BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In The Matter Of:	)	
Application No. 2013-01	)	
	)	
TESORO SAVAGE, LLC	)	Case No. 15-001
	)	
VANCOUVER ENERGY DISTRIBUTION	)	
TERMINAL	)	
	)	

HEARING, Volume 3

Pages 356 to 642

ADMINISTRATIVE LAW JUDGE CASSANDRA NOBLE

9:04 a.m.

June 28, 2016

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1 PROCEEDINGS
2 JUDGE NOBLE: We're on the record. Good
3 morning. This is the continuation of the adjudication
4 in the case of -- before the State of Washington Energy
5 Facility Siting Council, Case No. 15001 in the Matter of
6 Application No. 2013-01, Tesoro Savage LLC Vancouver
7 Energy Distribution Terminal.
8 We are in the midst of the proponent's case,
9 and yesterday we were listening to the testimony of
10 Jared Larrabee and I believe his testimony is not
11 completed, so I would ask counsel to proceed with
12 calling Mr. Larrabee in and finishing his testimony.
13 MR. JOHNSON: Yes, Your Honor. The
14 applicant recalls Mr. Jared Larrabee.
15 JUDGE NOBLE: Good morning, Mr. Larrabee.
16 THE WITNESS: Good morning.
17 JUDGE NOBLE: You may proceed.
18 JARED LARRABEE,
19 having been previously sworn,
20 testified as follows:
21 DIRECT EXAMINATION
22 BY MR. JOHNSON:
23 **Q. Morning, Mr. Larrabee. And just by way of a**
24 **reminder for the record, you're still under oath.**
25 A. Thank you.

JOHNSON / LARRABEE

1 **Q. I want to pick up where we left off yesterday,**
2 **and as you will recall, we walked through a series of**
3 **paragraphs describing rail unloading operations. And I**
4 **want to turn to facility safety issues more generally,**
5 **but before we do that, I was wondering, can you answer**
6 **for me what -- the total number of employees you plan to**
7 **have at the Vancouver terminal?**
8 A. Yes. We would anticipate having 176 employees
9 on site at the terminal. Those are broken down in a
10 number of ways by people who are working shift work and
11 then others who are working regular normal shift, the
12 day shift-type schedule.
13 **Q. Okay. And of those on a shift schedule, how**
14 **many would be actually doing rail unloading?**
15 A. So for those -- maybe to explain. So typically
16 our shift schedule would be a four on/four off shift
17 schedule, which would mean that employees are working
18 12-hour shifts, they're working for four days, and then
19 they are off for four days in that schedule.
20 So of the employees that are -- and that can
21 vary depending on -- when we get up in operations, we
22 could potentially change that to a DuPont schedule or
23 modified schedule, but typically we would use a four
24 on/four off schedule.
25 In doing that, we would typically have -- or at

LARRABEE

1 this facility we would anticipate having between 30 and
2 40 employees that are on that type of a schedule and are
3 working on a shift schedule. Of those 30 to 40
4 employees, approximately 18 would be doing the actual
5 unloading of the rail cars.
6 Now, yesterday, in response to some of the
7 questions when you looked at the photos, I referenced
8 that there would be three employees to a team and two
9 teams per train. Well, so that is on a train. So in
10 this particular facility, we have three unloading
11 tracks, which would mean that we would have six -- two
12 teams of three or six employees per train for a total of
13 18 that would be doing the unloading on -- well, in
14 total during that shift of 12 hours that they're
15 working.
16 JUDGE NOBLE: Yes, there's a question.
17 Excuse me, Mr. Moss has a question.
18 MR. MOSS: Yes, on this point, I just wanted
19 to ask you, a 12-hour shift is something that strikes
20 most of us as a long shift. I know for railroad
21 engineers, for example, conductors on trains and various
22 other personnel involved in this type of business, there
23 are some federal regulations limiting the hours they can
24 work; airline pilots is another category of people who
25 the safety of the passengers, of course, is an issue.

LARRABEE

1 I'm just wondering if there are any such regulations or
2 standards governing employees engaged in the types of
3 activities that your employees will be engaged in in
4 inspecting these trains and unloading them and loading
5 them, and I believe you're going to have an engineer
6 driving the train at some points, at least. Are there
7 any guidelines like that?
8 THE WITNESS: So there are state and federal
9 regulations, your typical labor laws that would dictate
10 that, which would also dictate the amount of work that
11 employees can do in a typical work week and things like
12 that. So maybe it would help if I clarified what
13 happens on an individual shift and what is happening
14 there.
15 So typically when you're in -- on that
16 shift -- and I'll break it down for an unloading
17 employee and what's happening there. When a train
18 arrives at the facility -- and there's a different set
19 of employees that would be operating the train. So
20 they're trained to a different standard and that have
21 passed all their certifications that we have in order to
22 operate a locomotive. So they're not the same employees
23 that are doing the unloading process.
24 One of the other commitments that we made is
25 that while a train is loaded at the facility, it will

LARRABEE

1 always be manned. There will always be an individual
2 that is on that loaded train. And so that is a separate
3 group of employees. But that group of employees will
4 bring the train into the facility and will move it
5 around to the loading area. That on a shift would
6 typically take about a half an hour. Again, you're
7 operating at five miles an hour or less, traveling
8 around a loop track that is over a mile long. So it
9 takes quite a while just to make it around the track
10 itself. And then you put it into a red zone, as I
11 described yesterday, where they're actually getting it
12 to a point where someone can actually begin work on the
13 rail cars.
14 Once they put it into that red zone state
15 and have it ready for the unloaders to come in and to
16 start their work, then at that point in time, they would
17 begin that work of connecting the rail cars and
18 connecting the top of the rail cars, as I described
19 yesterday. That usually takes about 45 minutes for them
20 to do that.
21 At that point in time, then the gravity
22 draining of the rail cars would begin. It takes roughly
23 two hours for the gravity drain to occur. Now, there's
24 different variations that can impact that where it could
25 be a little bit longer. It's typically not shorter than

LARRABEE

1 that, but roughly two hours for the gravity draining to
2 occur.
3 After that they will disconnect the rail
4 cars. Once they verify that the cars are all drained
5 and empty, they disconnect the cars. That's about a
6 half an hour for them to disconnect the cars and then
7 another 15 to 20 minutes to shuttle the cars forward and
8 put it in a red zone again and get ready to do that
9 again for the next set. So they do that four times in
10 that time frame.
11 So it's roughly four hours per set that
12 they're working on that. And so depending on the length
13 of the train, you multiply that by the number of sets
14 that they're doing.
15 So coming back to the unload time -- the
16 time when it's actually draining, when the cars are
17 actually draining and being unloaded, at that point in
18 time, the crews would actually be split and doing
19 different things. For each train we would anticipate
20 having two people that stay out on the unloading pad
21 area and those two people are the ones that are
22 monitoring what's happening. They're walking up and
23 down the train, making sure that there are no issues
24 going on.
25 The other set of the individuals that are

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1 working there would be doing rail car inspections and
2 finishing the inspections that happen on the bottom of
3 the rail cars, doing a complete circle around the rail
4 cars, as was shown in the picture.
5 Other employees would then be going on
6 breaks, and they may be rotating as they do this.
7 Right. So some of the employees would be using that
8 time as a break time and then other employees would be
9 using that time as a retraining or upgrading their
10 skills time as well. So they're going back and doing
11 retraining or they're doing observations of other
12 workers that are out there or they're taking new tests.
13 We always encourage our employees to continue to improve
14 their skills and continue to progress. So that would be
15 part of what's happening in there.
16 So through that process, approximately, you
17 know, every -- what would it be? About every two hours,
18 they have about a two-hour period where there's that
19 downtime for breaks or for other things that they can be
20 doing in there. I'm not sure if that directly answered
21 your question.
22 MR. MOSS: It was a good answer. Thank you.
23 These will be Savage employees, right?
24 THE WITNESS: Yes.
25 MR. MOSS: Now, I'm a little -- this relates

JOHNSON / LARRABEE

1 back to something I heard yesterday, which is you've got
2 Savage employees doing the train bit and you have Tesoro
3 employees doing the marine side of things. Is that
4 essentially correct?
5 THE WITNESS: Yes.
6 MR. MOSS: Now, is it one management
7 structure? Does everybody report to the same boss, or
8 are there two sets of management structures?
9 THE WITNESS: No. There is one management
10 structure that would oversee the entire structure. So
11 some ways you could do that is by contracting for one of
12 those services. And so in either case it would be all
13 under one structure, where the management and the
14 accountability is all under one structure.
15 MR. MOSS: Thank you.
16 MR. JOHNSON: Thank you, Mr. Larrabee.
17 BY MR. JOHNSON:
18 **Q. Just picking up, you ran through some numbers**
19 **there and some time. Generally speaking, how long does**
20 **it take for the entire unloading operation of a train?**
21 A. So unloading a train -- and I'll talk to a
22 couple of different outlets. In our application for
23 site certification, we indicated unloading a train would
24 take 12 to 14 hours.
25 As I work with our operators that are doing this

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1 on a day-to-day basis and you add some other -- other
2 kind of real world experiences that happen on a daily
3 basis, our average time to unload a train is roughly 15
4 to 16 hours. Now, there are trains that do unload in
5 12 hours. There's also trains that unload in 20 hours
6 and it takes 20 hours to unload the entire train,
7 depending on those different situations that can come
8 in. Some of the different things that happen, if there
9 are a bad order of cars, which is a car that needs to be
10 repaired, those cars need to be removed from the train
11 and set aside. That takes some time to account for that
12 and to make sure that that's happening.
13 If there is just something happening where it's
14 just draining slow -- because it's a gravity drain
15 process, sometimes it just takes a little longer for
16 that to happen. And when those things happen, then that
17 just delays the whole process as well.
18 **Q. Thank you. I want to turn now to -- just back**
19 **to one question about the photos we saw yesterday. At**
20 **one point there was a photo and it showed a yellow pan**
21 **at the bottom of the train, and you referred to that as**
22 **a drip pan or something and described it as being used**
23 **to contain small leaks or releases. Do you recall that?**
24 A. Yes.
25 **Q. Okay. Is that the only containment available if**

1 something were to happen and a train were to have a
2 larger leak?
3 A. No, it is not. So the -- when we look at a
4 facility like this, your primary -- first of all, we
5 look at primary containment is where you always want to
6 keep the product. So primary containment is the rail
7 car, the hoses, the system it's designed to be in. That
8 is your primary containment.
9 We do have the spill pans, the yellow spill
10 pans, that act as a secondary containment for small
11 spills. We also, at this facility, have a spill pan
12 that goes between the rails and goes -- runs the length.
13 I believe it's roughly five cars or six cars per length,
14 and it runs with a drain system to collect any of that.
15 If there were a larger incident or larger spill, then it
16 would be collected into that.
17 And then in addition to that, the area where the
18 pipe header is contained is also designed to be able to
19 contain spills as well. So there is secondary, tertiary
20 containment throughout the entire facility.
21 For example, in the photos that were referenced
22 yesterday, that entire concrete area is contained and
23 banked like a bathtub and intended to be a spill
24 containment area.
25 JUDGE NOBLE: Excuse me, I think Mr. Siemann

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1 has a question.
2 MR. SIEMANN: Thank you. Some of us were
3 curious about what you said earlier on a previous
4 response regarding 15 to 16 hours to unload a train.
5 We're trying to figure out how you get four trains in a
6 24-hour period with 15 to 16 hours per train.
7 THE WITNESS: So there are three unloading
8 tracks, and so on those three unloading tracks, you
9 would anticipate that one train would finish and you
10 could bring another train into that and be unloading
11 another train. So it isn't that you have four tracks
12 for four trains, but we would anticipate there's some
13 efficiency to bring another train in, depending on how
14 those all work.
15 MR. SIEMANN: Thank you.
16 BY MR. JOHNSON:
17 **Q. I would like to turn to more -- some more**
18 **general operational safety measures. First of all, with**
19 **regard to employees, is -- do you consider safety issues**
20 **when making employment and hiring decisions?**
21 A. Absolutely. So our -- we actually have a
22 defined process that we use. We call it our hire right
23 process, where we go through -- like anybody, we would
24 go through an interview process, but we're looking for
25 two specific things when we're doing an interview

1 process. We're looking for a demonstration of
2 integrity, does this person have integrity and
3 demonstrate that they will have integrity in their
4 operations and how they do things and how they conduct
5 themselves, and the second thing we're always looking
6 for is leadership, and that's someone who will be a
7 leader. It isn't we expect all of them to be leaders,
8 but we found that if they are demonstrating those two
9 things, that they are more likely to stand up and use
10 the authority that they've been given to stop work if
11 they see an issue that is coming -- and I don't think
12 I've mentioned, every employee at the operation has stop
13 work authority, no matter what. And they are encouraged
14 to use that. If they see an unsafe act or an unsafe
15 area, they are encouraged to use that to stop work. And
16 they can use that to stop work at a specific area or to
17 stop work at the entire facility.
18 **Q. And you touched on this briefly yesterday, but**
19 **do you have safety programs in place or under**
20 **development for the Vancouver terminal?**
21 A. Yes, we do. Again, that was part of our
22 application for site certification or a draft of that --
23 those safety certifications or those safety programs
24 that we have in place. But in addition to those, we do
25 have the observations that we require of employees. We

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1 do have our PPE or our safety equipment requirements as
2 well for our employees. We do have regular
3 communication meetings where all employees come
4 together. Those are primarily focused on safety. And
5 then we have our systemwide network that we're using for
6 safety as well.
7 On site, we would anticipate having a safety
8 manager that has a safety team reporting to him. We
9 have a program that we use that -- it's a designation
10 that employees can get, they actually go off site for
11 additional training and can be trained as a safety
12 specialist or as a lead safety specialist. They still
13 perform their regular job functions, but they have
14 heightened responsibility for safety in those crews for
15 making sure that they're working appropriately with the
16 crews on safety-related items and working with the
17 safety manager on those and making sure that things are
18 disseminated to all teams that are working and all
19 individuals working on site.
20 **Q. So there will be at least one individual, if not**
21 **more, whose sole responsibility is safety; is that**
22 **correct?**
23 A. Yes. Yes. Well, and -- so that -- there's one
24 individual who's designated as the safety manager. Our
25 operations directors and our operations managers are

1 also -- that is -- their primary responsibility is
2 safety as well.
3 **Q. Okay. And since unloading of a train can take**
4 **longer than a shift, are there procedures in place to**
5 **hand off the ongoing operations, if you will? And if**
6 **so, what are they?**
7 A. Yes, there are. So if an unloading operation
8 crosses over shifts, then we would typically do that at
9 a time where it makes the most sense, obviously, to do
10 that shift transition. We wouldn't do that in the
11 middle of connecting rail cars or disconnecting rail
12 cars, but at some other point other than that.
13 There would be a toolbox meeting or a shift
14 change meeting that would occur. In that meeting, you
15 would be going through all the processes that have
16 occurred, what was happening at that point in time and
17 handing off the responsibilities related to that.
18 **Q. All right.**
19 MR. JOHNSON: Can you pull up Exhibit 289,
20 page 1, please.
21 BY MR. JOHNSON:
22 **Q. And while this is coming up, this is a photo**
23 **that relates to fire facilities, if you will. And**
24 **Mr. Corpron will be providing testimony later about**
25 **design. But can you just generally describe what type**

1 of firefighting apparatus is available or will be
2 available at the terminal?
3 A. Yes. And the picture that is coming up, is that
4 the Anacortes?
5 **Q. We hope so. There you go. So maybe you can**
6 **describe what this shows.**
7 A. Okay. So on the left there are the fire
8 hydrants with nozzles attached. So those fire hydrants
9 go the length of the unloading area or the unloading
10 pad, and they also have an area where you can attach --
11 in this particular case, an area where you can attach
12 foam and introduce foam into the system as well.
13 Now, turning to the Vancouver Energy Terminal,
14 we would anticipate having similar hydrants the length
15 of the facility. We also -- it's a covered facility, so
16 that's one of the differences between the facilities.
17 The covering area in the facility actually has a foam
18 system the entire length of the facility inside that
19 area. That foam system can be actuated by an individual
20 hitting the button that actuates it or it can be
21 actuated automatically if heat is detected, then it will
22 go off and introduce foam into the facility. So that is
23 a built-in system. That system is also in place in the
24 tanks as well.
25 **Q. And yesterday you referred to some photographs**

1 of a computer monitoring system. Is that related to the
2 fire suppression system in any way?
3 A. I would defer to Mr. Corpron on the specifics of
4 how that's related to them, but, yes, it does have
5 similar features in that it can be actuated through --
6 in an automatic way.
7 **Q. Okay. And is there an emergency response plan**
8 **for the terminal?**
9 A. Yes, there is an emergency response plan. A
10 draft of that plan was also included in the application
11 for site certification.
12 MR. JOHNSON: And for the benefit of the
13 council, although I'm not going to take time to pull it
14 up, that's included in the site application. That's
15 Exhibit 001, beginning at page 4567.
16 BY MR. JOHNSON:
17 **Q. Go ahead.**
18 A. So I would just reiterate that all those plans
19 would be updated both for the design of the facility and
20 the ultimate construction of the facility once those are
21 complete as well.
22 MR. JOHNSON: All right. Thank you,
23 Mr. Larrabee. Nothing further, Your Honor.
24 JUDGE NOBLE: Are there any council
25 questions for Mr. Larrabee?

1 MR. STONE: Mr. Larrabee, the 12 to 15 hours
2 of total unloading time, is that from when the loaded
3 train comes into the loop system until the time the
4 empty train leaves the loop system?
5 THE WITNESS: Yes. So that would be from
6 the time the BNSF hands the train over to us and then we
7 put it out onto a staging track where the BNSF can pick
8 it up at that point in time.
9 So that is -- yesterday I referred to the
10 connecting systems of the railroad and the other
11 connecting systems. We would place a call out to the
12 railroad and tell them that a train is ready to pick up,
13 and then they would send a crew to pick that train up
14 and take it from there at that point in time. But it
15 would -- that would be from when we are done with our
16 piece of the process, not necessarily to when the BNSF
17 actually takes it and leaves.
18 MR. STONE: Okay. Thank you.
19 JUDGE NOBLE: Mr. Stohr?
20 MR. STOHR: Morning, Mr. Larrabee. Could
21 you describe the regulatory framework that the spill
22 prevention contingency emergency response planning
23 embeds itself in.
24 THE WITNESS: So we have a witness that's
25 coming later that can describe that in more detail, but

1 it would fit into both the state and the federal
2 regulatory system that exists today.
3 MR. STOHR: Thank you.
4 JUDGE NOBLE: Mr. Stephenson?
5 MR. STEPHENSON: Thank you. Mr. Larrabee,
6 good morning. Yesterday I think we talked about maybe a
7 few crews of three taking care of these trains, and
8 today it turned into 176 workers. And so I'm trying to
9 find out, because this is an important thing of how many
10 people are taking care of the inspections of these
11 things, what's the number?
12 THE WITNESS: So the total employees at the
13 facility is 176 that would be on site. So again, those
14 are shift workers. And I may have misunderstood your
15 question yesterday.
16 MR. STEPHENSON: Perfect.
17 THE WITNESS: They are shift workers, which
18 means if you do a four on/four off schedule, those who
19 are on shift are working 12-hour shifts, you would have
20 four shifts there. So each shift of 30 to 40 employees,
21 multiply that by four, and that alone is roughly 120
22 employees just in your shift workers but doing four
23 on/four off schedules 12 hours a day. So one shift is
24 12 hours. When that 12 hours is up, a second crew comes
25 on of roughly 30 employees, 30 to 40 employees. And

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1 when that crew is done, the next 12 hours starts and
2 another crew comes on. So they're rotating like that.
3 That's where that comes into play.
4 And per train, it would be during the
5 unloading process. What I referenced yesterday was just
6 the crews that are doing the unloading. We also have
7 employees that are inside the operations shelter that
8 are monitoring and managing the PLC or the system -- the
9 programmable logic control center, which is the system
10 that you're watching and monitoring the system. We have
11 employees that are doing the logistics, logistics
12 management. We have the safety employees that we
13 referenced. We would have the employees working at the
14 marine facility, employees over at the tank farm area
15 managing that and then the overall supervision and
16 management of the facility as well.
17 So it is a significant -- it is much more
18 than just three employees on each side of the train
19 working together. It would be just in that area 18
20 employees working on the three trains that would be
21 loaded and unloaded, plus the other employees that work
22 at the facility. I hope that that clarifies a little
23 bit. I apologize if I -- that came across as a
24 misrepresentation yesterday.
25 JUDGE NOBLE: Mr. Moss has a question.

