? I don't know.

A. I think it's my preference is to be a people person.
Q. Okay.
A. Yeah. I enjoy working with people rather than doing technical analysis of data.
Q. Okay. On the 25th, when you were called up about the MBS alarm, were you notified by Dave Scott about any of these low pressure alarms?
A. No.
Q. Did you pull up any of the --
UNIDENTIFIED SPEAKER: Speak up.
MR. EWING: Sorry. No. Sorry.
BY UNIDENTIFIED SPEAKER:
Q. So you weren't made aware of any of -- you weren't made aware of the LPM alarm.
A. No.
Q. You weren't made aware of the low suction alarm?
A. No.
Q. You didn't pull the alarm logs up on your --
A. No.
Q. Was Dave considered a non-qualified individual?
A. At that time, yeah.
Q. Would a non-qualified individually usually be shutting down a line?
A. Yes, depending on where they were in the training process.

Q. And he was how far into his training process?

A. I think I (indiscernible) in the transcripts, but I can't remember how far along he was, but he was a different case because he was a former operator who had operated for 20 plus years, and he was coming back in the training process.

Q. But you don't have anything -- procedures that says non-qualified person with 30 years experience coming back --

A. No.

Q. So really he's got to be defined as --

A. True, yeah. But as long as there's somebody sitting, a qualified person sitting with a operator, he would do that (indiscernible).

Q. Did you consult other operators when you were researching the MBS alarm on the 25th?

A. No.

Q. But you (indiscernible) the MBS analyst to be the expert?

A. Yes. He was the hydraulics expert there.

UNIDENTIFIED SPEAKER: The hydraulics expert? I don't think we have a hydraulics expert. The operators would be the hydraulics experts.

BY UNIDENTIFIED SPEAKER:

Q. I've got a lot of questions, and I think they all got answered, most of these. Looking back, you did talk in your first interview, you said you wished the operator had alerted you to

abnormal operating conditions.

A. Right.

Q. But when you talked to the operator, you didn't see anything abnormal, right? Everything was explainable if you talked to the operator. So something else you mentioned was your job is -- you have to be a good coach is what you said, right/

A. Um-hum.

Q. You're the -- your job is to ask questions.

A. Right.

Q. So I guess I'm curious. I mean what failed on the 25th? Have you reflected on this at all? Did you fail to ask the right questions or did your operator fail to bring to light abnormal operating conditions?

A. Probably a combination of the two.

Q. Did procedures fail you?

A. No.

Q. You think procedures were there?

A. Yeah.

Q. If you look at those alarm logs, you talked about the LPM and the low suction pressure, those are -- are those leak triggers to you on a shutdown in this specific case?

A. If I was an operator?

Q. Um-hum.

A. I've never operated that line, so I can't really answer that question.

Q. Would you have to have operated that line to make that assessment? Take away 6B. Any line. Line 3, Line 17. LPM followed by low suction, station shutting down.

A. Yeah. All those triggers (indiscernible).

Q. It's at least -- is it at least one trigger?

A. It would raise my eyebrows if it's operating, yes.

Q. Did you -- you didn't pull any trends, I imagine?

A. No.

Q. You having said you're a people person. You like to coach people. I've interviewed Dave Scott, and he is -- I would say his statements were pretty concise. He's not a man of a lot of words.

A. Um-hum.

Q. So in coaching people, I think you're probably looking for -- does that make it difficult? If you don't have someone that's communicating back to you, does that make your job harder?

A. That's a fair statement, yes.

Q. Okay. So maybe, you know, an attribute maybe you're looking for in an operator is --

A. Great communication.

Q. Good communication.

A. Yeah.

Q. Being able to discuss things?

A. Um-hum.

Q. And maybe my assessment's wrong because he's being

interviewed, maybe he's nervous. Is that a fair assessment of your interface with Dave Scott?