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1 MR. MOSS: I want to return to a point that
2 you touched on yesterday, and there may be another
3 witness who is more fully suited to answer my questions,
4 but to the extent you can, I'll appreciate it.
5 We touched on the topic -- or you touched on
6 the topic of financial responsibility yesterday. And I
7 was taking some notes, and one thing you said was that
8 Tesoro owns the oil that's on these trains that's coming
9 into the facility. And at what point does it take
10 ownership?
11 THE WITNESS: At what point does Tesoro
12 take --
13 MR. MOSS: Tesoro take ownership of the oil
14 as a commodity.
15 THE WITNESS: Okay. So what you're taking
16 about, I believe, is -- so there's two different
17 concepts, I think, that need to be discussed here. One
18 is ownership of the product and the other is care and
19 custody. In care and custody, you still have a
20 responsibility and you are accountable for the product,
21 not only from a regulatory standpoint but you're also
22 accountable to that customer from a commercial
23 standpoint for the product that you are managing there.
24 So specific to Tesoro as a customer of the
25 facility, they can take ownership of that product at a

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1 number of different points in the supply chain. One of
2 the common points that -- and this applies broadly to
3 any customer of the facility. One of the common points
4 where they take ownership is at the loading facility
5 point. But that can vary depending on the customer on
6 the exact point where they take ownership control.
7 Some of them would own it from the wellhead,
8 from the point of time where it's produced at the
9 wellhead. And others might take ownership at the time
10 when it's loaded into the rail car. But it varies
11 depending on the customer of the facility.
12 MR. MOSS: It can become complicated, I see,
13 in some instances a train -- unit train full of oil, the
14 oil may be owned by the producer all the way to the
15 Tesoro facility where a customer of a facility takes
16 ownership. I think that's what you just said?
17 THE WITNESS: So yes. And in a scenario --
18 did you say all the way to the refinery?
19 MR. MOSS: Well, somebody owns it at every
20 point in time. So I'm thinking if the person who's
21 buying it doesn't own it until it gets to the facility,
22 then the producer probably still has title to it, if
23 that's the right word.
24 THE WITNESS: Yes. Yes. Now, in route
25 while the producer may have title, whoever is

1 transloading it or transferring it has care and custody
2 at that entire point in time. So if you're talking
3 about rail, then the rail carrier would have care and
4 custody in addition to the title which would be owned by
5 someone else.
6 MR. MOSS: And I recognize it can get
7 complicated from a legal standpoint and I'm not trying
8 to push you in that direction. I haven't myself looked
9 at the laws of bailment in many, many years. But what
10 I'm interested in is who may have potential liability if
11 there's an accident either along the way, or more
12 specifically, because of you, at the facility itself.
13 So we have Tesoro Savage is the owner and operator of
14 the terminal itself. That's a joint venture. I think
15 you described it as that. I've heard other descriptions
16 of it as a limited liability corporation. And perhaps
17 there are yet other descriptions of its status.
18 But you would -- that Tesoro Savage,
19 whatever that entity is, would have care and custody
20 responsibility during the time that that oil is being
21 unloaded from the trains, put into the tanks, taken from
22 the tanks, put in the ships -- I'm sorry, I'm going
23 fast. I apologize. I'll slow down. Is that
24 essentially correct?
25 THE WITNESS: Yes. And when I say that we

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1 have care and custody, to be clear, that means we have
2 the liability responsibility while it's at our facility.
3 So yes -- and we have experts that can talk in more
4 detail to that, and I'm not going to say that I know or
5 purport to know all the legal framework that would go
6 behind that, but we have the responsibility and
7 accountability while it's in our care and custody.
8 MR. MOSS: Sure. And perhaps we'll get some
9 clarity through the hearing process concerning the
10 question whether the customer might also have some
11 liability. Even though you do have perhaps primary
12 responsibility and primary liability, what we lawyers
13 sometimes refer to as the deep pocket, there might be a
14 deeper pocket behind you somewhere that I feel confident
15 might become involved if there was an accident in terms
16 of the liability.
17 But the question -- and the next question I
18 have, then, is what sort of -- what sort of coverage, I
19 guess, insurance, bonds, whatever it may be,
20 self-insurance; how does Tesoro Savage expect to take
21 care of its responsibility, financial responsibility, in
22 the event something goes awry and there's a bad spill or
23 an explosion or a bad accident, a worst-case scenario?
24 THE WITNESS: We would anticipate having
25 insurance in that case, and we will have other experts

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1 that can testify more to that than I can.
2 MR. MOSS: And I believe we have some
3 prefiled testimony on that. As I recall reeding it, it
4 talks about the limits and so forth, but we can explore
5 that with perhaps other witnesses. I think that pretty
6 much exhausts my questions. Thank you very much.
7 THE WITNESS: You're welcome.
8 JUDGE NOBLE: Mr. Rossman?
9 MR. ROSSMAN: Thank you. A couple more
10 questions about the corporate relationships. So
11 Vancouver Energy -- you are an employee of Vancouver
12 Energy, not Tesoro or Savage; is that right?
13 THE WITNESS: I'm an employee of Savage, but
14 I have effectively been succumbed [sic] into Vancouver
15 Energy. My responsibilities are 100 percent related to
16 Vancouver Energy at this point in time.
17 MR. ROSSMAN: Does Vancouver Energy have
18 employees?
19 THE WITNESS: At this point in time, there
20 are no employees of Vancouver Energy.
21 MR. ROSSMAN: Will Vancouver Energy at some
22 point have employees?
23 THE WITNESS: I would have to -- I'm not
24 sure that I'm the one that could answer that question
25 specifically. It would come back to how we ultimately

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1 structure that arrangement between the various parties.
2 MR. ROSSMAN: And that's not determined by
3 the general manager of Vancouver Energy?
4 THE WITNESS: I would believe I would have a
5 say in that, but I would ultimately be working with our
6 senior leadership of the Vancouver Energy -- the
7 management committee for Vancouver Energy to determine
8 exactly how that would work.
9 MR. ROSSMAN: Who is that management
10 committee?
11 THE WITNESS: The management committee is
12 made up of executives from both Savage and Tesoro.
13 MR. ROSSMAN: Do you know if there's a list
14 of that submitted as part of the application?
15 THE WITNESS: I do not recall if there is a
16 list that was submitted as part of that or not.
17 MR. ROSSMAN: I guess I'm interested in who
18 those people are and sort of what the management of
19 Vancouver Energy looks like in practice, who makes
20 decisions on a day-to-day basis, who makes decisions in
21 terms of longer-term employment staffing. So could you
22 elaborate on that?
23 THE WITNESS: To some extent, I can. So I
24 think that what -- the question that's being asked has
25 to do with the operations of the facility, to my

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1 understanding, in how it would operate, which is a stage
2 that we're not to yet. While we're still in the
3 permitting process, frankly, those decisions are down
4 the road on things that we would be making down the road
5 related to the specifics of how we do employment, how we
6 would not do employment.
7 I can tell you that, as the general manager
8 and in accepting this role to come out here, I did
9 understand my primary -- or some of my responsibilities
10 to include hiring of employees and going through that
11 practice of making sure that they were working and able
12 to work for the facility.
13 MR. ROSSMAN: Hiring both Tesoro and Savage
14 employees?
15 THE WITNESS: No. Hiring of Savage
16 employees and making sure that the facility as a whole
17 was fully staffed, which would include making sure that
18 the appropriate contracts were in place to staff all
19 elements of the facility.
20 MR. ROSSMAN: So you wouldn't anticipate
21 having hiring authority over the Tesoro employees, but
22 you would anticipate understanding the contractual
23 relationship at that time such that you knew who did
24 have the hiring authority?
25 THE WITNESS: So I would anticipate having

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1 the ability, just like anyone who is operating a
2 facility, to make hiring and firing decisions, whether
3 or not that's a contractor or whether or not that's a
4 direct employee; meaning, as a contractor, I would have
5 the ability -- if there was a third-party contractor, I
6 would have the ability to terminate that contract or to
7 enter into a contract with an entity based on their
8 qualifications to perform and do something.
9 MR. ROSSMAN: So I'm a little -- that makes
10 sense in terms of scope of control. On the other hand,
11 it is Tesoro employees that are going to be doing the
12 dock portion of the project; is that right?
13 THE WITNESS: That's correct.
14 MR. ROSSMAN: Okay. So I'm struggling to
15 understand what the management structure will look like
16 and what the coordination will look like, but I'm
17 struggling because that has not been determined yet; is
18 that correct?
19 THE WITNESS: So the level of detail that
20 you are asking about, I don't know that that
21 specifically has been determined. In our -- if I recall
22 correctly, in our safety and operating procedures and
23 plan, we do have a structure in there that shows how
24 some of that will be managed, including the management
25 committee and including the coordination among the two

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1 entities and ultimately the management. I don't know
2 that it's at the level of detail that you are
3 referencing or asking about at this point in time.
4 So what -- I can add to that. So today, up
5 at Anacortes, Tesoro owns the facility and operates and
6 has broad responsibility over that. Savage is a
7 contractor to Tesoro at that facility. We have a
8 manager that reports to and works with the Tesoro
9 manager and our employees there -- it's a completely
10 distinct and separate facility from the refinery up in
11 Anacortes, but our employees coordinate on a daily basis
12 with the employees at the tank farm in the facility
13 there because they have a direct -- there are no tanks
14 at the Anacortes facility. The tanks are actually up at
15 the refinery, so they have to do coordination and
16 complete system integration.
17 So I am confident that that system works
18 because for the past five years -- four years -- four to
19 five years, we have operated in a system like that,
20 where we have complete overlap of accountability,
21 responsibility and we have a clear path for how to
22 address things and how to bring things into place.
23 It's actually no different than what we're
24 looking at here, just a little bit different players and
25 parties put into different positions.

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1 MR. ROSSMAN: Okay. That's starting to make
2 more sense to me. Thank you.
3 And this question may be better directed to
4 a different witness, and if so, I appreciate your
5 thoughts on which witness; but in terms of the sort of
6 scope of control and liability, you know, for, say,
7 negligence or something like that rather than for some
8 element of the facility that Vancouver Energy owns, I
9 guess what I'm wondering about is if sort of for
10 management and operations, day-to-day details of the
11 facility is not determined, but there's going to be both
12 Tesoro and Savage employees on site and then possibly
13 also Vancouver Energy employees on site, and Vancouver
14 Energy has care and custody responsibility for the
15 product, but may or may not have managerial authority
16 directly over the people working there except by
17 contract with not just sort of contractors that you've
18 hired from some broad search but with employees of your
19 corporate parents, Tesoro and Savage.
20 Is there any way to determine whether the
21 scope of control about who makes those decisions is in
22 line with who has financial liability? So I guess
23 Tesoro Savage Vancouver Energy is the entity that has
24 financial liability, but may or may not have day-to-day
25 managerial decisions. How does Vancouver Energy

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1 anticipate ensuring that appropriate practices are
2 followed?
3 THE WITNESS: So I'm not 100 percent sure
4 that I'm following the question. But at any facility
5 like this, whether it's this crude unloading facility or
6 whether it's a grain elevator or any other facility that
7 has something like this, you'll have multiple contract
8 relationships. And in all of those, you would have that
9 clearly defined, as far as accountability and
10 responsibility for certain elements. And in every case
11 you would have the right structure in place that would
12 provide that overall accountability and individual
13 accountability for the work that they are doing.
14 So I'm not sure if that fully addresses your
15 question or if I understood the question; but likewise,
16 in a facility that's integrated with this, I would
17 expect that when you talk about day-to-day managerial
18 accountability, the overarching management of Vancouver
19 Energy, or those who are in charge of managing the
20 overall facility, would have the ability to dictate
21 daily operations of anyone who is on site there and make
22 decisions related to that. That's integral to making
23 sure the facility operates appropriately.
24 MR. ROSSMAN: But that may or may not be
25 Vancouver Energy who has that managerial control?

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1 THE WITNESS: I'm not sure if I'm
2 understanding your question.
3 MR. ROSSMAN: Well, you're saying, whoever
4 is in that position of -- whoever is in the position of
5 having managerial control will be able to manage the
6 whole operation and it will be determined at a future
7 point.
8 THE WITNESS: Okay. So as the general --
9 and I'll just use me as the example. As the general
10 manager of the facility, I would have that over the
11 facility and over the operations of the facility. How
12 that -- when you talk about the specifics underneath
13 that or the specifics of the structure, ultimately, as
14 the general manager, I would have the ultimate
15 accountability and responsibility related to that and
16 managing that.
17 MR. ROSSMAN: Thank you.
18 JUDGE NOBLE: Are there any other council
19 questions? Mr. Snodgrass?
20 MR. SNODGRASS: Good morning. Just one
21 brief question. You've described many of the procedures
22 and functions on site pretty elaborately. Can you just
23 summarize what has been so far the safety record at
24 Anacortes?
25 THE WITNESS: So at Anacortes -- again, I'm

1 going to talk specifically about the crude unloading
2 facility because that is the facility that I directly
3 had accountability for when I was a business unit leader
4 and that I know about. And for our employees that
5 worked there, we've had one OSHA reportable in the
6 length of time that I was working over that operation.
7 An individual was on top of a rail car and he sprained
8 his ankle when walking around the rail car. That is the
9 only incident that I'm aware of.
10 JUDGE NOBLE: Mr. Siemann?
11 MR. SIEMANN: Thank you. Can you clarify
12 which entity has responsibility for the product from --
13 as it enters your facility and at what point when it
14 enters the facility and then at what point it leaves the
15 facility and if the liability and responsibility, the
16 care and custody, changes at any point within your
17 facility as it is on the rail cars, unloaded into pipes,
18 stored in tanks, transferred to ships, at what point --
19 and I'm also curious about the leaving facility -- at
20 what point the product on the ship, still at dock, not
21 at dock, sort of really specifically how that liability
22 is accorded.
23 THE WITNESS: So some of our other witnesses
24 may be able to speak in more detail to this, I believe,
25 but the point at which the BNSF hands the train over to

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1 us and our employees get on the train, that's the point
2 where we take over that care and custody responsibility
3 and when we have that care and custody responsibility
4 until the point when the oil enters the vessel and is on
5 the vessel. So that -- those are the defining points
6 where we have that care and custody responsibility and
7 the control of the facility and the care and custody
8 responsibility.
9 MR. SIEMANN: So is that to say that the --
10 once the product is on the ship that's still at your
11 dock, it is no longer your responsibility?
12 THE WITNESS: So at that point in time, it
13 is in the care and custody of the vessel operator and
14 the responsibility of the individuals that have the
15 vessel.
16 MR. SIEMANN: And does the responsibility --
17 is it -- and the liability, is it altered in any way
18 through that -- internal processes on your property?
19 THE WITNESS: No, it is not.
20 MR. SIEMANN: Thank you.
21 JUDGE NOBLE: Are there any other council
22 questions?
23 Cross-examination.
24
25

BRIMMER / LARRABEE

CROSS-EXAMINATION

BY MS. BRIMMER:

Q. Morning, Mr. Larrabee. I'm Janette Brimmer. I'm with Earthjustice. I represent the Columbia River group, a group of environmental and neighborhood organizations. So I'm going to start with some questions about some of your testimony yesterday, if I may.

You testified that Tesoro Savage would be accepting crude oil with an API between 15 and 45. Do you recall that testimony?

A. Yes.

Q. And I think you talked about the 45 is the lighter crude, such as the Bakken crude that we've been talking about during the hearing?

A. Yes.

Q. With the low end, the API of 15, that means that Tesoro Savage can accept tar sands or diluted bitumen; is that correct?

A. The facility would be able to accept pipeline-quality crude oil. So if it was able to flow through a pipeline, which a 15 API can flow through a pipeline, then we can accept that at the facility.

Q. Right. And to be precise, diluted bitumen can flow through a pipeline; that's what they do, right,

1 they add the diluent so that tar sands can flow through
2 a pipeline?
3 A. Yes, there are some diluted bitumens that can
4 flow through a pipeline.
5 **Q. And the heated tanks that are proposed for the**
6 **facility, I think there's going to possibly be two of**
7 **them; is that right?**
8 A. That's correct.
9 **Q. And the heated tanks are specific to being able**
10 **to handle tar sands, diluted bitumen as well because it**
11 **doesn't flow as readily, correct?**
12 A. So the heated tanks are able to handle a number
13 of different crude oils that could be a diluted bitumen.
14 It also could be a crude oil that has a heavier wax
15 content. So it doesn't necessarily -- it isn't always
16 necessarily dictated by the API gravity. It could be
17 other elements of the crude oil or other factors in the
18 crude oil that would dictate whether or not it would
19 need to be in a heated tank. And there's others who
20 could probably talk in more detail to that than I can.
21 **Q. Sure. So the heated tank gives you options and**
22 **one of the options is to handle the tar sands, diluted**
23 **bitumen?**
24 A. To handle diluted bitumen, which is different
25 than tar sands.

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1 **Q. Okay. It's not different than tar sands; it's**
2 **tar sands with diluent added, isn't it?**
3 A. What I meant when I referenced that is that is
4 not a raw bitumen which has no diluent in it.
5 **Q. I would like to turn to some of the questions**
6 **and answers between you and Council Member Rossman. And**
7 **I just want to get straight the various players here**
8 **because I -- and I apologize if I repeat some of the**
9 **subject matter, but I just want to make sure we're clear**
10 **in our minds on this.**
11 **So Vancouver Energy is an LLC, a limited**
12 **liability company; is that right?**
13 A. Yes. Vancouver Energy -- or Tesoro Savage
14 Petroleum Terminal LLC is doing business as Vancouver
15 Energy.
16 **Q. Okay. Is that governed by a board?**
17 A. It is governed by the management committee.
18 **Q. Okay. So that's not the same as a board of**
19 **directors for a corporation, right?**
20 A. I would defer to other folks who would
21 understand the legal framework better on whether or not
22 that would be similar or not to a board of directors.
23 **Q. Okay. Who are the members of the management**
24 **committee? And I don't mean who, names, I mean where do**
25 **they come from?**

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1 A. Can you clarify what you mean when you say
2 "where do they come from"?
3 **Q. Sure. Let's back up a little and I'll try to**
4 **break that apart. How are the members of the management**
5 **committee selected?**
6 A. So again, there's a structure that would put
7 in -- be put in place and that is in place that would
8 determine how members would be selected. Initially, I
9 don't know the specifics of how they were selected, but
10 there are two individuals from the Savage company
11 executive team and two individuals from the Tesoro team.
12 **Q. So when you say "they're from the executive**
13 **team," does that mean that two of them are executives at**
14 **Tesoro, and is that the Tesoro parent oil company or is**
15 **it a company that was developed specifically for the**
16 **purposes of opening this terminal?**
17 A. There was no company, to my knowledge, that was
18 developed specifically for opening this terminal; but
19 whether -- the level at which those individuals at
20 Tesoro are executives would be a question that would be
21 better addressed by Tesoro.
22 **Q. Okay. And I would ask the same question of**
23 **Savage, then, which maybe you're more familiar with.**
24 **Are the people that are on the management committee that**
25 **are Savage executives, are they, in fact, part of the**

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1 executives at the Savage parent company?
2 A. Yes, they are.
3 **Q. Okay. And you said there was a structure -- let**
4 **me clarify. Are you familiar with what you said was a**
5 **structure for selecting those people? Are you familiar**
6 **with what that structure was?**
7 A. No, I'm not familiar with the structure for how
8 they were originally selected or determined.
9 **Q. And in your answer it appeared that there would**
10 **be a different structure going forward. Did I misread**
11 **that answer?**
12 A. No. There would not be a different structure
13 going forward. What I was referring to is the specifics
14 of how the operation underneath that structure would
15 work is something that is still things that would be
16 determined.
17 **Q. So how are decisions made by the management**
18 **committee, if you know?**
19 A. Are you referring to today --
20 **Q. Correct.**
21 A. -- how decisions are made?
22 **Q. Yes.**
23 A. The management committee meets on a quarterly
24 basis and makes decisions based on how we proceed at
25 that point in time. The full management committee has

1 to be in place in order for that to meet or a quorum of
2 the management committee for that to occur and that does
3 occur on a quarterly basis.
4 **Q. Is a quorum three of four members?**
5 **JUDGE NOBLE: Excuse me. Council is having**
6 **a little bit of difficulty hearing you. If you would**
7 **turn this way and speak up a little, especially at the**
8 **end of what you say, you're trailing off a little bit.**
9 THE WITNESS: Okay. I apologize.
10 MR. STOHR: Either move your mic when you're
11 facing her or face us.
12 BY MS. BRIMMER:
13 **Q. And, Mr. Larrabee, I know it's polite to look at**
14 **me when you talk to me, but you don't have to. You can**
15 **look at them.**
16 A. Thank you.
17 **Q. So I think I had asked you, is a quorum three of**
18 **the four management committee members?**
19 A. Yes, a quorum would be three of the four. To my
20 knowledge, there has only been one meeting that has
21 occurred when not all of the management committee has
22 been there, that I can recall.
23 **Q. And when they're making decisions, is it a vote?**
24 **Is it consensus? How do they -- if there's**
25 **disagreement, how do they come to agreement or decide**

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1 what direction they're going to go?
2 A. So they're -- on a majority of the items that I
3 recall being discussed, there has been effectively --
4 without knowing the specifics of it, but effectively,
5 Robert's Rules of Order have been followed where they
6 would have a vote that was called.
7 **Q. Okay. What do they do when it's a four-member**
8 **committee and it's two to two?**
9 A. I don't recall that situation happening at this
10 point in time.
11 **Q. Does Vancouver Energy, the LLC, enter into**
12 **contracts on its own behalf?**
13 A. Yes, it does.
14 **Q. What kind of contracts?**
15 A. To this point in time, we've entered into
16 facility contracts or contracts for office space and
17 we've entered into contracts for consulting-related
18 services.
19 **Q. Has Vancouver Energy actually incurred debt for**
20 **the operation?**
21 A. For the operation itself?
22 **Q. Let's back up from that. I'll withdraw that**
23 **question.**
24 **Has Vancouver Energy incurred debt?**
25 A. No, not to my knowledge.

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1 **Q. Does it have the ability to do so?**
2 MR. JOHNSON: Objection. Your Honor, this
3 is wading beyond the scope of his direct examination and
4 beyond the scope of examination by the council and it's
5 also calling for speculation on the part of this
6 witness.
7 MS. BRIMMER: Your Honor, I don't want the
8 witness to speculate, certainly. If he doesn't know, I
9 would expect him to tell the council that. Council
10 Member Rossman asked what I thought were very astute
11 questions about who exactly is in charge, are we left
12 with an empty subsidiary box at the end of the day, how
13 do we incur --
14 MR. JOHNSON: Objection, Your Honor, she's
15 mischaracterizing the --
16 JUDGE NOBLE: Let her finish. Let her
17 finish. Mr. Johnson, let her finish.
18 MS. BRIMMER: I'm simply giving examples of
19 the type of questions that Mr. Rossman asked that I
20 think are very relevant for the council to consider. If
21 this witness is the wrong witness, he's obviously been
22 very honest and felt free to tell us when he's not the
23 right guy or if someone else can better answer the
24 question. So I would expect him to answer that if that
25 were the case.

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1 JUDGE NOBLE: Mr. Johnson, did you have
2 something to say that's brief?
3 MR. JOHNSON: No, Your Honor. I just stand
4 by the objection.
5 JUDGE NOBLE: Right. Well, more to the
6 point is whether or not it's beyond the scope of direct,
7 and I don't think it was, based upon the council
8 questions. There was also some questioning about
9 financial responsibility and, of course, this witness
10 knows, I think, not to speculate. I don't know if he
11 knows the answer, so I'll let him say whether -- I'll
12 let him answer the question, if he can.
13 A. Could you repeat the question?
14 MS. BRIMMER: Why don't we have it read back
15 so that we get it right. I don't remember precisely
16 either.
17 JUDGE NOBLE: Could the court reporter read
18 back the question.
19 (Question read back.)
20 MS. BRIMMER: And I think that was in
21 reference to incurring debt.
22 A. I am not aware of that.
23 BY MS. BRIMMER:
24 **Q. Do you know how Vancouver Energy acquires the**
25 **funds to do business, the business that it has done so**

1 far?
2 A. Yes.
3 **Q. How?**
4 A. A management committee meets and makes decisions
5 on when to provide additional funds to the --
6 JUDGE NOBLE: You were still -- excuse me.
7 You're trailing off again. I didn't hear the end of
8 that.
9 THE WITNESS: The management committee
10 meets, and when the management committee meets, they
11 make a determination of funding.
12 BY MS. BRIMMER:
13 **Q. Where does that funding come from when the**
14 **management committee determines that additional funding**
15 **is needed?**
16 A. The management committee -- funding comes from
17 the joint venture partners or the different entities
18 related to the management committee or related to
19 Vancouver Energy.
20 **Q. So the management committee for Vancouver Energy**
21 **decides that they -- that Vancouver Energy needs**
22 **additional funding, and that funding comes from the**
23 **separate corporate entities or separate business**
24 **entities, Tesoro and Savage. Do those two entities then**
25 **need to take some kind of management action to send the**

1 funds that Vancouver Energy has requested?
2 A. I would assume that they would also be taking
3 that action of those individual companies as well.
4 **Q. Is there --**
5 A. Again, to clarify, I am not an employee of
6 Tesoro and so I don't know the specific process they
7 would go through on their side.
8 **Q. Fair enough. Is there a general manager**
9 **counterpart to you, in other words, the job you do for**
10 **Savage, at Tesoro?**
11 A. No, there is not.
12 JUDGE NOBLE: Mr. Larrabee, speak up.
13 THE WITNESS: No, there is not. I
14 apologize.
15 BY MS. BRIMMER:
16 **Q. I think you responded to some questions from the**
17 **council that Vancouver Energy would have insurance if**
18 **things went wrong. I would like to ask you a little bit**
19 **about decisions related to things going wrong, if I may.**
20 **And, again, I apologize if I'm repeating some of the**
21 **subjects that the council members asked about.**
22 **And I was thinking of the BP Transocean issue**
23 **where, you know, Transocean was running the platform**
24 **that BP guys were on site helping with decisions.**
25 MR. JOHNSON: Objection, Your Honor,

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relevance.

MS. BRIMMER: Let me ask the question, please.

JUDGE NOBLE: Yes, that's a good idea. Let's have a question.

BY MS. BRIMMER:

Q. So it's my understanding that the Savage part of the operation is really overseeing the transloading operations, the unloading of rail cars and loading of vessels at the facility, correct?

A. So yes, but there would be oversight over the entire operation -- the entire operations as well.

Q. And the oversight of the entire operations comes from Vancouver Energy?

A. It would be ultimately with Vancouver Energy, but, again, the specifics of how that ultimately plays out can still be determined.

Q. Okay. Will there be Savage personnel on site -- excuse me, I'm getting the two mixed up. Will there be Tesoro personnel on site overseeing any part of the operation while Savage is overseeing the day-to-day transloading?

A. Overseeing the broad operations, is that what you mean, or any aspect of the operation?

Q. Well, again, using the BP Transocean example,

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1 I'm thinking is there a Tesoro person that can override
2 Savage decisions on site?
3 A. I'm going to answer that question as a general
4 manager of the operation. As a general manager, I would
5 have complete ability to use the operations there, and
6 anyone who is working there and is -- whether that's a
7 direct employee or contract employee, to address any
8 operational needs or any issues that might arise.
9 **Q. Okay. Thank you. That is clearer. And so you**
10 **would answer as the general manager really only to**
11 **Vancouver Energy as the ultimate oversight?**
12 A. Yes. And anyone that is working under me would
13 ultimately report -- as the general manager, would
14 ultimately report up and be accountable to me, whether
15 it's a contract or a direct employee.
16 **Q. You talked a little bit in response to council**
17 **questions about the Anacortes facility and you used that**
18 **as an example. First of all, I would like us to be**
19 **precise about how long Tesoro's Anacortes refinery has**
20 **actually been accepting crude by rail. I think that**
21 **it's only been about three years. Wasn't that maybe**
22 **December 2012, January 2013 that that operation started?**
23 A. It started receiving crude oil at the -- it
24 would have been fall of 2012, to my recollection.
25 **Q. And that is an entirely Tesoro operation, right?**

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I mean, that's their refinery and they're bringing crude to their refinery for their use?

A. So to be clear, the crude unloading facility is a separate facility from the refinery and is a separate facility. It is bringing crude oil just to the Tesoro refinery, but, yes, it is a Tesoro operation that is operated by Savage employees.

Q. It's not transloading oil onto vessels for someone else?

A. To my knowledge, it is not. But again, that is a Tesoro -- once it leaves that facility, that would be Tesoro who would know more specifics about that.

Q. And then my final set of questions concerns your care and custody testimony, and I think you said that the crude oil is in Vancouver Energy's care and custody once those employees take the train, physically get on the train and take it over, correct?

A. That's correct.

Q. But the train is in the port and in the facility for some period of time before that act happens, correct?

A. Yes, that act happens just before it enters the loop track area.

Q. And up until that time, it is BNSF that is responsible for the care and custody?

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1 A. Yes.
2 **Q. And then similarly, once the oil is on the**
3 **vessel at the dock, the care and custody transfers to**
4 **the vessel owner?**
5 A. That would transfer, yes, to -- well, I would --
6 I don't know that I would specifically say the owner of
7 the vessel, but it transfers over to the owner or
8 operator or the vessel parties, yes.
9 **Q. Okay. And, again, the vessel is at the dock for**
10 **some period of time while it is in the care and custody**
11 **of the crude oil?**
12 A. The vessel would only be at the dock for the
13 period of time that it is loading, unless there was
14 something else that caused it to stay there at the dock
15 for longer.
16 MS. BRIMMER: Thank you. I have nothing
17 further. Thank you so much.
18 JUDGE NOBLE: I just wanted to clarify what
19 you -- what you said. You said the care and custody of
20 Vancouver Energy starts when the employees get on the
21 car for the unloading operation, but BNSF only had care
22 and custody until the train enters the loop track?
23 THE WITNESS: So the BNSF crew that is
24 operating the train will hand over the train to the
25 employees of Vancouver Energy. Vancouver Energy will

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1 then take -- get on the train. When they get on the
2 train, they will operate it into the loop track.
3 JUDGE NOBLE: And that's the point at which
4 care and custody shifts to Vancouver Energy?
5 THE WITNESS: Correct.
6 JUDGE NOBLE: And then when the loading
7 operation is underway onto a vessel, care and custody is
8 with the shipping company or with Vancouver Energy?
9 THE WITNESS: So once the crude oil is
10 loaded into the vessel, it is care and custody of --
11 JUDGE NOBLE: When it's totally loaded, then
12 that's when the care and custody responsibility shifts?
13 THE WITNESS: The specifics of whether or
14 not it's when it's totally loaded or whether it's -- I
15 don't know that I can answer it -- it's individual
16 barrels or individual drops or whether it's the total
17 loading of the vessel.
18 JUDGE NOBLE: All right. So what I
19 understood your testimony --
20 THE WITNESS: So care and custody transfers
21 at the connection point between the facility and the
22 vessel. And so that's really where that transition
23 point occurs.
24 JUDGE NOBLE: It seems from your testimony
25 that the responsibility, this care and custody

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1 responsibility, has to do with whoever is doing the
2 moving of the product or managing the product itself in
3 some way.
4 THE WITNESS: Management of the product,
5 yes.
6 JUDGE NOBLE: Okay. Thank you. Thanks for
7 that clarification.
8 There's a question from Mr. Siemann.
9 MR. SIEMANN: How long does it take to load
10 a marine vessel with oil?
11 THE WITNESS: Mr. Bayer will be able to
12 answer that more specifically, but that would depend on
13 the flow rate and the size of the vessel, but that can
14 range. My estimate would be it would be roughly in the
15 20-hour range, but Mr. Bayer or Mr. Corpron would
16 probably have a better ability to answer that more
17 specifically.
18 MR. SIEMANN: So during those 20 hours of
19 transfer, is it possible that both entities, the ship
20 and Vancouver Energy, would have joint liability if
21 there were something that happened during that transfer
22 or can you speak to the liability issue during that
23 time -- that time period?
24 THE WITNESS: I can't speak to the specifics
25 of what the liability of the distinction would be there.

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1 I can say that when we are doing that loading process
2 and when it's part of our facility, that we would have
3 that care and custody responsibility and liability.
4 MR. SIEMANN: And one other question going
5 back. So the liability is with Vancouver Energy as an
6 entity itself, correct? Does the liability also go back
7 to Tesoro or Savage, or does it just reside with
8 Vancouver Energy?
9 THE WITNESS: I would assume that it would
10 reside with Vancouver Energy. Again, the specifics
11 of -- underneath that, contracting, things like that,
12 would be probably better answered by someone else.
13 MR. SIEMANN: Thank you.
14 THE WITNESS: To maybe clarify, that same
15 structure occurs regardless of the commodity. So
16 whether it's oil or whether it's grain or whether it's
17 apples, there is a care and custody transfer point for
18 everything that moves and there's liability and
19 responsibility for everything that moves and is
20 transferred that is not specific to the product that we
21 are looking to handle here. It is a general industry --
22 regardless of the industry, if you're looking at moving
23 materials.
24 MR. ROSSMAN: Just very briefly. Do you
25 know of specific witnesses who can testify to that

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1 structure in this instance?
2 THE WITNESS: Off the top of my head, I
3 cannot recall who those would be.
4 JUDGE NOBLE: Redirect, please.
5 MR. JOHNSON: I'm sorry, Your Honor --
6 MR. POTTER: I'm here.
7 CROSS-EXAMINATION
8 BY MR. POTTER:
9 **Q. Good morning, Mr. Larrabee.**
10 A. Morning, Mr. Potter.
11 **Q. I'm Bronson Potter. I represent the City of**
12 **Vancouver. We've met before?**
13 A. Yes, we have.
14 **Q. I would like to ask you a few questions to try**
15 **and clarify the type of tank cars that Vancouver Energy**
16 **would be willing to accept at the terminal. To do that**
17 **let's start by making sure we're on the same page with**
18 **respect to some tank car terminology.**
19 A. Okay.
20 **Q. Okay. So I understand, and correct me if I'm**
21 **wrong, that the older legacy tank cars are referred to**
22 **as DOT-111s. Is that your understanding?**
23 A. Yes.
24 **Q. And those cars can either be jacketed or**
25 **non-jacketed, correct?**

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1 A. That is correct.
2 **Q. And then there was a newer design developed in**
3 **2011 that's referred to as the CPC-1232, correct?**
4 A. Yes.
5 **Q. And that tank car can also be either jacketed or**
6 **non-jacketed?**
7 A. That is correct.
8 **Q. And in 2015, the Pipeline and Hazardous Material**
9 **Safety Administration, which I'll just refer to as PHMSA**
10 **from now on, developed a new standard in their enhanced**
11 **tank car rule, and that tank car is referred to as the**
12 **DOT-117?**
13 A. That is correct.
14 **Q. Okay. Do you believe that Vancouver Energy can**
15 **refuse to accept different types of tank cars at the**
16 **terminal if it chooses to do so?**
17 A. So we committed in the -- I'm trying to recall
18 specifically when we did this. It was a while ago. I
19 believe it was in our comment letter, but it may have
20 been just after our comment letter. But we committed to
21 only accept into the facility the DOT-117 rail car, the
22 new federal standard, or cars that exceeded that federal
23 standard.
24 We do have the ability to control that, and the
25 way that we do that is through contracts with our

1 customers; meaning, when we enter into a contract with
2 our customer, we will stipulate, along with a number of
3 other things that can happen, the type of car that they
4 are allowed to deliver to the facility. And we also
5 typically would stipulate in there the ability to reject
6 any cars that do not meet that standard as well.
7 **Q. So you referred to the DOT-117 tank car as the**
8 **standard by which any tank car accepted at your facility**
9 **has to meet?**
10 A. Yes.
11 **Q. Okay. And you also referenced your comments to**
12 **the DEIS as to where that commitment or that statement's**
13 **made?**
14 A. It was either in the comments to the DEIS or
15 just after that that we made that. I know that it is
16 certainly in our prefiled testimony.
17 **Q. Okay. I have in front of me -- and I'm going to**
18 **let you see this. This is the comment to the DEIS where**
19 **you talk about the tank car standard, and I want to give**
20 **you the benefit of having that statement in front of you**
21 **to see if it refreshes your recollection. There's a**
22 **strikeout and underline. And correct me if I'm wrong,**
23 **but isn't that comment stating that it's not the DOT-117**
24 **standard, but rather it's any tank car that meets the**
25 **federal rule for tank cars that would be accepted?**

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1 A. Yes. I appreciate you refreshing me on this.
2 So in our comment letter we did state -- or we did
3 strike out the DOT-117 tank car. It is something that
4 we've been discussing for a long period of time of how
5 to appropriately address this and when to look at this
6 and how to look at this holistically when we look at the
7 entire rail system and what our commitments would be.
8 And so in our comment letter, that is correct,
9 we did strike that out; but in our prefiled testimony,
10 we are clear that we will only accept the DOT-117 tank
11 car or better and we have spoken with EFSEC staff about
12 that on a number of times as well, so -- to make sure
13 that was clear as well. And I believe that is also
14 included in our revised -- it is included in the revised
15 application as well, and we did talk with EFSEC's staff
16 about that as well and specifically called that out in
17 our discussions with them.
18 **Q. Do you know where specifically in the revised**
19 **application that commitment appears?**
20 A. I do not know the exact section where that
21 occurs.
22 **Q. Okay. So let's delve a little bit deeper into**
23 **the tank car terminology, because I believe that there**
24 **is a designation of a DOT-117R, which stands for**
25 **retrofit; is that correct?**

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1 A. There -- in the DOT-117 language, there are a
2 number of different designations and that is one of
3 those designations.
4 **Q. So when you're talking about the DOT-117, does**
5 **that include retrofitted DOT-111s or CPC-1232s, or is it**
6 **just the new design standard promulgated in 2015?**
7 A. We did not specify further than the DOT-117
8 broad federal standard at this point in time.
9 **Q. So that could include retrofitted 111s or**
10 **retrofitted 1232s?**
11 A. If they met the new standard -- federal
12 standard, it potentially could include those.
13 **Q. Okay. It's important that we're very clear on**
14 **what the applicant is saying its commitment is here. So**
15 **please tell us exactly which types of cars you would**
16 **accept.**
17 A. I don't remember the specific language off the
18 top of my head that was in the application, but we did
19 commit to accepting rail cars that are the new federal
20 standard, which would be the DOT-117, and we -- if I
21 recall correctly, we left that as a broad new federal
22 standard. So anything that fits the federal standard of
23 a DOT-117 rail car, which includes a number of different
24 variations or iterations, including the R, then that
25 would fit into what the facility could accept, according

1 to what's in the application today.
2 **Q. Okay. And so -- I'm sorry.**
3 A. I think specific to rail cars in general, I will
4 answer your questions to the best of my knowledge, but
5 Mr. Hack has a much deeper knowledge of the rail cars
6 than I do and can address any of them more specifically.
7 **Q. I appreciate that. Is another way of saying**
8 **what you're saying is that if the rail cars are**
9 **permitted by the new US DOT enhanced standards for tank**
10 **cars for crude oil, that if it meets that rule, it will**
11 **be accepted at the site?**
12 A. Meets or exceeds that rule.
13 **Q. Okay. So for example, there is a phase-out**
14 **schedule for 111s and there's a phase-out schedule for**
15 **1232s. During the time that those tank cars are allowed**
16 **under the rule prior to the phase-out date, will they be**
17 **accepted at the facility?**
18 A. No, they will not be accepted at the facility.
19 We committed that we would meet that standard from day
20 one of operating the facility, not according to the
21 phase-out schedule.
22 **Q. Didn't Vancouver Energy have a concern that it**
23 **would be at a commercial disadvantage if it set a higher**
24 **standard for tank cars than other terminals?**
25 A. It was one of the elements that we needed to

1 consider in making that commitment. So it was not -- it
2 was certainly not the sole element that we needed to
3 consider, but is one of the elements that we needed to
4 consider.
5 **Q. All right. I'm going to approach you one more**
6 **time and point out to you a statement and a comment and**
7 **just ask you a question about it.**
8 A. Okay.
9 **Q. Starting right here with the applicant.**
10 **Mr. Larrabee, would you just please read that sentence**
11 **that I just pointed out to you that starts with the**
12 **words "The applicant."**
13 A. Yes. "The applicant is concerned with a
14 different rail car requirement than the federal
15 government and other existing terminals in Washington
16 state which essentially create an uneven playing field
17 for industry and could put Vancouver at a severe
18 commercial disadvantage" --
19 JUDGE NOBLE: Mr. Larrabee, you're reading
20 too fast.
21 THE WITNESS: Okay. I apologize. Do I need
22 to repeat any of that?
23 JUDGE NOBLE: No, you can go on.
24 A. Okay -- "even though other crude oil rail cars
25 are often transported much further through the state to

terminals in northern Washington."
BY MR. POTTER:
Q. Okay. Enough about tank cars.
You testified yesterday that there could be some variability in the arrival and departure of oil trains at the terminal.
A. That's correct.
Q. Just to be clear, could there be five oil trains arriving at the terminal in a single day?
A. There is that possibility based on scheduling and based on ratability or lack of ratability that that could occur.
Q. How many oil trains can you accommodate on the site at any one given time? What's the maximum number?
A. There are three loop tracks and so we can accommodate three trains for unloading.
Q. Yesterday you testified that BNSF would be, I think the word was, the primary carrier delivering oil to the terminal, or maybe it was the main carrier. Do you recall that testimony?
A. Yes. I said we would -- if I recall, we would anticipate BNSF being the primary carrier.
Q. Who might the other carriers be?
A. The Union Pacific has a connection point into the Port of Vancouver, but that would require -- for

1 them to do that, there is a number of different series
2 of things they would have to do to get into the
3 facility, which is -- it's a little more complex for
4 them to get into the facility. We also don't
5 necessarily anticipate that crude oil as often will come
6 from the different fields where the UP is the primary
7 service provider.
8 **Q. Yesterday you testified that the financial**
9 **assurance in the lease was the minimum that would be**
10 **provided; is that correct?**
11 A. So I believe what I said is we would anticipate,
12 yes, that those would be minimums. We don't look at
13 those as the ultimate accountability or financial
14 liability or responsibility that we would have in every
15 case.
16 **Q. Okay. And I'm going to give you some amounts of**
17 **insurance required by the lease and tell me if these**
18 **sound correct to you. On the liability insurance,**
19 **there's a $10 million per occurrence, $15 million**
20 **aggregate limit required.**
21 A. So I do not have the lease in front of me and
22 can't comment on whether or not that sounds correct or
23 not, but if you were telling me that, I'm going to
24 assume that is what's in the lease.
25 **Q. All right. And with respect to pollution legal**

1 liability insurance, does the amount of $25 million
2 sound correct?
3 A. Again, it sounds approximately correct.
4 **Q. Are you aware that -- in its draft regulatory**
5 **impact analysis for the new enhanced tank car standard,**
6 **that PMHSA stated -- PMH -- PHMSA considers 1.2 billion**
7 **in damages to be a somewhat conservative measure of**
8 **damages that could be caused by a higher consequence**
9 **event?**
10 A. I am not familiar with that. But it sounds to
11 me like what that is referring to is not terminal
12 operations but something different than terminal
13 operations. But I'm not familiar with the specific
14 statement or where that's coming from.
15 **Q. It does refer to oil train rail derailments, but**
16 **you will be having oil trains move at the site, correct?**
17 A. Yes. Oil trains will move at the site at
18 5 miles an hour.
19 **Q. Have you reviewed the prefiled testimony of**
20 **Mr. Blackburn who is a risk consultant hired by the City**
21 **of Vancouver?**
22 A. No, I have not reviewed that testimony.
23 **Q. Okay. So you're not aware that he's estimated**
24 **the maximum foreseeable loss from a major event being 5**
25 **to $6 billion?**

1 MR. JOHNSON: Objection. He just stated
2 that he hasn't read the testimony, Your Honor.
3 MR. POTTER: That's fine. I'll withdraw the
4 question.
5 JUDGE NOBLE: Sustained.
6 BY MR. POTTER:
7 **Q. The statement that the insurance required by the**
8 **lease is the minimum financial assurance that would be**
9 **provided sort of begs the question, what's the maximum**
10 **that will be provided?**
11 A. I think we can have others who can testify to
12 that separate from me.
13 **Q. What is the net worth of Vancouver Energy?**
14 A. I don't know that I have the data at the top of
15 my head to address that.
16 **Q. Is it less than $10 million?**
17 A. I'm not sure that I understand the question that
18 you're asking. When you say -- when you say "net
19 worth," when you're defining that and what are you
20 referring to?
21 **Q. Okay. Well, net worth -- focus on Vancouver**
22 **Energy, what's the value of its assets less the amount**
23 **of its liabilities? What's the net worth of Vancouver**
24 **Energy today?**
25 A. Today I would consider that proprietary

1 information and confidential information.
2 **Q. Okay. With respect to the safety plans that**
3 **have been developed for the site, you stated that there**
4 **is emergency response plans. Is the oil spill**
5 **contingency plan one of those?**
6 A. The oil spill contingency plan is something that
7 was also submitted with our application for site
8 certification.
9 **Q. Is there a specific firefighting response plan?**
10 A. To my recollection, there is not a specific
11 firefighting response plan, but there is some
12 information in there related to fires, meaning --
13 **Q. You answered my question.**
14 A. -- the ability to look at that. We also have an
15 additional witness who would be able to speak more
16 clearly to emergency response plan, emergency response
17 planning and spill planning. That would be Mr. Bayer.
18 **Q. And with respect to the employees at the site,**
19 **is it correct that there is not a dedicated firefighting**
20 **crew employed by any of the partners or Vancouver**
21 **Energy?**
22 A. That is correct. The firefighters are trained
23 in incipient firefighting. There is not a dedicated
24 crew at the site. There are a number of reasons for
25 that. When you --

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1 **Q. Mr. Larrabee, it was a simple yes-or-no**
2 **question. You answered it. There's not.**
3 A. Thank you.
4 **Q. If Mr. Johnson has follow-up, he can go into**
5 **that on redirect.**
6 A. Thank you.
7 **Q. Okay. You testified that -- yesterday, that the**
8 **West Vancouver Freight Access project underwent an**
9 **environmental review. Do you know if that environmental**
10 **review included an analysis of the transportation of**
11 **crude oil by unit trains?**
12 A. I do not know if it included that analysis.
13 MR. POTTER: All right. No further
14 questions.
15 JUDGE NOBLE: Thank you, Mr. Potter.
16 Are there any other entities who wish to
17 cross-examine?
18 MR. STONE: I have a follow-up question.
19 JUDGE NOBLE: Sure.
20 MR. STONE: Mr. Larrabee, who owns the
21 railroad tank cars on which the oil is transported?
22 THE WITNESS: Typically, the railroad tank
23 cars are leased, and the customer who is transporting
24 the product would typically lease the rail cars.
25 MR. STONE: So the railroad company owns the

1 tank cars and they're leased to others?
2 THE WITNESS: No. There are separate
3 companies that build tank cars, and they typically build
4 and own those tank cars. For example, UTLX is a company
5 that builds tank cars and own those -- owns those and
6 then would lease those out. Greenbrier is another
7 example in the area of a company that builds tank cars
8 and leases those tank cars out. There's a number of
9 companies that do that.
10 MR. STONE: So is the railroad company the
11 lessee?
12 THE WITNESS: No. The customer who is
13 transporting the product would be the lessee.
14 MR. STONE: So the railroad company neither
15 owns nor leases the tank cars?
16 THE WITNESS: Usually, no. There are
17 instances where the railroad company does own or does
18 lease rail cars. To my knowledge, in crude
19 transportation, the railroad does not.
20 MR. STONE: Well, what I'm getting at is the
21 commitments who have set only 117 tank cars that
22 Vancouver Energy is making, what role, if any, does a
23 railroad company have in fulfilling that commitment?
24 THE WITNESS: The railroad does not have a
25 role in fulfilling that commitment. The customers of

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1 the facility have the role in that commitment -- in
2 fulfilling that commitment. So if a customer wants to
3 deliver to our facility, then they would have to procure
4 rail cars that meet or exceed that standard, and then
5 they would arrange with the railroad for the
6 transportation of those rail cars to the facility.
7 MR. STONE: Okay. Thank you.
8 JUDGE NOBLE: We have --
9 MR. HALLVIK: I just have a couple of brief
10 questions.
11 JUDGE NOBLE: You have a couple of brief
12 questions. All right. We are going to take a break
13 after your couple of brief questions. We won't take a
14 break now then.
15 MR. HALLVIK: Thank you.
16 JUDGE NOBLE: Thank you.
17 CROSS-EXAMINATION
18 BY MR. HALLVIK:
19 **Q. Good afternoon -- good morning, Mr. Larrabee.**
20 **My name is Taylor Hallvik. I represent Clark County.**
21 A. Morning, Taylor.
22 **Q. A couple of follow-up questions --**
23 **JUDGE NOBLE: Can't hear you -- council**
24 **can't hear you.**
25 BY MR. HALLVIK:

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1 **Q. I have a couple of follow-up questions relating**
2 **to insurance and financial responsibility. As general**
3 **manager of Vancouver Energy, can you confirm -- or isn't**
4 **it true that Vancouver Energy has not yet identified any**
5 **specific insurance carrier or insurance coverage that**
6 **would be available in this -- with respect to this**
7 **facility?**
8 A. We have talked to our brokers about a number of
9 those things, but we have not specifically procured any
10 of that at this point in time or are also not in
11 operations yet.
12 **Q. And has not yet identified a carrier or -- who**
13 **is willing to provide the coverage requested?**
14 A. Michelle Hollingsed would be better able to
15 answer that question about whether we've specifically
16 identified --
17 **Q. But as general manager of Vancouver Energy, you**
18 **don't have that information?**
19 A. I do not at this point in time, no.
20 **Q. Okay. And for that reason, because you don't**
21 **know, is it true -- or isn't it true that you can't say**
22 **whether any such coverage would have -- what the terms**
23 **or limits or exclusions of any such coverage would be at**
24 **this point?**
25 A. No. We have other folks who are more versed in

1 that industry and more expert in that industry that can
2 specify that and can talk in more detail to that. I
3 utilize that team to do those types of things and refer
4 to them to rely on them.
5 **Q. As general manager of Vancouver Energy, you**
6 **don't have that information?**
7 A. I don't have it in front of me today and at the
8 top of my memory stack, I guess, is a way to put it. I
9 do know that we have begun those discussions and we have
10 talked with a number of those people and we've talked to
11 in broad and/or general terms, and our other witnesses,
12 Michelle Hollingsed, can talk in more specific terms
13 about what we have and have not talked about in the
14 level of detail about that.
15 **Q. So my final question would be, again, because**
16 **you don't have that information, you can't say whether**
17 **any such hypothetical coverage would provide coverage**
18 **for injuries or damages occurring at adjacent off-site**
19 **locations such as the Clark County Jail Work Center;**
20 **isn't that true? It's a yes or no question.**
21 A. Can you repeat the question?
22 **Q. Yeah. Isn't it true, because you don't have**
23 **this information with respect to this hypothetical**
24 **coverage, you can't say whether or not the insurance**
25 **coverage would provide -- or protect or cover injuries**

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1 or damages to off-site locations of adjacent facilities,
2 like the Clark County Jail Work Center?
3 A. I don't have the insurance information on the
4 top of my head to say --
5 MR. HALLVIK: That's all the questions I
6 have. Thanks.
7 JUDGE NOBLE: Before we go on break, I have
8 a question.
9 Mr. Larrabee, I know that you don't know the
10 specifics of the insurance coverage, how much it would
11 be or what it would cover, but do you know that the
12 mechanism, the instrument of financial responsibility is
13 insurance for Vancouver Energy?
14 THE WITNESS: I know that that is the most
15 likely mechanism that we are looking at, insurance.
16 JUDGE NOBLE: As opposed to a letter of
17 credit or bonding?
18 THE WITNESS: There are some situations
19 where, depending on where, we may use those as well, but
20 I can't speak to the specifics at this point in time.
21 JUDGE NOBLE: All right. Thank you. All
22 right. We will be in recess for 15 minutes, until
23 quarter of 11.
24 (Recess taken from 10:34 a.m. to 10:47 a.m.)
25 JUDGE NOBLE: Back on the record. Is there

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1 any other cross-examination of Mr. Larrabee?
2 Redirect?
3 MR. JOHNSON: Thank you, Your Honor.
4 REDIRECT EXAMINATION
5 BY MR. JOHNSON:
6 **Q. Mr. Larrabee, a few follow-up questions based on**
7 **questions from opposing counsel and council members.**
8 **First of all, let me pick up where Mr. Hallvik**
9 **left off. As a general manager and in your experience,**
10 **do you typically insure a facility that's not permitted**
11 **or constructed?**
12 A. No.
13 **Q. Now, I want to talk a bit about the management**
14 **structure of the joint venture and some questions**
15 **relating to the management committee. Do you recall**
16 **that series of questions?**
17 A. Yes.
18 **Q. Okay. Again, can you just describe the**
19 **management committee, how many members?**
20 A. Management committee has four members, two from
21 the Savage side of the joint venture and two from the
22 Tesoro side of the joint venture.
23 **Q. And who are the two from the Savage side?**
24 A. Nathan Savage, one of our executive vice
25 presidents and also a group business unit leader over

1 all of our oil and gas operations, and the second one is
2 Curt Dowd. He is an executive vice president currently
3 over strategy and was previously our chief financial
4 officer.
5 **Q. Okay. And how about on the Tesoro side?**
6 A. On the Tesoro side, Keith Casey, who is an
7 executive vice president over operations for Tesoro, and
8 Brian Sullivan, who is vice president of corporate
9 affairs for Tesoro.
10 **Q. And do you routinely attend the management**
11 **committee meetings?**
12 A. Yes. Since I was put in place as the general
13 manager, I've attended all of those meetings.
14 **Q. Okay. So you haven't missed any meeting of the**
15 **management?**
16 A. No.
17 **Q. Have you discussed, during any management**
18 **committee, use of the Vancouver Energy limited liability**
19 **corporation, that is, Tesoro Savage Petroleum Terminal**
20 **LLC, to limit the responsibility or liability of either**
21 **Tesoro Savage or that entity for the crude that's**
22 **passing through the Vancouver terminal?**
23 A. No.
24 **Q. Do you expect that the management committee will**
25 **resolve issues related to care and custody of the crude**

1 oil as it relates to the railroad and the marine vessels
2 going forward?
3 A. Yes.
4 **Q. Now, there was also some discussion about tank**
5 **car commitments. Did those commitments change from the**
6 **time of the DEIS comment letter that Mr. Potter was**
7 **referring to in January of 2016 to today?**
8 A. Yes, they did.
9 MR. JOHNSON: Ms. Mastro, could you please
10 pull up Exhibit No. 234.
11 MS. MASTRO: I'm waiting for it to --
12 MR. JOHNSON: All right. So we'll talk to
13 it here in a moment. I'm sorry, it's Exhibit 1,
14 page 234.
15 BY MR. JOHNSON:
16 **Q. You were asked some questions about the lease,**
17 **and Mr. Potter asked you some specific questions about**
18 **specific dollar amounts and limitations. Do you know,**
19 **without referring to the lease, what those specific**
20 **requirements are?**
21 A. No, not without referring to the lease.
22 **Q. And you will recall that the lease was entered**
23 **into evidence yesterday. Do you recall that?**
24 A. Yes.
25 **Q. And we're waiting for an exhibit to come up**

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here.

MS. MASTRO: I apologize. It's a thousand pages.

MR. JOHNSON: That's okay.

BY MR. JOHNSON:

Q. And with regard to rail -- well, rail operations and tank cars and the specific questions that Mr. Potter asked you about, you indicated there would be another witness that could provide additional information to the council. Who's that witness?

A. Mr. Hack could offer specifics related to tank cars.

Q. And, again, on the DOT-117 commitment, what specifically has the -- has Vancouver Energy committed to with regard to those rail cars?

A. We committed to specifically -- or only allow rail cars that meet or exceed the DOT-117 standard, and to do that in advance of the phase-out schedule that is specified in the regulation -- in the federal regulation.

Q. All right. And the intent here is to show where that's reflected in the ASC, but we're not getting it up.

MR. JOHNSON: So I think in the interest of time, Your Honor, I'll just conclude there.

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1 JUDGE NOBLE: Thank you. Council questions
2 based upon the cross and redirect? There are none --
3 there is one.
4 MR. SIEMANN: This is actually not about
5 cross or redirect, but going back to earlier testimony.
6 Is that all right?
7 JUDGE NOBLE: That's all right. We just --
8 we reopen direct for your question.
9 MR. SIEMANN: So you testified earlier about
10 how each employee has stop work authority. So I'm going
11 to -- I wanted to go back to the question about safety
12 and that. And you've also used the Anacortes facility
13 as an example and sort of a model for this facility; is
14 that correct?
15 THE WITNESS: Yes.
16 MR. SIEMANN: And it's my understanding that
17 a number of years ago, there was a -- an explosion and
18 fire and some staff died at the Anacortes facility, and
19 I wanted to understand whether or not both Tesoro and
20 Savage were operating at that time at that facility, and
21 if that authority for stop work resided in that -- if
22 that policy was also operational there.
23 THE WITNESS: So I cannot comment on the
24 specifics of that incident. I would go back and clarify
25 that the crude rail unloading facility is the portion

1 that Savage operates. It's a separate distinct
2 facility. It has a different fence line actually around
3 it from the refinery. So the refinery where that
4 occurrence occurred is a different facility. Savage has
5 not ever been inside or operated inside that until
6 just -- until after the crude rail unloading facility
7 was put in place, which, again, is a separate facility.
8 We do do some switching inside the refinery, but that is
9 not related to that at all. So they're two separate
10 facilities and I really don't have any ability to
11 comment on anything related to the refinery operations.
12 MR. SIEMANN: Thank you.
13 JUDGE NOBLE: Are there any other council
14 questions?
15 All right. In that case, Mr. Larrabee,
16 you're excused as a witness. Thank you very much for
17 your testimony here today.
18 THE WITNESS: Thank you, Judge Noble.
19 JUDGE NOBLE: Call your next witness.
20 MR. DERR: Thank you, Your Honor. We call
21 Brian Carrico.
22 JUDGE NOBLE: Mr. Carrico, would you raise
23 your right hand.
24 (Witness sworn.)
25 THE WITNESS: I do.

DERR / CARRICO

1 JUDGE NOBLE: Please be seated.
2 You may proceed.
3 BRIAN CARRICO,
4 having been first duly sworn, testified as follows:
5 DIRECT EXAMINATION
6 BY MR. DERR:
7 **Q. Thank you. Mr. Carrico, would you start by**
8 **stating your name and spelling it for the record.**
9 A. Thank you. My name is Brian Carrico. B-r-i-a-n
10 C-a-r-r-i-c-o.
11 **Q. Thank you. Mr. Carrico, did you prepare written**
12 **prefiled testimony?**
13 A. Yes.
14 **Q. And did your prefiled testimony include your CV**
15 **which describes your education, experience and**
16 **familiarity with city and county plans and regulations?**
17 A. Yes.
18 **Q. Have you worked on projects in the city of**
19 **Vancouver?**
20 A. Yes, I've worked on a variety of projects in the
21 city, including the bulk pot ash handling facility at
22 Terminal 5, the waterfront park, the waterfront --
23 Vancouver waterfront development and the united drain
24 terminal expansion at the Port of Vancouver.
25 **Q. Because your prefile has already been submitted,**

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1 I'm not going to ask you detailed questions about that,
2 but council and others may want to do so later.
3 Have you reviewed additional information since
4 your prefiled testimony to prepare for your testimony
5 today?
6 A. Yes. I reviewed the testimony of -- or the
7 prefiled testimony of Wechner, Mr. Eric Holmes, Hicks
8 and Broncheau as it relates to photographs provided for
9 fishing access sites, to Mr. Monaghan's testimony as it
10 regards to photographs of the Washougal well field, and
11 I also reviewed the EIS documents for the Clark County
12 Jail Work Center site in process.
13 **Q. Thank you. Mr. Carrico, in your prefiled**
14 **testimony, you described a history of rail development**
15 **within the city of Vancouver, including some historical**
16 **photograph references, the West Vancouver Freight Access**
17 **project, the Vancouver City Center Vision plan, and the**
18 **waterfront development planning process. Do you recall**
19 **that testimony?**
20 A. Yes.
21 **Q. And can you just briefly summarize what's your**
22 **opinion about whether each of those planning processes**
23 **accommodated existence of the rail line or plans for**
24 **future rail traffic?**
25 A. Yes. In my opinion, each of those, the

1 documents when referencing those plans, addresses the
2 exist -- the existing rail corridor in place, as well as
3 planning for growth around the rail corridor in the
4 context of expanded rail operations.
5 **Q. Thank you. Next I want to ask you a few**
6 **questions about the Jail Work Center. That, as I**
7 **recall, was not a topic of your prefiled testimony; is**
8 **that correct?**
9 A. That is correct.
10 **Q. Did you review the EIS for the original siting**
11 **decision for the jail work release center?**
12 A. I did.
13 MR. DERR: And, Your Honor, Exhibit 222 TSS
14 is the -- is that document. And I believe we have a
15 stipulation to enter that exhibit, but I also believe
16 you haven't necessarily ruled on all the stipulated
17 exhibits. So I want to ask the witness some questions
18 about that document.
19 JUDGE NOBLE: Let's get it admitted. Just a
20 second. It's my understanding there was no opposition
21 and this was an agreed exhibit. Exhibit 222, which is
22 the FEIS for Clark County Jail, 1997, Volume 1.
23 Exhibit 222 will be admitted.
24 MR. DERR: Thank you.
25

BY MR. DERR:

Q. Mr. Carrico, does Exhibit 222, the jail work release center EIS, does it evaluate impacts from locating that jail work release center at the site where it's now located?

A. Yes, it does.

Q. What was the use of this site prior to the jail?

A. Prior to the jail, it was part of ALCOA's aluminum operations.

MR. DERR: If I could ask you to pull up 222, page 73.

BY MR. DERR:

Q. And I'll ask you the question while the exhibit's coming up. What was the zone -- do you recall what the zoning of that site was?

A. My recollection at the time is that the site was zoned heavy manufacturing per the City of Vancouver code.

Q. So I'm going to ask you a question about this page, but if you can't read it and need a copy, I'll hand you a copy.

A. I can see it. Thank you.

Q. Oh, you can see it?

A. Yes.

Q. That's better than I can do that. I guess

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1 you're younger than I am, probably.
2 So did -- did the jail work release center EIS
3 recognize that locating the jail in a heavy industrial
4 zone allows uses that are incompatible with most other
5 uses in that zone?
6 A. Yes, it does.
7 **Q. And is the jail work release center considered a**
8 **residential use?**
9 A. It wouldn't be considered a typical residential
10 use, such as single-family, but the inmates there do
11 stay there overnight and so it does have residential
12 activities.
13 **Q. Is this an unusual location to site a**
14 **residential facility from a land use planning**
15 **perspective?**
16 A. It's not typical to allow residential activities
17 within a heavy industrial or heavy manufacturing zone
18 because of the incompatibilities with residential
19 activities that industrial activities often have, such
20 as noise, the hours of operation, heavy truck or rail
21 traffic, things like that.
22 **Q. Are there other existing heavy industrial uses**
23 **in close proximity to the jail site?**
24 A. Yes. The site's completely surrounded by
25 industrial activities, including such things as the

1 gas-fired power plant, electric power plant. There is a
2 propane off loading and distribution terminal, a metal
3 yard and a sand and gravel operation on just a few.
4 MR. DERR: If you could pull up 222,
5 page 50.
6 BY MR. DERR:
7 **Q. Again, as it comes, Mr. Carrico, my question is**
8 **going to be does the jail work release center EIS**
9 **address -- identify potential expansion of the BNSF rail**
10 **service and conflicts at the former ALCOA site?**
11 A. Yeah, the document specifically identifies the
12 existing BNSF rail lines located north of the facility
13 and notes the potential for expansion of those
14 facilities.
15 **Q. And how -- does the EIS --**
16 MR. DERR: If you pull up 222, page 99.
17 BY MR. DERR:
18 **Q. Did the EIS address access to the jail work**
19 **release center and concerns regarding delays due to rail**
20 **traffic?**
21 A. Yes. The EIS noted that access into the
22 facility was -- would be via an at-grade crossing, and
23 that access into the facility could be delayed while a
24 train was on those -- on those tracks.
25 **Q. Did the EIS recommend mitigation measures to**

1 address that access concern?
2 A. It specifically noted that those delays could
3 result in emergency service delays into the facility,
4 and it identified providing fire sprinklers within the
5 facility as a way to mitigate those impacts.
6 **Q. And do you know if fire sprinklers were**
7 **installed in the jail work release center?**
8 A. I reviewed the online permit information the
9 City has available and in doing so there were a number
10 of inspection -- fire inspections noted of the facility,
11 noting that the sprinkler systems were inspected. So my
12 assumption is that if they're inspecting the sprinkler
13 systems, they were installed.
14 **Q. And do you know, has the access issue to the**
15 **jail work release center been changed since the**
16 **discussion in this EIS?**
17 A. Yes, as part of the port's West Vancouver
18 Freight Access project, they constructed the Gateway
19 Avenue overpass, which provides for a grade-separated
20 access into the facility.
21 **Q. Thank you. I next wanted to ask you a few**
22 **questions about Mr. Eric Holmes' prefiled testimony.**
23 **Have you reviewed that document?**
24 A. Yes, I have.
25 **Q. On page 14, Mr. Holmes provides the following**

1 opinion, and I'll quote: "Approval of this project is
2 likely to negate the planning Vancouver has done."
3 Do you agree with this opinion?
4 A. I do not.
5 **Q. And why not?**
6 A. I think that opinion fails to recognize the
7 variety of planning efforts of both the City and the
8 Port to recognize and accommodate the growth both of
9 land use and rail traffic on the corridor. Some
10 examples are the presence of the existing rail corridor.
11 That corridor was built really before the majority of
12 development within the city of Vancouver and that
13 development would have seen and recognized that corridor
14 as being in place.
15 In regards to the site itself, it fails to
16 recognize the plan designation and zoning that
17 specifically allows for heavy industrial activities,
18 including the proposed use of the terminal.
19 It fails to recognize the planning efforts of
20 both the port and the City in regards to rail traffic,
21 specifically the West Vancouver Freight Access -- excuse
22 me, West Vancouver Freight Access project and the
23 Vancouver waterfront access project that dealt with that
24 existing rail corridor and provided access into the port
25 to increase rail into that facility, including unit

1 trains.
2 And also the waterfront development occurred --
3 planning for that occurred either in conjunction with
4 the West Vancouver Freight Access project and those rail
5 improvements or after those improvements were completed.
6 **Q. Mr. Carrico, I'm going to remind you, as the**
7 **other attorney did, you can be rude to me and answer --**
8 **speak to the council -- I think they can hear you fine,**
9 **but it's also fine for you to explain your testimony by**
10 **looking at them instead of me.**
11 **I want to move on. On page 15 of Mr. Holmes'**
12 **prefile, he provides the following observation. Again,**
13 **I'll quote: "The construction and operation of Tesoro's**
14 **oil terminal would adversely impact existing and**
15 **anticipated patterns of land use."**
16 **In your opinion, does Mr. Holmes support his**
17 **statement?**
18 A. No, for a number of reasons. In regard to the
19 site itself, as indicated in my prefiled testimony and
20 earlier, it fails to recognize the zoning and use --
21 zoning and plan for that site, as well as existing and
22 historical uses there.
23 In regards to the rail corridor, it fails to
24 recognize that existing rail corridor and that no
25 improvements are planned for that facility.

1 **Q. So in your opinion, will construction and**
2 **operation of the terminal require the City to make**
3 **changes to its plans for City Center?**
4 A. No, not in my opinion, because the
5 infrastructure improvements necessary to access that
6 site through the rail corridor are in place and there's
7 no improvements as a result of this project to the rail
8 corridor in the vicinity of that project.
9 **Q. Okay. One more item. Mr. Holmes on page 6 of**
10 **his prefiled testimony, he described the Riverview**
11 **Gateway subarea plan and describes concerns about a**
12 **quarry with a single at-grade access point. Are you**
13 **familiar with that planning area and with the quarry and**
14 **the access point referred to?**
15 A. Yes, I am familiar with that. The quarry is in
16 the vicinity of -- or in that subarea plan are located
17 north of the rail line and actually don't require a
18 crossing of the rail line to gain access. There is a
19 sawmill in that subarea and it is accessed via an
20 at-grade crossing of the BNSF rail line. There are -- I
21 believe it is protected with gates and signals and is a
22 flat crossing. I'm not sure how semi-trucks would have
23 difficulty accessing that since they access the sawmill,
24 I assume, quite frequently.
25 **Q. And finally, what about Mr. Holmes' concerns**

1 regarding access to the Columbia Business Center and
2 Columbia Shores?
3 A. That's an existing condition that doesn't -- the
4 project doesn't plan or include any improvements along
5 the rail corridor in that area. I would also note that
6 even if that rail line was not there, Highway 14
7 parallels the rail corridor in that location. And so
8 access is restricted by Highway 14, where you can't
9 cross that except for at the one location identified in
10 Mr. Holmes' testimony.
11 **Q. Okay. I now want to switch and ask you a couple**
12 **questions about Mr. Wechner's prefiled testimony. Have**
13 **you reviewed that document?**
14 A. Yes, I have.
15 MR. DERR: I'm going to ask -- pull out
16 page 54 of Wechner's prefile. And I have an exhibit
17 number, but my understanding is we're not using exhibit
18 numbers for prefile. So I'll assume you can find it
19 that way. And if not, mine say it's 5902 CRK.
20 BY MR. DERR:
21 **Q. Mr. Carrico, does your prefiled testimony or**
22 **exhibits attached address all of the same land use**
23 **planning policies and development regulations that**
24 **Mr. Wechner addressed?**
25 A. Yes, with one exception related to the city

1 shoreline management plan.
2 **Q. And can you describe, while we're pulling it up,**
3 **at least in general terms, what's the nature of the one**
4 **shoreline policy he addresses that you do not address?**
5 A. It's actually the sub-one bullet or subset of a
6 policy regarding shorelines of statewide significance,
7 and it's a statement that the statewide interests need
8 to be considered over local interests when it comes to
9 siting on shorelines of statewide significance, which
10 the Columbia River is designated as such.
11 **Q. There we go.**
12 MR. DERR: So that's the exhibit, but it's
13 not -- it's his prefile. That looks like his CV.
14 So I'm going to read -- let me -- for the council's
15 benefit, it's Mr. Wechner's prefile, page 44. I don't
16 think that's that because that's a statement of
17 qualifications.
18 BY MR. DERR:
19 **Q. Let me read you a document, and you can later**
20 **confirm that I quote it exactly correctly. The policy**
21 **states, "Preference shall be given to the uses that are**
22 **consistent with the statewide interest in such**
23 **shorelines. These are uses that recognize and protect**
24 **the statewide interests over local interests."**
25 **Does that sound familiar to you, the policy you**

1 were referring to?
2 A. That sounds familiar, yes.
3 **Q. Okay. Did the City staff identify this**
4 **shoreline master program policy in the draft staff**
5 **determination of consistency that you discussed in your**
6 **prefiled testimony?**
7 A. Yes, they did identify that.
8 **Q. And what did the City say about the proposed**
9 **terminal's consistency with this aspect of the shoreline**
10 **policy?**
11 A. The City noted that it was not addressed by the
12 applicant, and then deferred compliance with that policy
13 to EFSEC's determination.
14 **Q. So based on what you know about the project,**
15 **what is your opinion about whether the proposed terminal**
16 **protects statewide interests over local interests as**
17 **described in that policy?**
18 A. Yes. The legislature in the Shoreline
19 Management Act identified that navigable waterways
20 should be protected and preference for uses along the
21 shorelines of those waterways should be for
22 water-dependent uses, uses that can't locate in other
23 areas and that are dependent upon the waterway itself.
24 In this case the project involves loading cargo
25 onto vessels, which is clearly dependent upon a location

1 on a navigable waterway.
2 **Q. What about --**
3 A. I think also that -- sorry. The Port of
4 Vancouver's -- one of the Port of Vancouver's goals is
5 to encourage and provide for marine-dependent industrial
6 activities. And finally, the statewide interest in
7 providing access to energy could be considered another
8 overarching statewide interest.
9 **Q. What about the -- referring to Mr. Wechner's**
10 **testimony, he spoke about greenhouse gas issues and jobs**
11 **under this policy. What about those comments?**
12 A. Well, I think others will speak to --
13 specifically about greenhouse gasses, but my
14 understanding is that greenhouse gases generated by the
15 facility itself are relatively -- are not significant.
16 Similarly, others will address the economic
17 benefits of the project, but my understanding is that it
18 does create a number of jobs and have economic benefits
19 for the community.
20 But from an overarching state interest, I think
21 it really deals with reserving shorelines for
22 water-dependent uses and providing access to the trade
23 that those navigable waterways can provide.
24 **Q. Thank you. In paragraph -- and also in**
25 **Mr. Wechner's testimony, he addresses in various**