A. Yeah, he is very --

Q. Brief.

A. -- brief with his (indiscernible).

Q. When you rated -- you were asked to assess the three operators that were currently on suspension, you said low to (indiscernible) can you tell me what that's based on? Is that past performance, is that --

A. Past performance, yeah, bad attitude.

Q. Okay. And you mentioned earlier that attitude is a big part of making a successful control room?

A. Correct.

Q. So I have to ask, the attitude that they would exhibit is one of indifference or how would you define their --

A. How would I describe them? Dave is very brief with his, what he says. He's clear, but he doesn't, doesn't try to do the extra stuff, doesn't try to go the extra mile. He does his core job. He does it well, and that's all he's there to do.

Q. Okay.

A. Yeah.

Q. Is that a function of years of service do you think?

A. It could be -- that's speculating. I don't know.

Q. Okay. You mentioned that there's been a lot of discussion now in the control room about not exceeding that 10-

minute rule. Not exceeding the 10-minute rule would not have changed anything on the day you were --

A. Correct. Yeah.

Q. Was workload an issue on the 25th at the console?

A. On Line 6?

Q. On Line 6 --

(Simultaneous comments.)

Q. -- lines that were operated, console five.

A. I don't believe so. Nothing was mentioned to me.

Q. But, yet, you say there were recent changes to console workload.

A. Yeah.

Q. What were those changes?

A. Line 3 was moved off of the console that we were previously on was Line 6-A 17 and 6-B.

Q. Okay. You've already addressed this, but I'm going to ask it again.

A. Sure.

Q. Has your role been redesigned based on the events of the 25th?

A. Redesigned? It's changed --

Q. For lack of a better word.

A. It's changed definitely, yeah.

Q. The scope of your work has now --

A. Yes.

Q. In what sense? You mentioned how you are doing call sep cols. Column sep (indiscernible) we because of the new self-imposed limits, we're doing much more --

Q. Okay.

A. -- over pressure calculations. We're doing a lot more technical stuff than we --

Q. We meaning the --

A. The shift leads, yeah.

Q. Has the role of the mass balance analyst been redefined?

A. Much more structured. Communication is a lot less.

Q. What does that mean?

A. So basically it's like we only ask them the question is the model working correctly or isn't it? We don't get into speculating about what's causing the alarm or anything like that. And if it meant -- if the model is not -- is working properly then we're shutting down.

Q. I didn't catch this part, but have you worked (indiscernible) Teresa a long time on a shift leads group with operators? Is that --

A. Yeah. Well, throughout my career, it's changed. So when I first started, we would change shifts and shift leads every year. But for the last three years, I think it is, we've maintained similar people on our shift just due to the growth and the, you know, influx of new people.

Q. So this wasn't working with Dave. Teresa wasn't.

You've worked with Dave for three years.

A. I've worked with Teresa for a few years. I'm not sure about Dave because Dave was gone for awhile, right.

Q. Right. Did you work with -- that's another question.

A. Yeah.

Q. Did you work with him prior to his leave of absence?

A. I've never been his direct key performance manager. So I can't remember if he was on my shift or not.

Q. So that would be Bob.

A. Could be Bob, yeah. Or Dave could have been on another shift.

Q. You kept saying before you were talking about changing alarm values. You said it comes down from the engineer. Is that integrity engineer?

A. Changing the alarm values?

Q. You're the one, you get an e-mail that says --

A. Oh, then --

(Simultaneous comments.)

Q. -- change --

A. -- pressure limits. Pressure allowable limits.

Q. Okay.

A. So what --

Q. Which ultimately results -- oh, okay. But those are all alarm limits, right, out of a station?

UNIDENTIFIED SPEAKER: The alarms would -- for instance you'd have a high pressure low suction alarm based on where those allowables are.

UNIDENTIFIED SPEAKER: Um-hum, right.

UNIDENTIFIED SPEAKER: Yeah, so --

BY UNIDENTIFIED SPEAKER:

Q. What engineer? Who --

A. Integrity (indiscernible) engineer to the CCO engineer.

Q. Okay.

A. And the CCO engineer would send them on to us.

UNIDENTIFIED SPEAKER: So what's going on right now on 6B or A, and is the integrity folks are looking at their in-line inspection data, and if there's a reason to lower the pressures because of defects, they would go in and say we need, we need this level of pressures based on their calculations, their (indiscernible) calculations. Then that goes -- from that engineer goes to the control center engineer, Richard, who we'll be talking to. They take that, and then they look at how to configure the lines of the pressure allowables, come up with those numbers, which are given then to the group to change it into theirs.