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1 paragraphs the project's consistency with a
2 comprehensive plan. Can you compare his approach with
3 your approach on that topic?
4 A. My recollection is Mr. Wechner's approach
5 focuses primarily on rail access on the existing rail
6 network as opposed to development at the terminal
7 itself.
8 **Q. Do you agree with Mr. Wechner's approach of**
9 **evaluating rail traffic rather than the terminal site?**
10 A. I don't, for a number of reasons. The first is,
11 in evaluating land use impacts, you typically look at
12 changed -- changed land use. And since -- or changed
13 land uses. And since the project doesn't involve any
14 activity on -- or improvements to the rail corridors
15 leading to the facility, there's no change in land uses
16 there. So because there's no changes in land use, you
17 wouldn't evaluate it against the comprehensive plan
18 policies.
19 **Q. But isn't it true planners review transportation**
20 **corridors as part of land use permit review?**
21 A. Yes. Typically corridors are evaluated, but
22 primarily in the context of concurrency, meaning, does a
23 project impact the level of service of, for example,
24 roadways leading to a site. And from my understanding,
25 I think others will address this, that the rail corridor

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1 has capacity to accommodate this use, and there are no
2 changes proposed to that rail corridor leading to the
3 facility.
4 **Q. Thank you. And do you recall Mr. Wechner's**
5 **statement that heavy industrial uses should be located**
6 **on the fringe of the city?**
7 A. Yes.
8 **Q. What's your thought on that statement?**
9 A. I would say the site is on the fringe of the
10 city.
11 **Q. Do you recall Mr. Wechner's testimony regarding**
12 **the terminal's consistency with several subarea planning**
13 **documents?**
14 A. Yes, I do.
15 **Q. Do those subarea planning documents apply to the**
16 **terminal site?**
17 A. No, the project's site is not located in those
18 subareas.
19 **Q. In your professional opinion, would a city**
20 **typically review a proposed development for consistency**
21 **of the subarea plans outside where the development**
22 **proposal is sited?**
23 A. No.
24 **Q. Would you agree with Mr. Wechner's opinions**
25 **regarding the terminal's consistency with the Fruit**

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1 Valley subarea plan?
2 A. I don't.
3 **Q. And why not?**
4 A. In looking at the Fruit Valley subarea plan, it
5 specifically recognizes and acknowledges the presence of
6 the rail corridor, and it also notes that much of the
7 development within that subarea came as a result of that
8 rail corridor being in place.
9 **Q. How about Mr. Wechner's opinions regarding the**
10 **terminal's consistency with the VCCV subarea plan? Do**
11 **you agree with that?**
12 A. I don't.
13 **Q. And why not?**
14 A. The VCCV subarea plan specifically, similarly to
15 Fruit Valley, acknowledged the presence of that rail
16 corridor, in this case the rail berm, and identified
17 specific efforts to overcome the presence of that rail
18 corridor, including providing access through the berm
19 into the waterfront development site.
20 **Q. And how about Mr. Wechner's opinions regarding**
21 **the terminal's consistency with the Riverview Gateway**
22 **subarea plan? Do you agree with his conclusions there?**
23 A. I do not.
24 **Q. And why not?**
25 A. Well, if -- in regards to the rail corridor, the

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1 plan -- the subarea plan doesn't encourage or identify
2 significant developments along the rail corridor. The
3 majority of the development envisioned by that subarea
4 plan is located north of Highway 14 above the rail
5 corridor.
6 **Q. And would that envisioned development have to**
7 **cross the rail corridor, then, to access the**
8 **development?**
9 A. Not to my knowledge.
10 **Q. And what's the zoning adjacent to the rail**
11 **corridor in the Riverview Gateway subarea?**
12 A. I believe there are two zones per the city
13 zoning map, R2, which is a low-density residential zone
14 and heavy industrial which is applied to the sawmill
15 site.
16 **Q. And was that zoning applied to that planning**
17 **area when the -- with the rail corridor in place?**
18 A. That's my understanding, yes.
19 **Q. So are rail corridors within or adjacent to**
20 **single residential areas a permitted use in the**
21 **Riverview Gateway subarea plan?**
22 A. The City zoning code for R2 specifically allows
23 rail corridors as a permitted use.
24 **Q. Does Mr. Wechner address consistency of the**
25 **terminal site itself, as distinguished from the rail**

corridor in City planning documents?

A. It primarily focuses on the rail corridor.

Q. And does he -- does he address general land use planning policies in the City documents or does he address only a narrow set of policies in the City documents?

A. In regards to the terminal itself, my recollection is he focuses primarily on the Clark County trails plan, I think that's the right -- that's the right terminology there.

Q. Do you agree with his conclusions regarding consistency of the terminal site with those City trail and recreation planning documents?

A. I don't, for a number of reasons. First, I think it fails to recognize the plan designation and zoning applied by the City for the site and surrounding areas, and it also fails to recognize the existing industrial users within that location.

The proper time to address those potential inconsistencies would have been the time at which the zoning or the plan designation was applied to the site where the planning effort for that trail would have occurred. And I think in this case, the zoning was in place prior to that trail planning effort.

I think it also fails to recognize that there

1 are existing portions of that trail already developed
2 adjacent to industrial activities and it fails to
3 note -- to recognize that the rail corridor leading to
4 the facility is not adjacent to the trails that he
5 identified. It's located some distance away from those
6 trails.
7 He also notes the Columbia River water trail,
8 which is the Columbia River, and I think it fails to
9 recognize the existing developed nature of the port
10 along considerable length of the river, including the
11 berth plan for this facility. So there wouldn't be
12 any -- it's already an industrial area, a section of the
13 river. It's a navigable, federally designated channel
14 and it wouldn't be inconsistent with that plan for the
15 water trail.
16 **Q. Is the berth that you mentioned already in**
17 **existence?**
18 A. Yes.
19 **Q. So any impact on that water corridor is already**
20 **in existence?**
21 A. Yes.
22 **Q. I want to now just ask you some questions**
23 **related to the photographs in the prefiled testimony of**
24 **Hicks and Broncheau.**
25 MR. DERR: And, Your Honor, these also

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1 are -- there's a new exhibit, which is Exhibit 228, four
2 photographs, aerial photographs that Mr. Carrico
3 compiled in response to the testimony. And I don't -- I
4 don't know if you've ruled on the admission of this one
5 or not.
6 JUDGE NOBLE: I have not, but I need to ask,
7 are these the -- some of the exhibits that there's no --
8 that you've been able to work out any objections to?
9 MR. DERR: I guess I don't recall. I know
10 the next one I'm going to offer is not stipulated. I
11 believe 228 is stipulated, but --
12 JUDGE NOBLE: Well, it's not one of the
13 agreed exhibits.
14 MR. DERR: It's not one of the agreed. This
15 came -- this came after prefile.
16 JUDGE NOBLE: So are there any objections to
17 the admission of the 228 exhibit?
18 MS. BRIMMER: Can I just confirm that's the
19 one called "Fishing Access Sites"; is that right.
20 JUDGE NOBLE: That's what I have.
21 MR. DERR: That's correct.
22 MS. BRIMMER: No, we had an objection.
23 JUDGE NOBLE: All right. The court reporter
24 can't hear you, so if you want to step to one of the
25 microphones to make your objection.

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1 MS. BOYLES: We had an objection to it
2 because we hadn't had an opportunity to review it and
3 see if it accurately represented what it says it
4 represents. And Mr. Lothrop, for the Columbia River
5 Inter-Tribal Fish Commission, is more familiar with
6 those than anyone else, so I will defer to him.
7 JUDGE NOBLE: Mr. Lothrop?
8 MR. LOTHROP: So Your Honor, we will have
9 some questions about Mr. Carrico's qualifications to
10 make representations about treaty fishing and fishing at
11 usual and accustomed fishing places and we will offer
12 rebuttal testimony in that regard.
13 The actual photographs that relate to that
14 underlying testimony, I don't think there's a need to
15 object to those particular photographs, but I would not
16 want the council or yourself to misperceive that we
17 don't have concerns about Mr. Carrico's underlying
18 testimony.
19 JUDGE NOBLE: Ms. Broyles, I don't see that
20 goes to whether or not the photographs themselves can be
21 entered into evidence.
22 MS. BOYLES: With that, we would withdraw
23 the objection.
24 JUDGE NOBLE: All right. 228 will be
25 admitted.

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1 MR. DERR: All right. Thank you. Can we
2 pull up -- I would actually like to just pull up
3 Exhibit 228, slide 2.
4 BY MR. DERR:
5 **Q. Mr. Carrico, again, maybe to even help clarify**
6 **and rest assured, I'm going to simply ask you a question**
7 **about the photograph and what you did with the**
8 **photograph. I don't intend to ask you any questions**
9 **about tribal treaty fishing rights or activity at that**
10 **site. So this is solely for the purposes of clarifying**
11 **these access sites and what you did. So my question is,**
12 **to ask you to describe sort of what you -- what you did**
13 **in response to the Broncheau and Hicks prefiled**
14 **testimony and their description of the fishing access**
15 **sites.**
16 A. Their testimony identified for fishing access --
17 unimproved fishing access sites that I previously did
18 not address in photographs. And so this looked at those
19 four unimproved sites, which included Aldercreek, Rock
20 Creek, Mooday and -- Moonay and Goodnoe, I believe were
21 the four sites.
22 **Q. So those were four sites in their testimony that**
23 **you did not have in your prefile; is that correct?**
24 A. Correct.
25 **Q. And so then this is one example. So what did**

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1 you then do? You went and identified the site?
2 A. We identified the site using a GIS software
3 program, and I took a current -- a relatively current
4 aerial photo of that site to identify where it's located
5 and how it is accessed with -- by vehicles, by motor
6 vehicles.
7 **Q. So just to clarify, on Exhibit 228, page 2, the**
8 **one that's on the screen, that's the aerial. What about**
9 **the labels?**
10 A. So I added the labels to show the site and to
11 identify in -- once you trace back the access road
12 where -- where it crosses the rail corridor if that's
13 necessary.
14 **Q. So this particular exhibit, 228, page 2, can you**
15 **describe the rail crossing?**
16 A. So from the aerial photograph here, you can see
17 where the roadway crosses underneath the rail corridor
18 at that -- at its crossing of what looks like a creek or
19 a backwater there.
20 **Q. So that's a grade-separated crossing?**
21 A. Grade-separated, yes.
22 **Q. Thank you.**
23 MR. DERR: And then finally, I'll be
24 referring to Exhibit 216. Again, maybe to clarify
25 before the objections, this is solely for the purpose of

1 Mr. Carrico describing the photographs contained in this
2 exhibit, not to respond to the subject matter in the
3 prefiled testimony, but simply to offer a photograph
4 that illustrates the information in that prefiled
5 testimony.
6 JUDGE NOBLE: But you are offering 216 --
7 MR. DERR: 216 we're offering for admission.
8 JUDGE NOBLE: Is there an objection to the
9 admission of Exhibit 216?
10 Hearing none, it will be admitted.
11 MS. BRIMMER: No objection, Your Honor.
12 JUDGE NOBLE: Thank you.
13 MR. DERR: Thank you. If you could scroll
14 to the next page.
15 BY MR. DERR:
16 **Q. Mr. Carrico, could you just describe what's**
17 **illustrated in this photograph?**
18 A. So I took these photographs of the Washougal
19 well field, which was identified in Mr. Monaghan's
20 testimony, I believe. And this photo is taken from the
21 west side of the well field from a public roadway that
22 dead ends to -- into the rail corridor, and it shows the
23 well houses there, the rail corridor and the distance of
24 those well houses from the corridor itself, as well as
25 the elevation change between the rail and the well

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houses.

Q. So for purposes of someone who only gets to read this in the future, as opposed to look at the picture at the same time, can you describe a little bit which is the well houses, where is it in the photo, where is the rail line? When you say the elevation, can you describe a little bit more about what's -- that elevation in the photo?

A. Yes. In the foreground of the photo is the BNSF rail corridor that extends across the photo in the lower half.

In the background you see four, or more, gray, cinder block buildings that represent the well houses, I believe, that the City of Washougal has and provides some of the water the city uses. In between those cinder block buildings and the rail corridor is a landscaped area and what looks like an elevated fill slope with the well houses some distance above the rail line with a swell in between or a low spot in between the rail line and the well houses.

MR. DERR: Can you give me the next page, please.

BY MR. DERR:

Q. Just briefly, can you explain what's in page 3?

A. Yes. This is a zoomed-in view of one of the

well houses. Again, gray, looks like cinder block building in the background of the photograph. In the foreground is the rail corridor with the -- excuse me, the rail lines. And in between those two elements is a landscaped area, as well as a chain link fence, indicating the well houses at an elevation slightly above the rail corridor with a low space in between.

Q. How about the last page 4, same exhibit?

A. This photograph is taken from the public right-of-way on the east side of the well field looking -- and it looks west.

On the left side of the photograph is the rail line on an elevated rail bed. In the middle photograph is a low -- low landscaped area composed of grass, and on the right side of the photograph is the cinder block well buildings located on a fill-elevated area above that swell I discussed.

Q. Thank you.

MR. DERR: No further questions, Your Honor.

JUDGE NOBLE: Thank you. Are there any questions by council based upon the direct examination?

MR. SNODGRASS: I have a couple.

JUDGE NOBLE: Mr. Snodgrass?

MR. SNODGRASS: Good morning. As a fellow land use planner, it's gratifying to get into an area of

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1 the subject matter that we have some background in.
2 JUDGE NOBLE: Make sure you talk into your
3 mic, Mr. Snodgrass.
4 MR. SNODGRASS: First, I guess, is a general
5 question in terms of land use practices for development
6 and review, which obviously you're familiar with. When
7 the local jurisdictions review the projects, certainly
8 the use and whether the use is allowed in the zone is
9 obviously a primary first question. But just to -- and
10 I think you recall we talked a little bit about
11 concurrency off-site impacts of the transportation.
12 Is it not the case also in addition to the
13 sort of capacity issues on concurrency that local
14 jurisdictions in reviewing projects also sometimes
15 either condition or deny projects based on load safety
16 off-site caused by a particular development?
17 THE WITNESS: I think in answering that I
18 would have to say if there is a specific development
19 regulation or standard that would require that review
20 and against which you could measure compliance or
21 noncompliance.
22 MR. SNODGRASS: Okay. Is the -- there
23 are -- in terms of the comprehensive plan policies
24 particularly addressed in the prefiled testimony, a
25 number of those address issues beyond the question of is

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1 the use allowed in that particular zone. And so a
2 number of them bring up issues that have been brought up
3 and will be reviewed in this adjudication length
4 about --
5 JUDGE NOBLE: Mr. Snodgrass, the court
6 reporter is having trouble with hearing you.
7 MR. SNODGRASS: -- safety impacts,
8 environmental impacts, economic impacts, train delay and
9 so on.
10 Is it your position, as a land use planner,
11 that the -- you have concluded -- I don't want to put
12 words in your mouth, but it sounds like you have
13 concluded, based on the other information which this
14 council reviewed in depth on those impacts, that
15 essentially land use compatibility is there with your
16 proposal. Is that fair to say?
17 THE WITNESS: Yes, that seems fair to say.
18 MR. SNODGRASS: Is -- well, let me -- I'm
19 going to defer to Mr. Siemann because I do have a couple
20 of follow-up questions that I just need to formulate.
21 JUDGE NOBLE: All right. Mr. Siemann?
22 MR. SIEMANN: Thank you. First question is,
23 who owns the shoreline? What is the jurisdiction of the
24 shoreline at the edge of the port property there where
25 this facility will be going into?

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1 THE WITNESS: My recollection is that --
2 it's a little bit complicated there. The port generally
3 owns the upland portions of the site. I'm assuming
4 you're speaking of the berth itself.
5 MR. SIEMANN: Right.
6 THE WITNESS: In the water, the state owns
7 that property. Again, I'm trying to -- there's some
8 complicated ownership issues there. I think the port
9 might own a couple of parcels that are below ordinary,
10 high or proportions thereof.
11 I would also note the port has I think a
12 port management agreement with Department of Natural
13 Resources regarding overall management of those
14 state-owned parcels.
15 MR. SIEMANN: And so is there a use
16 authorization permit that has been granted to your
17 knowledge for those berths and would this use change
18 that, change the conditions of that use authorization?
19 THE WITNESS: Can I ask a follow-up?
20 MR. SIEMANN: Sure.
21 THE WITNESS: What entity authorizing the
22 use?
23 MR. SIEMANN: DNR, Department of Natural
24 Resources, which manages state-owned aquatic lands. So
25 my question -- on state-owned aquatic lands, anything on

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1 or over state aquatic lands requires a use authorization
2 from DNR.
3 THE WITNESS: I can't speak to the specifics
4 of when that berth was developed and what authorization
5 may or may not have been issued by DNR for that. My
6 understanding of the port management agreement between
7 the port and DNR -- and perhaps a port staff person
8 could address this more specifically -- is that it does
9 not require authorization from DNR for the specific use,
10 but rather, DNR needs to be notified of the port's
11 activities and then DNR can comment on those, or
12 something to that effect.
13 MR. SIEMANN: Okay. Separate question is
14 with regard to the Jail Work Center, who owns the
15 property on which that center is located?
16 THE WITNESS: It's my understanding Clark
17 County owns that property.
18 MR. SIEMANN: And was that -- but it was
19 previously owned by the port; is that correct?
20 THE WITNESS: No, I believe the previous
21 owner was ALCOA.
22 MR. SIEMANN: I see. Okay. And then the
23 third question related to the photographs that were just
24 shown there with the wells and the railroad tracks,
25 those wells draw water for the city of Washougal; is

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1 that correct?
2 THE WITNESS: That's my understanding, but
3 really all I did for that was take the photographs. So
4 I didn't investigate any of the issues surrounding the
5 actual wells.
6 MR. SIEMANN: I see. So you wouldn't know
7 if water is drawn from -- how do we say this? -- from
8 areas underneath those tracks as well, sort of an
9 aquifer that might exist underneath those tracks or in
10 that space, do you?
11 THE WITNESS: Yeah, I do not know the
12 details of how deep those wells are and what aquifer
13 they draw from.
14 MR. SIEMANN: I see. Do you know who would
15 have that information?
16 THE WITNESS: I assume the City of Washougal
17 would have that information.
18 MR. SIEMANN: Thank you.
19 JUDGE NOBLE: Mr. Moss?
20 MR. MOSS: I just wanted to follow up on
21 that. Do you know why you were asked to take those
22 photographs of the Washougal well fields and the
23 adjacent land?
24 THE WITNESS: I believe the testimony of
25 Mr. Monaghan brought up issues surrounding the

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1 relationship of those wells to the rail corridor.
2 MR. MOSS: And you were asked to take
3 photographs, but I think I just heard you say you didn't
4 have any particular purpose other than to take the
5 photographs. You're not expecting us to infer anything
6 from --
7 THE WITNESS: I believe other people will
8 testify to the significance or nonsignificance of what's
9 represented in those photographs.
10 MR. MOSS: I'm just wondering why you were
11 being asked questions and presenting those photographs
12 if you were not asking us to infer something from that.
13 You don't know?
14 THE WITNESS: I don't.
15 MR. MOSS: Thank you.
16 JUDGE NOBLE: Mr. Shafer?
17 MR. SHAFER: Mr. Carrico, I think in your
18 statements, if I understood correctly, you had mentioned
19 in your assessment that the facility's on the fringe of
20 the city; is that correct?
21 THE WITNESS: Yes.
22 MR. SHAFER: And so my question's in regard,
23 does that assessment also entail or include the freight
24 activity that's associated with that facility?
25 THE WITNESS: No, I was speaking only to

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1 the -- to the terminal site itself.
2 MR. SHAFER: Okay. So when you make that
3 assessment, it normally does not include the freight
4 activity that is associated with that site, then?
5 THE WITNESS: Off the terminal site,
6 correct; I only made it in regards to the terminal site.
7 MR. SHAFER: Okay.
8 JUDGE NOBLE: Mr. Snodgrass, you had some
9 other questions?
10 MR. SNODGRASS: I did, yes, just a couple.
11 You had mentioned that -- both in your prefiled
12 testimony and your testimony today, that the uses
13 adjacent to the facility and to some extent a little bit
14 more in the corridor in the Vancouver area, you went
15 through the planning processes that either should have
16 noted or did, in fact, note the presence of the rail
17 corridor and the -- and the industrially zoned area
18 port; is that right?
19 THE WITNESS: Yes.
20 MR. SNODGRASS: Did any of those -- did any
21 of those planning processes explicitly note or make
22 any -- do an analysis of what future use of the railroad
23 might be, either total number of trains or uses or
24 anything like that?
25 THE WITNESS: I think the only one that

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1 talked specifically about volumes was likely West
2 Vancouver Freight Access project because that was the
3 purpose of that project, was to increase capacity of
4 mainline and access into the port.
5 MR. SNODGRASS: Right. But of the
6 development projects and/or the residential development
7 that took place over decades near the corridor, did any
8 of that go through a planning process that did anything
9 more than acknowledge the presence of the rail corridor?
10 THE WITNESS: I don't recall any of those
11 talking specifically about volumes.
12 MR. SNODGRASS: Okay. Did any of those
13 occur -- you're probably more familiar with the downtown
14 project than I am, but did any of those occur at a time
15 when crude-by-rail was happening and/or more
16 specifically when there had been some level of -- I
17 guess we're talking late 2013 or early 2014, some level
18 of awareness of the potential for accidents? Did any of
19 those processes take place then?
20 THE WITNESS: Well, I'm not an expert in
21 crude-by-rail, so I can't speak to --
22 (Simultaneous discussion interrupted by
23 reporter.)
24 THE REPORTER: One at a time.
25 THE WITNESS: Apologies. My recollection of

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1 those processes is they were -- they're typically prior
2 to -- I think you used -- 2013 is prior to that time
3 frame.
4 MR. SNODGRASS: Just stepping back in terms
5 of -- kind of putting my land use planner hat back on,
6 is you recommend -- or your findings of compatibility
7 between the rail corridor and the facility area itself
8 and the surrounding land uses, are those based strictly
9 on the fact that the use of the rail corridor or the
10 terminal and the facility is allowed under those
11 zonings, or are those based on any assessment of the
12 impact of what's going on essentially with the proposed
13 use of the corridor or at the facility, or is it just
14 based on that it's allowed?
15 THE WITNESS: So in regards to the terminal
16 itself, I mean, you're looking at whether that use is
17 consistent with the development regulations for that
18 use. So yes, in my opinion, it is consistent with that
19 and that includes operational activities.
20 In regards to the corridor itself, there are
21 no improvements planned for that corridor. So there's
22 really nothing to measure against for compliance with a
23 development standard or a regulation. I think there has
24 to be also a recognition that traffic on that -- on that
25 rail line, if I was to step back from a broad planning

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1 perspective, should have considered that rail traffic is
2 variable and there's a variety of cargoes that can be
3 moved down that corridor.
4 MR. SNODGRASS: Okay. As a land use
5 planner, is there sort of a -- let me rephrase the
6 question.
7 Is there any level of activity or record of
8 either rail volume or the nature of rail activities or
9 facility activities, for that matter, that would lead
10 you to conclude that the comprehensive plan is not being
11 met?
12 THE WITNESS: Specific to use of an existing
13 corridor?
14 MR. SNODGRASS: Yeah. Could anything happen
15 on that corridor that would lead you to conclude there
16 was incompatibility, or is the mere fact that the
17 corridor has allowed the land being used sufficient to
18 say yes, it's compatible in regards to what's going
19 on --
20 JUDGE NOBLE: You need to slow down,
21 Mr. Snodgrass. The court reporter didn't get all that.
22 MR. SNODGRASS: Should I repeat? Is there
23 any -- from a land use perspective, is there any type of
24 use, nature of use, nature of impacts of these allowed
25 uses in the corridor and the facility that would rise to

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1 a level of in the comprehensive plan being met, there's
2 land use incompatibility, or is it -- it doesn't matter
3 what's going on there if it's an allowed use?
4 THE WITNESS: I think it doesn't matter. I
5 think you're not proposing any improvements there, so
6 therefore there's really nothing to measure against.
7 Stepping back from a broad planning perspective, if
8 you -- if we identify potential incompatibilities
9 between what's happening on that corridor and the
10 surrounding land uses, then maybe you should evaluate
11 your land use plan and see whether that's appropriate,
12 considering those activities as kind of a baseline
13 condition.
14 MR. SNODGRASS: Thank you.
15 JUDGE NOBLE: Are there any other council
16 questions?
17 Yes, Mr. Stephenson?
18 MR. STEPHENSON: Thank you. Thank you,
19 Mr. Carrico. I believe you said that the greenhouse gas
20 emissions from this facility weren't significant, and I
21 would like you to explain your basis for that.
22 THE WITNESS: I don't have the specific
23 volume of greenhouse gases, I can't recall what that is
24 from a yearly basis, but my understanding, if you look
25 at like policy guidance for SEPA on greenhouse gas

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1 emissions, that it falls below the level of
2 significance. It does require -- it is -- you know, it
3 sets forth in that policy guidance a variety of
4 different thresholds. So it would require kind of
5 review and consideration, but, you know, it's relatively
6 small when you look in the context of other industrial
7 users.
8 JUDGE NOBLE: Mr. Siemann?
9 MR. SIEMANN: Following up on that, are you
10 familiar with the federal guidance on SEPA and
11 greenhouse gases?
12 THE WITNESS: A federal guidance for SEPA?
13 MR. SIEMANN: I'm Sorry. Federal guidance
14 for NEPA.
15 THE WITNESS: No, I'm not intimately
16 familiar with that.
17 MR. SIEMANN: That may actually suggest a
18 different conclusion in the NEPA guidance.
19 And a second follow-up question from
20 earlier: Of any of the planning documents or
21 environmental assessments that you've referenced thus
22 far, did any of them explicitly discuss the potential
23 for combustible material being transferred by rail
24 through those corridors?
25 THE WITNESS: I don't recall the specific

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1 commodities being discussed in the context of those
2 planning documents that could travel on the rail
3 corridor.
4 MR. SIEMANN: So you don't know if they
5 foresaw the possibility of combustible materials such as
6 crude oil?
7 THE WITNESS: I can't -- the documents, I
8 don't believe, spoke specifically about combustibles,
9 but the rail corridor, even without crude rail -- crude
10 by -- crude-by-rail, you know, I think a variety of
11 products are transferred on that, including combustibles
12 already. So even without that.
13 MR. SIEMANN: Thank you.
14 MR. STONE: I have a question. Good
15 morning, Mr. Carrico. In your prefiled testimony you
16 noted that the Fall Bridge subdivision railroad corridor
17 was completed in the early 1900s. I think the year was
18 1908.
19 THE WITNESS: I believe I got that reference
20 from the statewide rail plan, yes.
21 MR. STONE: And you further testified in
22 your prefiled testimony that the majority of development
23 of the city of Vancouver and its environs happened
24 sometime after that, considerably after that?
25 THE WITNESS: I think in my prefiled

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1 testimony, I compared the population of Vancouver and
2 Clark County at the time the rail corridor was developed
3 around 1908 versus the existing population, and from a
4 population basis, it would indicate that the majority of
5 that development occurred after the rail corridor was
6 established.
7 MR. STONE: And what is the significance of
8 that testimony with respect to the proposal in this
9 hearing?
10 THE WITNESS: The significance is that --
11 from a planning perspective, that the rail corridor
12 should have been acknowledged and considered as kind of
13 part of the baseline condition, that it's in place and
14 that a variety of cargoes are going to travel along that
15 rail corridor. And so in selecting appropriate land
16 uses and allowing development alongside that rail
17 corridor, it should be understood and acknowledged that
18 a variety of products may travel down that, and your
19 choices from planning should consider -- consider that.
20 MR. STONE: So it's really about land use
21 compatibility between the railroad corridor and adjacent
22 land uses?
23 THE WITNESS: Yes.
24 MR. STONE: So given that over 100 years of
25 operating that rail corridor and that there probably has

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1 been changes with regard to rail traffic in terms of
2 number of trains per day, length of trains, the nature
3 of cargo of those trains, does that have anything to do
4 with land use compatibility with respect to adjacent
5 land uses?
6 THE WITNESS: I would say that as -- I would
7 agree that rail traffic -- not being a rail expert but
8 knowing, you know, something about rail traffic, that
9 it's likely changed a considerable amount since the rail
10 corridor was established.
11 But as I kind of expressed previously with
12 Mr. Snodgrass that the planning process, you know, in
13 updating or establishing zoning, a comprehensive plan
14 should kind of understand and acknowledge that kind of
15 activity in making those planning choices.
16 MR. STONE: But given that some of the
17 developments, even though they occurred after 1908,
18 happened well before some of these more significant
19 changes in rail traffic, what are the implications of
20 that? What are you supposed to do, take away those
21 developments so you eliminate the noncompatibility?
22 THE WITNESS: I don't think I would suggest
23 that, but rather, maybe you don't encourage or allow for
24 additional development along that rail corridor if it's
25 incompatible with the rail corridor operations. I mean,

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1 you could look at it similar to a freeway. You know, we
2 all know I-5 has gotten a lot more traffic over time
3 and, you know, from my house I can hear it, for example.
4 So you know, I think you have -- you make those choices
5 when you do your appropriate planning.
6 And I would say that if improvements were
7 conducted on that rail corridor that increased its
8 capacity, maybe that's the time you look at the
9 incompatibility as well.
10 MR. STONE: Thank you.
11 JUDGE NOBLE: Mr. Lynch has a question.
12 MR. LYNCH: Thank you for your testimony
13 this morning. Could you please describe a little but
14 the difference between comprehensive plan policies and
15 development regulations and how, if the City has a
16 concern about a particular type of activity, could they,
17 in fact, control that through development regulations?
18 THE WITNESS: Yes. I think in my prefiled
19 testimony, I discussed the context of the comprehensive
20 plan in relationship to development regulations. So the
21 City is a jurisdiction that plans under the Growth
22 Management Act and the Growth Management Act defines
23 what a comprehensive plan is, and the City plan also
24 articulates what it's -- what the plan is intended for.
25 And it's really to set a broad policy framework for

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1 growth and development in the city or in the
2 jurisdiction that the plan covers. It's not intended to
3 be applied to specific projects that come in the door
4 and ask for a permit. Rather, the GMA requires that you
5 adopt specific standards or development regulations to
6 implement the vision of the comprehensive plan. And
7 it's those specific development regulations or standards
8 that are applied to the specific request for a project.
9 MR. LYNCH: Thank you. That's my only
10 question.
11 JUDGE NOBLE: Are there any other council
12 questions?
13 Mr. Rossman?
14 MR. ROSSMAN: Thank you, Your Honor. And
15 also thank you for your testimony. I'm interested in
16 sort of the implication of the cargo being transported
17 in a mode that the City doesn't have regulatory
18 authority over. And I guess I'm wondering -- I'm
19 wondering in a case where hazardous cargo were to be
20 transported by truck to a facility, would the land use
21 review and the City's potential mitigations of those
22 impacts include regulating the times at which those
23 trucks would travel to the facility, the routes that
24 they would take, things of that nature?
25 THE WITNESS: From my knowledge of the City

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1 of Vancouver regulations in regards to traffic
2 generation or compliance with standards for use of their
3 roadways, I don't believe it factors in specific
4 commodity transport. Really it looks at are those
5 roads -- is there capacity available in that roadway to
6 accommodate the anticipated traffic from the development
7 and still be able to maintain the level of service
8 standards for that roadway that the City's defined by
9 their policy.
10 MR. ROSSMAN: So you believe the City of
11 Vancouver would be interested in the volume of traffic
12 but not the contents of the traffic?
13 THE WITNESS: Well, I can't say whether or
14 not the City would be interested in it, but from a
15 regulatory perspective, I'm not aware of a standard
16 governing -- specific City of Vancouver standard
17 governing the -- carrying that product on their
18 roadways.
19 MR. ROSSMAN: As a general matter at a time
20 when there isn't a development regulation pertaining to
21 an aspect of a product, would it -- I mean, does that
22 mean that no mitigation would be considered by the City
23 if there weren't an applicable development regulation?
24 THE WITNESS: So I'm speaking of --
25 specifically to development standards or regulations.

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1 There may be authority under the state Environmental
2 Policy Act based upon an established City policy that
3 you may get to mitigation measures if you can show that
4 probable significant adverse impact would occur without
5 that mitigation.
6 MR. ROSSMAN: Would you say the development
7 regulations are written with that understanding in mind,
8 that there will be other ways to review and mitigate
9 potential impacts beyond those considered by the
10 development regulations?
11 THE WITNESS: I mean, SEPA, it's the
12 Environmental Policy Act, I think is intended to cover
13 those situations where a development regulation may not
14 cover that particular issue, but SEPA is also supposed
15 to factor in on a project decision what the City's
16 policies are and what the development regulations say.
17 MR. ROSSMAN: Okay. Thank you.
18 JUDGE NOBLE: Are there any other council
19 questions? There's one.
20 MR. SNODGRASS: Just in follow-up to a
21 particular line of inquiry. Just confirming, SEPA is
22 part of the City's development code in Title 20 in
23 Vancouver, correct?
24 THE WITNESS: Correct.
25 MR. SNODGRASS: And typically SEPA allows

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1 for -- typically, on most developments, is it fair to
2 say that SEPA will not result in substantive mitigation
3 on most projects and it may on some? Is that a fair
4 statement?
5 THE WITNESS: I think in the case of City of
6 Vancouver, because you have kind of a comprehensive set
7 of development regulations, most projects don't have
8 additional mitigation imposed by SEPA.
9 MR. SNODGRASS: All right. But isn't it
10 fair to say those that do, SEPA is often invoked for
11 purposes of reaching compliance with the broader goals
12 of SEPA in a way that the Vancouver code might not
13 address?
14 THE WITNESS: Yes, I would say that's an
15 accurate statement. Yes.
16 MR. SNODGRASS: No further.
17 JUDGE NOBLE: Any other council questions?
18 All right, then. This is a good time to
19 break for lunch. It's almost noon. We will be
20 adjourned until 1:00. Thank you.
21 (Recess taken from 11:57 a.m. to 1:01 p.m.)
22 JUDGE NOBLE: We're back on the record.
23 Before we get to cross-examination of Mr. Carrico, there
24 are two things. One is that we have replaced now --
25 thank you to Tesoro. We have replaced Exhibit 130 so

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1 that it should be a much clearer photograph for you.
2 That's available on your laptops, and also we've got a
3 hard copy -- no, we don't have a hard copy.
4 MS. REED: And, Your Honor, the City of
5 Vancouver had objected to that exhibit on the grounds of
6 legibility, and we looked at the new copy and we
7 withdraw our objection.
8 JUDGE NOBLE: Thank you for that. Thank
9 you. And I believe it's already been admitted.
10 MR. JOHNSON: Yes, Your Honor.
11 JUDGE NOBLE: And the other one is, I think
12 that there's an offer before we get to cross-examination
13 of Exhibit 370, although we won't get to that until
14 later testimony, we don't want to forget that the
15 parties have been able to work out an agreement on
16 Exhibit 370. So could I have that offer?
17 MR. JOHNSON: Yes, Your Honor, applicant
18 would move to admit TSS Exhibit 370.
19 JUDGE NOBLE: And there is no objections; is
20 that correct?
21 MS. BOYLES: No objection, Your Honor.
22 JUDGE NOBLE: Exhibit 370 is admitted. And
23 now we may proceed with the cross-examination of
24 Mr. Carrico.
25

1 CROSS-EXAMINATION
2 BY MR. BRICKLIN:
3 **Q. Good afternoon, Mr. Carrico. My name is Dave**
4 **Bricklin. I represent the Friends of the Columbia**
5 **Gorge, Columbia Riverkeeper, and other organizations. I**
6 **want to start with the discussion of off-site impacts**
7 **and -- excuse me. I forgot my notebook. Just one**
8 **second. And I was a little confused by your testimony,**
9 **because there were times it seems like you were saying**
10 **that analysis of off-site impacts was appropriate and**
11 **that other times I thought you were saying that it**
12 **wasn't.**
13 **You would agree, wouldn't you, that it's**
14 **appropriate to consider the land use impacts of this**
15 **project along the entire rail corridor, not just at the**
16 **terminal site?**
17 A. I think my testimony, as reflected in the
18 prefiled testimony and what I addressed earlier, was
19 that lacking a specific change in land use along the
20 rail corridor, that there was -- the comprehensive --
21 you don't measure that against the comprehensive plan
22 because there's no land use change to measure.
23 **Q. Okay. So if there were a land use change, you**
24 **would agree that there would -- it would be appropriate**
25 **to analyze impacts off-site along the rail corridor?**

1 A. I would say if -- yes, if the rail -- if
2 improvements or changes to the physical condition of
3 that rail corridor were proposed, then it would be
4 appropriate to evaluate those against the development
5 regulations in place.
6 **Q. Well -- so it's interesting because there are no**
7 **proposed rail improvements, right?**
8 A. Correct.
9 **Q. And yet you yourself considered off-site**
10 **impacts, didn't you?**
11 A. I'm not sure of the question.
12 **Q. Did you in your -- didn't you in your prefiled**
13 **testimony analyze impacts along the rail corridor?**
14 A. To the extent that the comprehensive plan
15 policy -- if someone -- if the issue of consistency with
16 those comprehensive plan policies was raised in DEIS or
17 some other document, then I looked in -- at that plan
18 policy in the context of use of those rail corridors,
19 but I think in my testimony -- or in my prefiled
20 testimony, I indicated that since there weren't any
21 improvements on those corridors, that it wasn't
22 applicable, the plan policy wasn't applicable.
23 **Q. Didn't you start a lengthy analysis of land use**
24 **impacts along the rail corridor on paragraph 32 of your**
25 **prefiled testimony and continue for about six pages**

through paragraphs 33, '4, '5, '6, 37, 38, 39 and 40? Wasn't all that testimony of yours regarding impacts along the rail corridor?

A. Can I see the testimony?

Q. I thought you would have had your testimony there. I'm sure we can get a copy for you.

MR. DERR: Got it. I've got one.

MR. BRICKLIN: There we go.

A. So you said beginning in paragraph 32?

BY MR. BRICKLIN:

Q. Thirty-two. In fact, isn't the first sentence, "I have been asked to testify regarding potential land use impacts associated with the rail lines leading to the project site"?

A. Yes, that's correct. That's what the first sentence says.

Q. And so you would agree, then, that to the extent that there are changes in land use compatibility along the rail line, they're fair game for analysis by this council, right?

A. I can't speak to the authority of the council, as I'm not an expert in that authority. I can speak to land use issues.

Q. All right. And as to land use issues, you would acknowledge that if there's a project proposed and it's

1 **going to have a -- served by a rail line and there are**
2 **land use impacts along that rail line, that's part of**
3 **the analysis that a land use plan would engage in,**
4 **right?**
5 A. If I was presented with a project that I was
6 about -- if I put my -- theoretically I was a planner at
7 the City of Vancouver and received an application that
8 involved rail traffic, if there was a City regulation
9 that spoke to the authority to regulate rail traffic,
10 then I think you would analyze it.
11 **Q. Well, you don't have to look to a City**
12 **regulation. Doesn't the state Environmental Policy Act**
13 **regulations require consideration of off-site impacts?**
14 A. In the context of SEPA, I think off-site impacts
15 can be evaluated.
16 **Q. Can be or are required to be?**
17 A. "Required" is probably a good term, yes.
18 **Q. Right. And that's also true under the Shoreline**
19 **Management Act as well, isn't it?**
20 A. I'm not familiar with the specific policy about
21 off-site impacts related to transportation in the SMA or
22 the City's SMP. But again, I don't have that in front
23 of me.
24 **Q. Well, the Ecology rules for shoreline master**
25 **programs provides in WAC 197 -- excuse me,**

1 **173-26-251(3)(c)(i), that local jurisdictions are to**
2 **consider, "the extent and importance of ecological**
3 **resources of statewide importance and potential impacts**
4 **to these resources, both inside and outside the local**
5 **government's geographic jurisdiction."**
6 **Are you familiar with that regulation?**
7 A. I'm not familiar directly with that WAC, but it
8 sounds -- sounds accurate.
9 **Q. Right. And that's consistent, in fact, with the**
10 **WAC you are familiar with under SEPA, right? Correct?**
11 A. Yeah.
12 **Q. So we don't have to be searching for a City of**
13 **Vancouver or Clark County or a Benton County regulation**
14 **that says, "consider impacts beyond the city limits," do**
15 **we?**
16 A. Well, I think in the context of the SMA, there
17 is a local master program the City has adopted that
18 establishes their spot policy and regulations for use
19 within the shoreline, and that's where you would look to
20 for the specific standards that you would weigh your
21 project against.
22 **Q. Inside the city of Vancouver?**
23 A. Inside the city of Vancouver.
24 **Q. But you're not saying that would trump state**
25 **requirements that you look beyond the city limits, are**

1 **you?**
2 A. Well, in this case, the project's located within
3 the city of Vancouver, so -- where the improvements
4 within the shoreline jurisdiction are proposed. So I
5 don't see why you would look to another master program.
6 **Q. So let's turn to that part, because the second**
7 **part I think of your -- of your testimony is that, well,**
8 **even if in theory you have to consider impacts outside**
9 **the jurisdictional limits, in this case there's no**
10 **proposal to actually change the track configuration or**
11 **the number of tracks and therefore there are no land use**
12 **impacts beyond the city limits. Is that your testimony?**
13 A. Yes.
14 **Q. All right. And so let's explore that a little**
15 **bit. Because you recognize, as a land use planner, that**
16 **land use impacts can change, not only when there are**
17 **physical changes, but also when there's changes in use,**
18 **correct?**
19 A. Correct.
20 **Q. So for instance, a structure might be used by**
21 **a -- for residential purposes, and then it can be**
22 **converted to a business, right?**
23 A. Yeah. And that would be -- yeah.
24 **Q. And there would be no change in the physical**
25 **structure, but there would be a change in the use and**

1 **consequently a potential change in land use impacts,**
2 **right?**
3 A. Yes.
4 **Q. So we don't need a physical change in the**
5 **railroad tracks to have a change in the intensity of the**
6 **use of those tracks and the land use impacts associated**
7 **with that, do we?**
8 A. Well, I think your example was going from a
9 residential to a commercial use. And as far as I know,
10 the project doesn't propose to change the use of the
11 rail corridor. It's still being used for rail
12 transportation purposes.
13 **Q. Let's use another example. How about if I have**
14 **a single-family home and I change it into a -- and I**
15 **divide it up into a quadplex, four apartments. Still**
16 **residential, different intensity, right?**
17 A. Yes.
18 **Q. And so a rail line could be used at one level**
19 **and have one kind of land use impact and could be used**
20 **at a different level and have a different intensity of**
21 **land use impact. True?**
22 A. Again, I think the example you provided was
23 physically -- was changing the use from a single-family
24 to a multifamily. It's still residential, but it's
25 definitely a change in use. And the codes typically

1 would say if you -- if you're changing a single-family
2 home to a multifamily home, there's a standard. You
3 need to make sure it's consistent with zoning,
4 development regulations, adequate parking, et cetera.
5 **Q. Because --**
6 A. Versus changing it, say, for example, from a
7 single-family with four people to a single-family with
8 six people living in it. You wouldn't evaluate that
9 change.
10 **Q. So let's talk about the change in use of this**
11 **rail line as a result of this project. Okay. You would**
12 **agree, wouldn't you, that the project contemplates**
13 **nearly a threefold increase in the number of oil unit**
14 **trains using this rail line. True?**
15 A. I'm not an expert in rail transportation, so I
16 can't speak to volumes of oil currently being
17 transported to what's proposed.
18 **Q. Well, how did you evaluate whether the project**
19 **would result in a changed intensity of land use along**
20 **the rail line if you didn't know how much increase there**
21 **was going to be in the rail traffic on this line?**
22 A. I think my testimony reflects that there isn't a
23 change in use along the rail corridor.
24 **Q. So if this railroad track previously had been**
25 **used by the Toonerville trolley once a year and the**

train came down and had one load of wheat on it and now it's going to be used by 28 -- 28 unit trains a week, you would -- you would say that was no change in use, no change in land use impacts? That's your testimony?

A. I mean, you're not -- you're not changing the rail corridor?

Q. No, I'm not changing a single track, not changing a single tie, they're all -- it's the -- one's a railroad, comes down once a week or once a year with a load of wheat, and then the next condition, it comes down four times a day with 110 cars loaded with crude oil, and you're saying that's not a change in use and no change in land use impacts. Is that your testimony?

A. I think you have two questions. Change in use, I would say that it's not being changed. The use is not changing. It's a rail corridor.

Q. How about changing --

A. So change in intensity, you obviously described a condition of a changed intensity.

Q. Okay. Change in intensity could result in land use impacts, right?

A. I think it could result in impacts, but it -- it may not be land use related. It may be related to noise or air quality or some other issue. But in regards to land use, I don't see it -- a change in use.