BY UNIDENTIFIED SPEAKER:

Q. One other review by the control center.

A. Yes.

Q. I've seen the MBS alarm procedure, but there's been talk

about a call sep procedure. Is there such a procedure?

A. A call sep procedure? Well, if your pressure doesn't change within -- yes, there's a procedure.

Q. Strict -- and that procedure is column separation procedure?

A. I'm not sure what it's called.

Q. But it's --

A. But there's a procedure that if you -- if your pressures aren't changing downstream within 10 minutes, you need to shutdown.

Q. And that's been in effect prior to July 25th?

A. Since I started, yeah.

UNIDENTIFIED SPEAKER: That's all I've got, Allister.

MR. EWING: Okay.

MR. NICHOLSON: Karen, are you finished?

MS. BUTLER: I have about five that came out of the things that you've just recently said.

BY MS. BUTLER:

Q. I just want to find out regarding the communication with Dave Scott, is that something you've noticed he's brief with everybody he interfaces with?

A. Yes.

Q. Okay. So it's not necessarily just towards you?

A. No.

Q. Okay. So he has that characteristic -- in the control

room?

A. Since I've known him, yes.

Q. Okay. And he operated for quite awhile beforehand, right?

A. Yes.

Q. So as far as we know, that's never caused a problem in the past?

A. No. I was shocked when the question was asked to me in the last interview.

Q. Okay, that's fine. I just wanted to make sure. Okay. And you have in the past interview I think noted that there were some problems either in the SCADA system or maybe -- I think you referenced the scheduling system or CMT. And I just wondered how that gets documented when you find a problem like that.

A. If it's a problem with the equipment in the field, it's a fact man request. A SCADA problem, we would call the help desk, and they would log the call. So that's all recorded.

Q. Okay.

A. A CMT problem, if we could figure it out ourselves, we wouldn't call anybody, and it wouldn't be recorded anywhere.

Q. Okay.

A. And if we couldn't figure it out ourselves, we'd have CMT support people who I'm sure would record all our calls. We would phone them. We would contact them through the help desk as well, so that would be recorded.

Q. Okay. So it's fact man, help desk request. What was the other one?

A. We'd figure it our ourselves.

Q. Okay. Figure it out yourself.

A. Yeah.

Q. Does anything go to IT on a formal request?

A. Yeah, we have SCADA problem reports that we fill out.

Q. Okay. So it's called a SCADA problem report?

A. Yeah.

Q. All right.

A. But if we have something that we need fixed immediately, we would page them.

Q. Okay. And if it's something that gets fixed immediately, is that documented in any way?

A. Yeah. It would be recorded through the help desk.

Q. Okay. And when we talk about this help desk, is that -- is there just like one help desk or are there a bunch?

A. I think it's just one, and then they direct the call to whoever you need.

Q. Okay. All right. Since the role of the shift lead has changed, it's becoming more technical, like for example you're doing more of the math balance calc, is that something that seems to be working program or you can't tell yet?

A. It's definitely working. We're more focused and aware of things that are happening.

Q. Okay.

A. So we're basing it on getting an understanding of what's happening.

Q. Okay. All right, and when did that get changed?

A. Shortly after the incident.

Q. Okay. And that's happening for every shift lead, right?

A. I believe so, yeah.

Q. Okay. And you've mentioned that the role of the mass balance analyst, the MBS analyst is less, much less. It's either working correctly or it's not.

A. Yeah.

Q. Is that a good thing or a bad thing in your view?

A. I think it gives clarity. We're not looking to solve -- we're not looking to find a solution to the problem. We're just -- now we're assuming the worst possible scenario and just shutting down.