1 **Q. Well, isn't -- when you say noise -- and**
2 **vibration would be another one, right? Dust. Risk of**
3 **fire or explosion. Those are things we consider as land**
4 **use planners, don't we? That's why we try to separate**
5 **heavy industrial uses from residential uses because of**
6 **those conflicts and those kinds of impacts, right?**
7 A. Yes. I think if you were to -- in the planning
8 process you would consider those effects in determining
9 what appropriate land uses would occur next to that
10 corridor.
11 **Q. Right. And so you agree with me that having an**
12 **increased number of oil -- crude oil cars coming down**
13 **this track could change the amount of dust, vibration,**
14 **the risk of fire and explosion, and those are all land**
15 **use impacts, aren't they?**
16 A. Well, I can't speak to the risk of a fire or
17 explosion, but I think the trains, during normal
18 operations, are like any other train.
19 **Q. And so --**
20 A. So the impacts from air or noise would be the
21 same.
22 **Q. Different intensity? Different magnitude?**
23 A. Again, it's a real volume question as opposed
24 to --
25 **Q. So if you're the land use planner and you're**

1 **trying to put your finger on whether there are any**
2 **changes in these kinds of impacts, don't you need to**
3 **gather the information on what the existing use of this**
4 **rail line is and how it's going to differ after this**
5 **project's in place and then compare the two --**
6 A. So --
7 **Q. -- and then reach a conclusion?**
8 A. I think it depends upon the land use issue at
9 hand. If there's a development application that
10 proposes this increase and that jurisdiction has
11 authority to regulate that impact, then you would
12 appropriately look at that within the context of a
13 development application.
14 In the context of long-range or kind of
15 comprehensive planning, if a rail corridor was in place
16 and the rail operator got more customers or whatever and
17 increased the volume of rail on that corridor, then
18 through your long-range planning process or an update,
19 you would want to look at whether those land uses are
20 still appropriate next to that rail corridor,
21 considering the use of it in its current state.
22 **Q. And so isn't that what this -- doesn't the**
23 **council, if it's going to make a determination on**
24 **whether this project creates land use impacts and, if**
25 **so, the magnitude and intensity of those impacts, don't**

1 **they need that information? Don't they need to**
2 **understand how many more trains there are going to be;**
3 **how much more dust, vibration there's going to be; how**
4 **that's going to impact access from one side of the**
5 **trail -- of the rail line to the other? Aren't those**
6 **all -- how much -- how much people who own property are**
7 **going to -- on -- adjacent to the line are going to be**
8 **concerned about the risk of fire? Aren't those all the**
9 **sorts of things that a land use planner and this council**
10 **need to evaluate along the whole rail line?**
11 A. So I think the council -- I can't speak to their
12 authority, but I believe others will speak to those
13 specific topics about air quality, dust, transportation
14 and volume of rail. If you're discussing land use
15 changes, I mean, land use is a topic that EFSEC has.
16 But again, I go back to my testimony, there's no
17 physical change to the rail corridor and that's to
18 evaluate a change against a comprehensive plan.
19 **Q. Okay. Well, we've heard that part. So despite**
20 **the fact that there's no change to the corridor, you**
21 **did, in fact, evaluate the impacts to at least two state**
22 **parks outside of Clark County, didn't you?**
23 A. I used two examples of state parks that
24 currently exist in proximity to the rail line.
25 **Q. And they're not in Clark County or --**

1 A. Correct.
2 **Q. -- in the City of Vancouver, correct?**
3 A. Right.
4 **Q. And there's no change in the tracks there, is**
5 **there?**
6 A. None that I'm aware of.
7 **Q. Right. But you thought it was worth discussing**
8 **those things because of the -- whether the change in the**
9 **rail traffic was going to impact access to those parks,**
10 **didn't you?**
11 A. The testimony was intended to indicate whether,
12 you know, these -- these parks had to deal with existing
13 rail traffic, in both the Doug's Beach and Beacon Rock
14 in different ways deal with existing rail traffic.
15 **Q. But under your testimony -- that was just**
16 **irrelevant. You didn't even have to mention that,**
17 **right? Because there's no change in the track proposed**
18 **here and, ipso facto, no land use impacts; we could just**
19 **ignore that part of your testimony, huh?**
20 A. I mean, that's one way to look at it. I think
21 that in the context of evaluating the potential of it,
22 of an impact, you look at -- you know, parks and
23 recreation was a topic I looked at.
24 **Q. So just to sum up, then, it did not matter to**
25 **you that this project would result in a**

1 **two-and-a-half-time increase in the number of crude oil**
2 **unit trains running on this line; that simply was**
3 **irrelevant?**
4 MR. JOHNSON: Objection, that
5 mischaracterizes the witness' testimony.
6 BY MR. BRICKLIN:
7 **Q. Well, let me ask you, is that your testimony?**
8 **Is it your testimony that a two-and-a-half-fold increase**
9 **in the number of unit train -- crude oil unit trains on**
10 **this track is irrelevant to a land use assessment as**
11 **long as they're not changing the physical configuration**
12 **of the tracks? That's your testimony?**
13 **JUDGE NOBLE: Just a minute, witness --**
14 **Mr. Carrico, don't answer that. There's been an**
15 **objection to the question that was apparently withdrawn**
16 **and rephrased --**
17 MR. BRICKLIN: Right.
18 JUDGE NOBLE: -- so still an objection?
19 MR. JOHNSON: I'm okay with the way it was
20 rephrased. Thank you, Your Honor.
21 JUDGE NOBLE: You may proceed, Mr. Carrico.
22 THE WITNESS: I'm sorry. Can you repeat it?
23 BY MR. BRICKLIN:
24 **Q. So is it your testimony that even if there's a**
25 **two-and-a-half-fold increase in the number of crude oil**

1 **unit trains on this track, that there are no land use**
2 **impacts -- cannot be any land use impacts because the**
3 **tracks themselves have not changed? That's your**
4 **testimony?**
5 A. Yes.
6 **Q. Okay. And the same thing if there is a**
7 **threefold increase in the number of rail cars coming**
8 **down this track as a result of this project?**
9 A. From the land use perspective?
10 **Q. From the land use --**
11 A. Yes.
12 **Q. All right. Thank you.**
13 **You talked a little bit about subarea plans**
14 **inside the city of Vancouver, and I just wanted to**
15 **clarify, make sure I understood your testimony there.**
16 **You said that while a number of the plans acknowledge**
17 **the existence of the rail line, it was only the West**
18 **Vancouver Freight Access plan that actually contemplated**
19 **any increase in the use of the rail line along the lines**
20 **being addressed in this proceeding; is that right?**
21 A. Well, the West Vancouver Freight Access plan
22 isn't a subarea plan, so it's a port planning process.
23 And that process was specifically to improve access for
24 increased rail traffic.
25 **Q. And so that plan did actually address -- or**

1 **contemplate possible increases of crude oil unit trains,**
2 **right?**
3 A. Well, it was specifically designed to increase
4 rail access to the port. I can't speak to whether it
5 contemplated crude oil as a commodity on those tracks.
6 **Q. But in contrast to that one, which had at least**
7 **some discussion about some increase, all the other plans**
8 **that you referenced, the Fruit Valley plan, the Center**
9 **City Vision plan, the Columbia business city plan and**
10 **all the others, while they acknowledge the existence of**
11 **a rail line, to your knowledge, none of them**
12 **contemplated an increase in use of the rail line along**
13 **the lines that's being contemplated by this project;**
14 **isn't that true?**
15 A. The three subarea plans, the Fruit Valley,
16 Vancouver City Center Vision and Columbia Gateway were
17 the three ones I looked at. Those all acknowledge the
18 rail traffic, but those plans were specifically about
19 appropriate land uses and development within that
20 subarea plan. They acknowledge the rail corridor, but
21 they do not discuss, contemplate or encourage additional
22 rail traffic on those BNSF lines, to my knowledge.
23 **Q. And going back just for a second to that -- the**
24 **first issue we were talking about on the impacts -- land**
25 **use impacts along the rail line. You mentioned that you**

1 **did take a look at Doug's Beach State Park and Beacon**
2 **Rock State Park, but it's true, isn't it, that you did**
3 **not analyze the impact to any of the other state parks**
4 **along the rail line; isn't that true?**
5 A. Correct, not in my -- not in my testimony.
6 **Q. Right. And you did not analyze the impacts to**
7 **any residential uses that are adjacent to the rail line**
8 **anywhere from Spokane to Vancouver, did you?**
9 A. Correct, not in my testimony.
10 **Q. And you didn't analyze the consistency of an**
11 **increase in traffic on this rail line with the**
12 **comprehensive plans or development regulations of any of**
13 **the dozen-or-so counties and several dozen cities along**
14 **the rail line, did you?**
15 A. Not in my testimony.
16 **Q. All right. And then -- are you aware that a**
17 **witness offered by the applicant is -- prefiled**
18 **testimony suggests there may be up to a one and a half**
19 **percent decrease in property values of properties along**
20 **the rail line?**
21 A. Am I aware of that? I believe that Mr. Schatzki
22 will talk about economic issues. I'm not familiar with
23 the details of his testimony.
24 **Q. Right. But you cited that in your testimony,**
25 **didn't you?**

1 A. I believe, yes, I cited Mr. Schatzki's testimony
2 in the context of economic development.
3 **Q. And as a land use planner, do you recognize that**
4 **the reason that the economist thinks there might be up**
5 **to a one and a half percent decrease in values would be**
6 **because of incompatible land uses generated by the**
7 **rail -- increased use of the rail line?**
8 A. I would need to review the specific aspects of
9 his prefiled testimony on that.
10 **Q. Can you think of any reason, other than the**
11 **incompatible nature of the increased rail traffic on the**
12 **adjacent land uses, that would generate a reduction in**
13 **land values along the railroad line?**
14 A. I'm not in economics, so I don't know what it
15 would be.
16 **Q. You talked about the Shoreline Management Act a**
17 **little bit and, in fact, I think you -- early in**
18 **your live testimony here, you said that one of the --**
19 **one issue that you had not addressed in your prefiled**
20 **testimony was the goals for the shorelines of statewide**
21 **significance, right?**
22 A. What I indicated is in my -- in my prefiled
23 testimony, I did not address that specific 3.2.1.a
24 subpolicy of the City of Vancouver, nor was that
25 addressed in other exhibits to my testimony.

1 **Q. So you're -- as a planner you're -- I presume**
2 **you're familiar with the goals in the Shoreline**
3 **Management Act for the shorelines of statewide**
4 **significance, right?**
5 A. Yes.
6 **Q. And the Columbia River is a shoreline of**
7 **statewide significance, right?**
8 A. Yes.
9 **Q. And true, isn't it, that those goals include**
10 **that statewide interests shall take precedence over**
11 **local interests, right?**
12 A. Yes.
13 **Q. And that there's a preference for preserving the**
14 **natural character of the shoreline -- shorelines of**
15 **statewide significance, right?**
16 A. I don't have that specific policy in front of
17 me, but I believe that is one of them.
18 **Q. Yes. And that the long-term interests of the**
19 **state shall take priority over short-term interests,**
20 **right?**
21 A. I'm not sure if the long term references
22 state -- but, yes, long term versus short term is
23 generally in there.
24 **Q. All right. Let's see. We can quote. So this**
25 **is a 90.58.020, that in developing programs for**

1 **shorelines of statewide significance, the local**
2 **government shall give preference to uses in the**
3 **following order of preference. So these are ranked.**
4 **Number 1, "Recognize and protect the statewide interest**
5 **over local interest." That was the first one. You**
6 **recognize that one, right?**
7 A. Yes.
8 **Q. Number 2, "Preserve the natural character of the**
9 **shoreline," right?**
10 A. Uh-huh.
11 **Q. Three, "Result in long term over short term**
12 **benefit," right?**
13 A. Uh-huh.
14 **Q. Okay. Now, isn't it true that -- and there are**
15 **several others. None of them are about economic**
16 **development, are they, in terms of the priorities for**
17 **the shorelines of the state?**
18 A. I believe there's a few more.
19 **Q. Yes, there are. "Protect the resources and**
20 **ecology of the shoreline," right? That's No. 4.**
21 **Number 5, "Increase public access."**
22 **Number 6, "Increase recreational opportunities."**
23 A. Okay.
24 **Q. And these are in ranked order.**
25 A. Okay.

1 **Q. Number 7, "Provide for any other element as**
2 **defined in 90.58.100." Do you know what's in 90.58.100?**
3 A. It's been a while since I looked at it exactly,
4 sir.
5 **Q. I want to -- economic development. So that's**
6 **the seventh priority. Comes after protecting the**
7 **statewide interest, after long-term over short-term,**
8 **after all those other ones. Does that sound familiar to**
9 **you?**
10 A. Sure. Yes.
11 **Q. And would you agree that one of the long-term**
12 **statewide issues of greatest significance is dealing**
13 **with climate change? Is there anything more important**
14 **in this arena today than that issue?**
15 A. I mean, you indicated that's the greatest
16 interest of the state?
17 **Q. Well, let me -- would it fit within recognizing**
18 **and protecting the statewide interest over local**
19 **interest resulting in long-term over short-term**
20 **benefits, protecting the resources and ecology of the**
21 **shoreline? Doesn't addressing climate change issues**
22 **fall into all those categories which are in the top tier**
23 **of priorities for shorelines of statewide significance?**
24 A. I mean, I can't speak -- I'm not an expert in
25 climate change or greenhouse gas emissions, so I can't

1 speak specifically to any technical details regarding
2 that. But climate change is, I believe, a topic that is
3 addressed in the shoreline master program. It is
4 something that you would look at in applying the
5 provisions to a specific project.
6 **Q. And would take precedent -- because it falls**
7 **within these -- in several of the first six priorities,**
8 **it would take precedence over the economic development**
9 **which is cross-referenced in another section, right?**
10 A. I can't speak to whether the term "precedence"
11 is correct. I think they all need to be considered in
12 evaluating a project.
13 **Q. Well, you wouldn't disagree with the language of**
14 **the statute, "shall give preference to uses in the**
15 **following order of preference"?**
16 MR. DERR: Objection, calls for a legal
17 conclusion.
18 BY MR. BRICKLIN:
19 **Q. Let me ask you this. You testified that you**
20 **didn't think that the project itself would create**
21 **greenhouse gas emissions that were significant. Is that**
22 **your testimony?**
23 A. So I was specifically addressing the testimony
24 of Wechner in the context of the SMA policy dealing with
25 shorelines -- statewide interests over local interests.

1 And I believe Mr. Wechner's testimony indicates that
2 greenhouse gas emissions were a key issue from a
3 statewide significance perspective. And I said I didn't
4 think they were significant in the context of SM -- the
5 SMA policies related to statewide over local interest.
6 I wasn't -- I'm really not qualified to speak to the
7 significance of those greenhouse gas emissions in the
8 context of policies or regulations or climate change
9 related to their emissions.
10 **Q. So council should not pay any attention to any**
11 **of your testimony about greenhouse gas emissions, then;**
12 **is that what you're saying?**
13 A. I think to the extent you would apply them to
14 the significance of the emissions associated with the
15 project, I can't speak to that. I can speak to it in
16 the context that it was used in relationship to this SMP
17 policy, related to statewide interest over local
18 interest.
19 **Q. So I guess I'm confused. What is your testimony**
20 **in that regard?**
21 A. That in applying the policy from the SMA -- from
22 the City's shoreline master program that says, for
23 shorelines of statewide significance, preference should
24 be given for projects of statewide interests over local
25 interests in the characterization of greenhouse gases,

1 but not in the context of SEPA policies or regulations
2 regarding emissions of GHGs.
3 **Q. So you're saying that greenhouse gas emissions**
4 **are not an issue of statewide significance?**
5 A. I did not say that. I said in the context of
6 the shoreline management policies.
7 **Q. And what is the shore -- and this is a City**
8 **shoreline management policy, this program?**
9 A. It's a City policy, 3.2.1.a, which essentially
10 is reflective of the 90.58.020 language for shorelines
11 of statewide significance.
12 **Q. And you're saying that policy which refers to**
13 **statewide -- giving preference to statewide interests is**
14 **not -- is not synonymous with giving preference to**
15 **addressing greenhouse gas emissions? Is that your**
16 **testimony?**
17 A. My recollection of what 90.58.020 says doesn't
18 relate specifically to GHGs. There's no definition of
19 what a -- specifically what statewide interest over
20 local interest is.
21 **Q. And because there's no specific definition,**
22 **therefore, you would discard consideration of greenhouse**
23 **gases as a statewide issue?**
24 A. I looked at the discussion -- or the legislative
25 intent reflected in 90.58. Specifically, it talks about

1 the kind of -- what the intent of the SMA is. And it
2 talks about access to shorelines, water-dependent uses
3 and -- among a number of other things, including
4 restoration, et cetera. So I don't have the 90.58 in
5 front of me specifically, but I could look to those
6 specific issues in that.
7 **Q. And you don't think -- and you don't think**
8 **climate change is going to have any impact on the**
9 **shorelines of the state, sir?**
10 A. I did not say that.
11 **Q. And on a related point, I notice in your**
12 **prefiled testimony on page 22, paragraph k, you're**
13 **talking about a policy from the -- I believe this is the**
14 **City's comprehensive plan that deals with energy**
15 **conservation and says, "Promote and facilitate energy**
16 **conservation an alternative" -- "and alternative energy**
17 **resources and generation." Do you see that at the top**
18 **of page 22?**
19 A. Yes, I do.
20 **Q. And I notice there that you -- down on the third**
21 **sentence, you say, "Regardless, the Project has**
22 **committed to use a variety of energy conservation**
23 **measures in its construction and operations."**
24 **And by stating that, did you mean to suggest**
25 **that a facility designed to transport crude oil and to**

facilitate the combustion of huge volumes of crude oil, that because they're, what, using LED light bulbs that therefore they're practicing energy conservation and that this project is consistent with this policy?

A. Yes, the project in its operations committed to those energy conservation measures.

Q. And so because they're using LED light bulbs, or whatever other conservation measures, that converts this crude oil operation into an energy conservation and alternative energy source project?

A. I did not --

Q. Is that your testimony?

A. I did not characterize the project as being an energy conservation project. I characterized what they had committed to in regard to their energy use at the facility.

Q. All right.

A. Not related to the crude oil that is moved through the facility.

Q. Right. You would acknowledge that a facility designed to promote the -- and enable the combustion of crude oil, that project cannot be characterized as an energy conservation or alternative energy source and generation project. True?

A. I would not characterize the project as that.

1 **Q. And then last, you talked -- testified somewhat**
2 **about the role of comprehensive plan policies and their**
3 **relationship to develop regulations, correct?**
4 A. Yes.
5 **Q. And you noted that in the GMA context, Growth**
6 **Management Act context, that, as a general rule,**
7 **comprehensive plan policies direct the development of**
8 **development regulations, provide guidance for that, but**
9 **then once you have the development regulations in place,**
10 **that's what you use to actually regulate individual**
11 **projects. Is that your testimony?**
12 A. That's correct.
13 **Q. You would acknowledge that while that's the**
14 **general rule, that's not the universal rule, though,**
15 **right?**
16 A. There are some -- and I think I provided an
17 example in my testimony. There are some circumstances
18 where a development regulation may point to the
19 comprehensive plan. You also may use the comprehensive
20 plan to provide some guidance if there's a question
21 about interpreting the development regulation.
22 **Q. And also as you mentioned, you may implicate the**
23 **comp plan as a result of SEPA policies, right?**
24 A. Typically, SEPA adopts, as one of its policy
25 framework, the local comprehensive plan.

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1 **Q. And so that right there brings the comprehensive**
2 **plan into virtually every -- in any case such as this**
3 **one where you have an EIS and you've triggered SEPA, the**
4 **comprehensive plan policies are in play then, right?**
5 A. You would -- as part of your typical SEPA
6 process, I assume that would be one of your land use
7 considerations, to evaluate this consistency with that
8 comp plan.
9 **Q. And to your knowledge, that's also true when the**
10 **site evaluation council does its SEPA --**
11 A. Yeah, to my knowledge, they should consider the
12 local comprehensive plan.
13 MR. BRICKLIN: Thank you. That's all I
14 have.
15 JUDGE NOBLE: Is there other
16 cross-examination of Mr. Carrico?
17 MS. REED: Yes, Your Honor.
18 CROSS-EXAMINATION
19 BY MS. REED:
20 **Q. Mr. Carrico, good afternoon. My name is Karen**
21 **Reed. I represent the City of Vancouver. And I would**
22 **like to ask you a couple of questions to clarify some of**
23 **your testimony here today.**
24 **You testified, I believe, that SEPA evaluations**
25 **of off-site environmental impacts should be considered**

1 during the long-range planning process, for example,
2 during comprehensive plan development; is that correct?
3 A. I'm not sure I put that in the context of SEPA,
4 but I did indicate that in evaluating your comprehensive
5 plan, you would -- you would look at the use of that
6 rail corridor is my recollection.
7 **Q. You weren't suggesting, were you, that the**
8 **analysis -- SEPA analyses are limited to the long-range**
9 **planning process, were you?**
10 A. No, not at all.
11 **Q. Would you agree, in fact, that SEPA policy**
12 **states that it should be integrated to the fullest**
13 **extent possible in the land use and planning process?**
14 MR. DERR: Your Honor, I guess I -- I think
15 I have an objection, because we sound like we're talking
16 about SEPA adequacy and SEPA analysis, which in the
17 context of your ruling earlier about the relevance of
18 the draft EIS, I guess I want to file an objection about
19 asking Mr. Carrico to offer opinions about SEPA
20 requirements in this context.
21 MS. REED: Your Honor, there were some
22 questions earlier about the role of SEPA in the planning
23 process, and I wanted to clarify Mr. Carrico's responses
24 to those questions because it was unclear to me whether
25 he was testifying that SEPA was separate from the

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1 planning process or a part of the planning process.
2 MR. DERR: And as I recall, Your Honor,
3 those were questions from council members, and I'm
4 reluctant to object to questions from council members
5 because I feel like you're allowed to ask anything you
6 need to know for your decision; but I just want to mark
7 the question to try to understand with clarity when are
8 we going to talk about SEPA requirements and SEPA
9 adequacy in this proceeding and when are we not?
10 MS. REED: Your Honor, I was not intending
11 on taking this line of questioning any further, but I
12 did feel that there was some ambiguity in Mr. Carrico's
13 responses to the questions from council members, and so
14 I just wanted to clarify that point.
15 JUDGE NOBLE: All right. I'm going to allow
16 the question. I think that this question goes more to
17 the comprehensive planning process and what
18 considerations went into that that were required by
19 SEPA. And it does not seem to be addressing the SEPA
20 process that EFSEC has been undergoing.
21 MS. REED: Thank you, Your Honor.
22 JUDGE NOBLE: So I will allow this question.
23 And you're not going any further with this, right?
24 MS. REED: No, Your Honor.
25 JUDGE NOBLE: Overruled.

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BY MS. REED:

Q. I'll repeat the question.

A. Thank you.

Q. Would you agree that SEPA policy states that SEPA analyses should be integrated to the fullest extent possible in the land use and planning process?

A. In the context of comprehensive planning or long-range planning, yes, I agree the consideration of the environmental consequences of your comprehensive planning processes should be integrated, like you said, in that decision-making process.

Q. Thank you. I also wanted to talk about some of your earlier testimony in response to questions from council members with respect to the determination of land use consistency. And I -- I wanted to clarify your testimony with respect to consideration of off-site impacts to human health and safety.

Now, I thought I heard you testify that land use consistency cannot consider off-site impacts to human health and safety unless there is a specific development regulation addressing those impacts to human health and safety. Was that your testimony?

A. I'm not sure it was in the context specifically with environmental health and safety, but, yes, I recall my testimony did indicate that in -- if you're faced

1 with a development application, you would apply the
2 policies in place or the regulations in place, and if
3 they did assess or require that, then you would have to
4 look at that.
5 **Q. Okay. And I guess my question was, what if the**
6 **specific development regulations did not impose**
7 **requirements related to off-site impacts to human health**
8 **and safety; then it's your testimony that that would not**
9 **be under consideration?**
10 A. In the context of land use codes and plans, yes.
11 **Q. Okay. Thank you.**
12 **You testified about a predecisional staff draft**
13 **determination by the City of Vancouver, Exhibit 167.**
14 **Did you realize that this was a predecisional document**
15 **that was never finalized?**
16 A. Yes.
17 **Q. And I believe you testified with respect to some**
18 **specific language in that document on page 13, regarding**
19 **the determination of statewide interests versus local**
20 **interests. Do you recall that?**
21 A. Yes, I do.
22 **Q. And I wanted to clarify that testimony. Were**
23 **you suggesting that the City of Vancouver stated that it**
24 **did not have jurisdiction to make that decision, or that**
25 **it simply was suggesting to EFSEC that it should make --**

1 that it should consider that issue?
2 A. The latter, that EFSEC should make that
3 decision. I think previously in that document, they
4 indicate they don't have authority -- the City does not
5 have authority because of the EFSEC statute.
6 **Q. Okay. And I don't want to go too much further**
7 **with this, but I guess the specific reference that you**
8 **were making on page 13, I believe it said the**
9 **determination of statewide interests versus local**
10 **interests should be addressed by EFSEC prior to any**
11 **approvals. And would you agree that that statement is a**
12 **suggestion to EFSEC, not a recognition of lack of**
13 **jurisdiction?**
14 A. I can't speak to the City's intent.
15 **Q. Okay. I was asking about the specific**
16 **statement. Okay.**
17 MS. REED: I'm going to need to ask for some
18 exhibits to be called up here. The first one is
19 Exhibit 5912.
20 BY MS. REED:
21 **Q. Mr. Carrico, are you familiar with**
22 **Chapter 20.620 of the Vancouver Municipal Code which**
23 **establishes a Columbia River shoreline enhancement**
24 **district?**
25 A. Yes, I am familiar with that code.