Q. Okay. So we've changed the culture to leak first or is that an unfair --

A. In my head, yes.

Q. Okay. All right. When you guys hit some power alarm limits at particular stations, who enters those, the limitations that those get set on?

A. Power levels?

Q. Yeah.

A. The power allowable group, I guess.

Q. So does that go straight into the system or do they set those -- do they determine the limits and then send them to you and you enter them?

A. No. They would send them straight --

Q. They do what? I'm sorry.

A. They would send those directly. I've never -- I don't think I've ever put in power level limits.

Q. So those might -- they might have a direct interface to the system?

A. I'm not sure, but I think so.

Q. Okay. And the concept of leak detection and the shutdown line, have you ever been told that when the line is shutdown your leak detection system is not active?

A. I don't think so, no.

Q. Okay, all right. Then previously we mentioned that when we have pressure allowable limit changes that the integrity might find a (indiscernible) they send that to the CCO engineer. Then based on the control room engineers, they send them to you, and you enter them, right?

A. Yes.

Q. Okay. Well, how does that get to the MBS system?

A. Well, the MBS system takes this data from the SCADA system.

Q. Okay. So your thought is that those new limits for the model automatically get updated because the SCADA system gets

updated?

A. I believe so, yeah.

Q. Okay. Okay, so that's a question we'll just ask later, but that's your understanding, right?

A. Um-hum, yeah.

Q. Okay. All right, and then I just have one thing I just want to pass to you, but I need you to take a piece of paper and be able to write something down.

A. Okay.

Q. Okay. So do you have a pencil and a piece of paper or --

A. I do.

Q. Okay. And I'm going to give you my phone number directly and Matt can give you his or however you want to work that, since I can't hand you a business card.

A. Okay.

Q. It's (816) 214-3027.

A. Okay.

Q. Now the reason I did that is because it occurs to me from our previous conversation about things being in the transcript or not being in the transcript.

A. Um-hum.

Q. The fact that you're a coach and that people may tell you things, that they may still not be comfortable telling us about their view of supervision or leadership with Jay in the

room. So we want to make sure that you have an avenue by which to directly tell someone.

A. Sure.

Q. Okay.

A. Yeah.

Q. Since you're a coach, I'm counting on you to be able to take that number and anything Matt would give your or Robbie would give you or Brian would give you and pass that to people as needed.

A. Okay.

Q. Okay. So that that would be an avenue by which information can be reported, and then not have any threat or any danger of that. We would make the commitment amongst ourselves to share it, okay?

A. Okay.

Q. Because we're clearly joint investigators on this.

A. Sure.

Q. So -- right?

A. Sounds good.

Q. Okay.

MS. BUTLER: That was all I needed.

UNIDENTIFIED SPEAKER: I have one thing, and I apologize. Earlier in our interview of Allister you had said that would be an IRN. I didn't write it down.

UNIDENTIFIED SPEAKER: I did.

MS. BUTLER: It had to do with how the LPM system would interface with set point with the allowable pressure allowable limits being change.

MR. PIERZINA: (indiscernible) LPM and a pressure allowable change.

UNIDENTIFIED SPEAKER: Does that sound correct to you, Karen?

You want to read that again, Brian?

MR. PIERZINA: One --

MS. BUTLER: Yeah, it is.

UNIDENTIFIED SPEAKER: Okay. I'll get it from you and then send it on to Bonnie.

MS. BUTLER: Question -- if there's any question about what that meant, then somebody can call me or we can re-clarify.

MR. NICHOLSON: Let me -- if we're done with questions, because that doesn't need to be in the transcript. Let's go ahead and close out this interview, okay. Are you finished, Karen?

MS. BUTLER: Oh, yes. Thank you.

MR. NICHOLSON: Okay. Yeah, that concludes our interview of Allister Ewing.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	ENBRIDGE OIL SPILL MARSHALL, MICHIGAN Interview of Allister Ewing
DOCKET NUMBER:	DCA-10-MP-007
PLACE:	Edmonton, Canada
DATE:	December 15, 2010

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

_____

Katherine Motley
Transcriber