1 **Q. And the document that I asked to be called up is**
2 **a copy of that chapter. In your prefiled direct**
3 **testimony on page 28, you stated with reference to this**
4 **district, the Columbia River shoreline enhancements**
5 **district, "that district and its applicable regulations**
6 **only apply to land south of the BNSF rail line and east**
7 **of the BNSF rail bridge to Wintler Park. The District**
8 **does not include the Project site or the rail lines that**
9 **may be used by trains serving the Project."**
10 **Do you still agree with that statement?**
11 A. Yes.
12 **Q. Okay. I'm hoping to direct your attention at**
13 **page 2 of Exhibit 5912. Would you agree, Mr. Carrico,**
14 **that this -- that this page is a depiction of the**
15 **Columbia River shoreline enhancement district?**
16 A. That looks correct, yes.
17 **Q. Okay.**
18 MS. REED: Next I need to ask for page 29 of
19 Exhibit 245.
20 JUDGE NOBLE: Could I have the number again
21 of the previous exhibit?
22 MS. REED: The previous exhibit was 5912.
23 And the one that I just asked for was 245.
24 MS. MASTRO: Ms. Reed, can you give me a
25 page number again?

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1 MS. REED: Page 29.
2 MS. MASTRO: Thank you.
3 MS. REED: Thank you.
4 BY MS. REED:
5 **Q. It's a little hard to see from here. Do you see**
6 **the green line towards the bottom of the page that then**
7 **turns into a blue line?**
8 A. Yes.
9 **Q. Thank you. That's the line. And would you --**
10 **that is labeled "South Lead Track." I know it's really**
11 **hard to read from here, but that line. And you**
12 **testified earlier that you were familiar with the West**
13 **Vancouver Freight Access project?**
14 A. Yes.
15 **Q. And would you agree that this figure is labeled**
16 **as the project detail for the West Vancouver Freight**
17 **Access project, east terminus?**
18 A. Yes.
19 **Q. The line that I just mentioned labeled as the**
20 **"South Lead Track," that line runs -- would you agree it**
21 **runs under the railroad bridge -- runs from the port**
22 **facility on the left side of the figure, under the**
23 **railroad bridge and then connects with the BNSF mainline**
24 **towards the right of the figure?**
25 A. Yes.

1 **Q. And would you agree that this South Lead Track**
2 **is inside the area depicted on Exhibit 5912 that I just**
3 **asked you to look at earlier, depicting the Columbia**
4 **River shoreline enhancement district?**
5 A. The prior exhibit, it's difficult to tell at the
6 scale that it was indicated, but if you combine that
7 figure with a description in my testimony, it would --
8 it does appear that that south lead and that connection
9 are within that enhancement district, contrary to the
10 testimony.
11 **Q. Okay.**
12 **JUDGE NOBLE: Could I just interrupt here.**
13 **Exhibit 245 is a Tesoro Savage exhibit. Is that right?**
14 **And I don't see that it's been admitted yet.**
15 MS. REED: Oh, I'm sorry.
16 JUDGE NOBLE: And then Exhibit 5912 has --
17 is part of the Vancouver Municipal Code, I think, that's
18 been officially noticed already.
19 MS. REED: Yes, Your Honor.
20 JUDGE NOBLE: I just wanted to -- I don't
21 think it would be proper to have testimony from an
22 exhibit that hasn't been admitted yet, but I don't know
23 whether the parties can agree that it could be admitted,
24 even though --
25 MR. DERR: I think we can do that right now.

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1 I assume you want to offer it?
2 MS. REED: We'll offer it.
3 MR. DERR: We certainly have no objection to
4 the exhibit we proposed. And we have no objection to an
5 adopted city planning document for other -- that's why
6 they were common exhibits to begin with.
7 JUDGE NOBLE: Right. And Vancouver
8 Municipal Code has been officially noticed by way of
9 order.
10 MR. DERR: So we have no objection.
11 JUDGE NOBLE: So I will admit
12 Exhibit No. 245.
13 MS. REED: Thank you, Your Honor.
14 And I have no further questions of the
15 witness.
16 JUDGE NOBLE: Is there any other
17 cross-examination of this witness?
18 MR. LOTHROP: Your Honor, this is Rob
19 Lothrop. I have a few questions.
20 CROSS-EXAMINATION
21 BY MR. LOTHROP:
22 **Q. Good afternoon.**
23 A. Good afternoon.
24 **Q. Good afternoon, Your Honor, and Mr. Chairman,**
25 **members of the siting council, I have a few quick**

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1 questions.
2 JUDGE NOBLE: Could you just identify
3 yourself for the record.
4 MR. LOTHROP: I'm sorry. My name is Robert
5 Lothrop, and I am with the Columbia River Inter-Tribal
6 Fish Commission.
7 JUDGE NOBLE: Thank you.
8 BY MR. LOTHROP:
9 **Q. Mr. Carrico, I was looking at your testimony,**
10 **and I saw that your testimony addresses Doug's Beach**
11 **State Park, Beacon Hill -- I'm sorry, Beacon Rock State**
12 **Park. Are those in the Columbia River Gorge National**
13 **Scenic area?**
14 A. I believe both of those are within the scenic
15 area, yes.
16 **Q. Okay. So I didn't see anything in your**
17 **testimony specifically talking about consistency of the**
18 **project with the scenic area, but I could be wrong. Is**
19 **there anything in your testimony about --**
20 A. No, I did not address the scenic area.
21 **Q. Thank you. Your CV, Attachment A to your**
22 **testimony, indicates that you're a geographer by**
23 **education and a planner by profession. I didn't see**
24 **anything in your CV that says you have a degree in**
25 **anthropology or Native American history.**

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1 MR. DERR: Objection, that's beyond the
2 scope of the witness' testimony.
3 JUDGE NOBLE: Excuse me, what was the
4 beginning of your objection?
5 MR. DERR: Beyond the scope of the witness'
6 testimony. He's not testifying to archaeological
7 resources, and he hasn't.
8 JUDGE NOBLE: This is just a question about
9 his qualifications. I don't know where this line of
10 questioning is going, but this questioning per se is not
11 objectionable. It's just his qualifications. So I will
12 let you answer this, Mr. Carrico, and overrule the
13 objection.
14 MR. LOTHROP: And I haven't quite got the
15 question out.
16 BY MR. LOTHROP:
17 **Q. Which is, do you have a degree in anthropology**
18 **or Native American history?**
19 A. No, I do not.
20 **Q. Okay. And have you ever testified in federal**
21 **court concerning the existence of tribal usual --**
22 A. No, I have not. Sorry.
23 **Q. Sure. Have you ever testified in federal court**
24 **as an expert concerning the existence of tribal usual**
25 **and accustomed fishing places?**

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1 A. No, I have not.
2 MR. LOTHROP: Thank you, Your Honor. I have
3 no further questions.
4 JUDGE NOBLE: Thank you.
5 Any other cross-examination of Mr. Carrico?
6 All right. Redirect?
7 MR. DERR: Thank you, Your Honor.
8 REDIRECT EXAMINATION
9 BY MR. DERR:
10 **Q. Mr. Carrico, I'm going to take you back to the**
11 **questions that you were asked about the priorities of**
12 **the Shoreline Management Act, relative priorities and**
13 **goals of the Shoreline Management Act. Do you recall**
14 **that questioning on cross-examination?**
15 A. Yes.
16 **Q. And let me first ask you, do you do work for**
17 **ports in the state of Washington?**
18 A. Yes, I do.
19 **Q. And do you -- are those ports industrial ports?**
20 A. Yes.
21 **Q. Are those ports located on shorelines of**
22 **statewide significance?**
23 A. Yes.
24 **Q. And based on that experience, what has been your**
25 **experience with application of the Shoreline Management**

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1 Act policies discussed in that section of the statute as
2 it applies to industrial marine ports?
3 A. That industrial marine ports for water-dependent
4 uses are allowed and a preferred use on shorelines of
5 statewide significance.
6 **Q. And, in fact, I'm going to read you a section,**
7 **like Mr. Bricklin did, because I know you probably did**
8 **not memorize that entire statute. And I'm going to read**
9 **a sentence further down in that section that says,**
10 **"Alterations of the natural condition of the shorelines**
11 **and shorelines of the state shall be recognized by the**
12 **department."**
13 **Is that a policy that applies, in your opinion,**
14 **to existing industrial ports on shorelines of statewide**
15 **significance?**
16 A. Yes.
17 **Q. And would -- therefore, as you evaluated this**
18 **policy of shorelines of statewide significance, I**
19 **believe I recall your testimony earlier was you**
20 **recognized an overriding state interest is maritime**
21 **commerce on the Columbia River, the existence of the**
22 **Port of Vancouver as an industrial port designed for**
23 **maritime commerce. So in your opinion, is promoting**
24 **that industrial activity promoting an interest of**
25 **statewide significance?**

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1 A. Yes.
2 **Q. And is it therefore, in your opinion, consistent**
3 **with those priorities under the Shoreline Management**
4 **Act?**
5 A. Yes.
6 **Q. So Mr. Carrico, you were asked questions about**
7 **requirements to evaluate off-site impacts and questions**
8 **about your prefiled testimony and whether you evaluated**
9 **off-site impacts. First I want to ask you a question**
10 **about sort of the purpose of that prefiled testimony.**
11 **Was that purpose to meet the requirements of SEPA or was**
12 **that purpose to respond to issues for the adjudication**
13 **and to respond -- and I'm going to -- excuse me, I'll**
14 **stop there. Was the purpose of that prefiled testimony**
15 **to respond to the issues during the adjudication?**
16 A. Yes.
17 **Q. And was the purpose of that testimony to respond**
18 **to comments about compliance with those plans and**
19 **policies that had been raised in comment letters that**
20 **were submitted by other parties to the draft EIS?**
21 A. Yes.
22 **Q. So in discussing those issues in your prefiled**
23 **testimony, were you agreeing that all of those issues**
24 **applied or were you simply responding to issues that**
25 **were raised by others?**

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1 A. Responding to issues raised by others.
2 **Q. Okay. Mr. Carrico, you were also asked several**
3 **questions about how do you deal with land use**
4 **consistency with rail corridors. Do you recall those**
5 **questions?**
6 A. Yes, I do.
7 **Q. Based on your understanding as a land use**
8 **planner, do local comprehensive plan policies or local**
9 **development regulations in the city of Vancouver, or**
10 **frankly in any other city, regulate or apply to the**
11 **volumes of rail traffic on the rail line?**
12 A. No.
13 **Q. Based on your understanding as a land use**
14 **planner, do local comprehensive plan policies or local**
15 **development regulations regulate or apply to the type of**
16 **commodity that can be carried on the rail line?**
17 A. No.
18 **Q. Based on your experience as a planner with SEPA,**
19 **which you've talked about today, does SEPA provide**
20 **authority or jurisdiction to a city over any activity**
21 **for which the City does not otherwise have authority?**
22 A. No.
23 **Q. So does SEPA provide the City with authority to**
24 **regulate the transportation of hazardous material on the**
25 **rail corridor?**

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1 A. Not in my opinion.
2 **Q. Next, I want to ask you some questions about**
3 **your testimony or the cross-examination about which**
4 **parks and recreation areas did you evaluate along the**
5 **rail line.**
6 **Again, was that testimony to respond to comments**
7 **by others or was that testimony intended to be an**
8 **exhaustive analysis of all of those locations?**
9 A. It was intended to respond to issues raised and
10 not an exhaustive analysis of parks and recreation
11 impacts.
12 **Q. And would those parks and recreation impacts**
13 **typically be addressed in a SEPA document?**
14 A. Yes.
15 **Q. And was the scope of your testimony to address**
16 **adequacy of the SEPA documents?**
17 A. No.
18 **Q. So Mr. Carrico, is it -- is it fair to summarize**
19 **your testimony as testimony about consistency or impacts**
20 **as to local comprehensive plan consistency rather than**
21 **SEPA consistency?**
22 A. Yes.
23 **Q. And so is that perhaps why you did apply the**
24 **SEPA framework --**
25 A. Correct.

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1 **Q. -- to your analysis?**
2 MS. LARSON: Your Honor, objection. This is
3 a bunch of leading questions for the witness.
4 MR. DERR: I'll withdraw the question.
5 JUDGE NOBLE: The question's been withdrawn.
6 MR. DERR: If we could pull up 245, page 29.
7 If I can ask a different question while we're pulling up
8 that exhibit, and then the exhibit will be my last
9 question.
10 BY MR. DERR:
11 **Q. Do you recall being asked questions about**
12 **page 22, paragraph k, energy conservation projects?**
13 A. In my prefiled testimony?
14 **Q. Yeah. And if you want to take a look at that**
15 **paragraph if you need to.**
16 A. Yes, I recall that question.
17 **Q. So Mr. Carrico, do you interpret that policy in**
18 **the City comprehensive plan to require every project in**
19 **the city to be an energy conservation project itself?**
20 A. No. The policy says "promote and facilitate."
21 **Q. So as I recall, your testimony was that there**
22 **are aspects of the terminal project which have included**
23 **energy conservation, but is the project intended to be a**
24 **conservation project itself?**
25 A. No.

1 **Q. Do you believe that's the requirement of that**
2 **comprehensive plan policy?**
3 A. No.
4 **Q. Okay. Take a look at -- this is Exhibit 245,**
5 **page 29. I just want to clarify. You were asked**
6 **questions about the rail line shown on this. The blue**
7 **and light green rail lines that you were asked about,**
8 **are those part of the West Vancouver Freight Access**
9 **project?**
10 A. Yes, they were -- they are.
11 **Q. As far as you know, are those rail lines already**
12 **constructed?**
13 A. Yes, they are constructed.
14 **Q. Is the terminal project requiring construction**
15 **of those rail lines?**
16 A. No.
17 MR. DERR: Thank you. I have no further
18 questions.
19 JUDGE NOBLE: It's time for council
20 questions. Are there any?
21 Mr. Snodgrass?
22 MR. SNODGRASS: A couple of -- I'll try to
23 be slower here. Just regarding the compliance of the
24 specific comprehensive plan policy because that's what
25 we were talking about. You find in your prefiled

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1 testimony -- you find in your prefiled testimony
2 consistency with policy CD-15, Public Health and the
3 built environment, and policy CD-16, Sustainability.
4 And both of these enumerate -- talk about a broad value
5 and then say -- well, I'll just quote it. "Promote
6 improved public health through measures including but
7 not limited to the following" -- policy CD-15 says,
8 "Promote improved public health through measures
9 including but not limited to the following," and CD-16,
10 Sustainability, says, "Facilitate sustainable land use
11 development through measures including but not limited
12 to the following."
13 So what -- I just want to be clear about
14 your position. Is it that -- at least to the prefiled
15 testimony, it seems to say that the examples given
16 aren't really related to this project and therefore we
17 shouldn't consider other examples not enumerated; in
18 other words, that the phrases in both of those policies,
19 including but not limited to the following. So as EFSEC
20 tries to evaluate this, how should -- should we not
21 consider other -- in terms of determining consistency
22 with these policies, should we not consider
23 nonenumerated examples of public health or of
24 sustainability, or will they be addressed elsewhere?
25 THE WITNESS: So my testimony in regards to

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1 these specific policies were that they were more
2 directive to the City in establishing land use patterns,
3 growth patterns, transportation patterns, as opposed to
4 being applied to a specific project. I didn't say that
5 health and safety shouldn't be considered, but rather,
6 in the context of these policies, they simply weren't
7 applicable to a decision about a specific project at a
8 specific site.
9 MR. SNODGRASS: Thank you.
10 JUDGE NOBLE: Any other questions for
11 Mr. Carrico?
12 There being none, we'll open it up to
13 questions based upon that one question.
14 MS. REED: Your Honor, we --
15 JUDGE NOBLE: Ms. Reed?
16 MS. REED: I have one question on recross.
17 Could you please call up the Exhibit 245
18 dash -- at page 29, that you just discussed on --
19 MR. DERR: Your Honor, this sounds like it
20 is not based on Mr. Snodgrass' question.
21 JUDGE NOBLE: It's not. She says that it is
22 recross, and normally you would ask if we could proceed
23 to recross. It's not common in these kinds of hearings
24 to go into recross, but is there a reason why you didn't
25 ask this on cross-examination?

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1 MS. REED: It seemed to me the implication
2 of the question on redirect was that this line would not
3 be used by the project and I wanted to clarify whether
4 or not this line would be used by the project.
5 MR. DERR: That's not the question I -- you
6 could read back the question. That's not the question I
7 asked.
8 JUDGE NOBLE: I think it would be a little
9 burdensome for the court reporter to have to go back and
10 try to find that question. But I think I would be a
11 little too technical in not allowing it to be reopened
12 so that she could have an opportunity to ask this
13 question. However, I will give Tesoro Savage an
14 opportunity to ask a question after that if you want to
15 clarify something.
16 MR. DERR: Thank you.
17 JUDGE NOBLE: Go ahead.
18 MS. REED: Thank you, Your Honor.
19 JUDGE NOBLE: This will just be one
20 question, is it not?
21 MS. REED: One question, Your Honor. Is
22 this loud enough, or do I need to step to a microphone?
23 JUDGE NOBLE: I can hear you. If anyone
24 else cannot, they should let me know. All right. I
25 think you --

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RECROSS-EXAMINATION

BY MS. REED:

Q. So the line that we were talking about, the south lead line that has the cursor on the screen up there next to it, will trains arriving at the Tesoro or leaving from the Tesoro facility use that line?

JUDGE NOBLE: Mr. Carrico, is the question clear to you which line she's talking about?

THE WITNESS: Yes.

JUDGE NOBLE: All right. Can you answer that?

A. It is my understanding that that is the route that trains traveling to the facility will use.

JUDGE NOBLE: All right. Thank you.

MS. REED: Thank you.

JUDGE NOBLE: Is there another question based upon that?

MR. DERR: So that there was no confusion about my question, I asked if it was required to be constructed before the project could use it.

THE WITNESS: And it's already in place.

MR. DERR: Thank you.

JUDGE NOBLE: Thank you. Mr. Moss now has a question.

MR. MOSS: I want to follow up on that. I

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1 hesitated before, but now I am going to follow up on
2 that.
3 As I recall earlier testimony concerning the
4 construction of that line and the movement of the
5 railroad tracks from one side of that parcel of property
6 to the other, essentially, that I understood was in part
7 to facilitate the Columbia Gateway development project
8 that the City of Vancouver has in play, you testified
9 several times that there was no change to the rail
10 corridor and so therefore we didn't have to worry about
11 some of these comprehensive plans and so on and so
12 forth. But I seem to recall the testimony being that it
13 was necessary to move that line in order for this
14 facility to be able to accommodate unit trains or at
15 least more unit trains than had previously been the case
16 because of some congestion problems there where all
17 those rail lines diverge and converge and so forth.
18 Now, do I have that wrong or -- do you recall that
19 testimony?
20 THE WITNESS: I don't -- I wasn't here to
21 hear the testimony from the court. My testimony in
22 regards to consistency with the plan policies was that
23 the project -- the Vancouver Energy project does not
24 propose any changes to the rail corridor leading to the
25 facility. These improvements are already in place.

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1 MR. MOSS: All right. But I just want to be
2 clear. It seemed to me from the testimony, and maybe
3 you don't know, that we had testimony from the court
4 that it was necessary to make these changes in order to
5 accommodate this type of thing. It didn't necessarily
6 have to be oil. It could have been unit trains full of
7 wheat, I suppose, but the testimony, as I recall it, was
8 that these changes were necessary changes to the rail
9 corridor in order to facilitate the port's ability to
10 accommodate more traffic?
11 THE WITNESS: I can't speak to what someone
12 else said. My understanding of West Vancouver Freight,
13 it was designed to facilitate increased rail access into
14 the port and remove congestion on the mainline.
15 MR. MOSS: I think that's consistent what
16 with I said. Okay. Thank you.
17 JUDGE NOBLE: Just for the record, could we
18 have a definition, if you know, what you mean by "rail
19 corridor."
20 THE WITNESS: So the -- when referring to
21 the rail corridor, I'm generally referring to the tracks
22 leading to and from the facility. I don't -- it's not
23 intended to include the rail improvements that Vancouver
24 Energy is undertaking at the Terminal 5 loop track.
25 That's part of their project.

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1 JUDGE NOBLE: Thank you. Are there any
2 questions based upon those two questions?
3 MR. DERR: No, Your Honor. Thank you.
4 JUDGE NOBLE: Thank you.
5 All right. Mr. Carrico, you are excused as
6 a witness. Thank you for your testimony today.
7 THE WITNESS: Thank you.
8 JUDGE NOBLE: You may call your next --
9 well, before we call the next witness, why don't we have
10 our break now. That makes most sense. And so we'll be
11 adjourned until 2:25. Thank you.
12 (Recess taken from 2:14 p.m. to 2:30 p.m.)
13 JUDGE NOBLE: We're back on the record.
14 Would you call your next witness.
15 MR. JOHNSON: Yes, Your Honor. The
16 applicant would call Mr. David Corpron.
17 JUDGE NOBLE: Thank you.
18 MR. JOHNSON: Mr. Corpron, if you could just
19 approach the seat there and remain standing to be sworn.
20 JUDGE NOBLE: Mr. Corpron, would you raise
21 your right hand.
22 (Witness sworn.)
23 JUDGE NOBLE: Thank you. Please be seated.
24 DAVID CORPRON,
25 having been first duly sworn, testified as follows:

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1 DIRECT EXAMINATION
2 BY MR. JOHNSON:
3 **Q. Mr. Corpron, could you please state your full**
4 **name and spell it for the record, please.**
5 A. David Corpron, D-a-v-i-d C-o-r-p-r-o-n.
6 MR. JOHNSON: All right. And before we
7 proceed, Ms. Mastro, if you could pull up Exhibit 1,
8 page -- that's 001 PCE page 214. I'm just trying to get
9 a little ahead of you here. We won't refer to it for a
10 few minutes, but if you could do that.
11 And then, Your Honor, I have coordinated
12 with opposing counsel, and I would move at this time to
13 admit TSS Exhibit 0283 and TSS Exhibit 0278.
14 JUDGE NOBLE: 278, summary of
15 decommissioning costs?
16 MR. JOHNSON: Yes, Your Honor.
17 JUDGE NOBLE: Is there an objection to the
18 admission of Exhibit 278?
19 MS. BOYLES: No, Your Honor.
20 JUDGE NOBLE: It will be admitted. The
21 other one was 28 --
22 MR. JOHNSON: 283.
23 JUDGE NOBLE: -- 3. 283 is November 14,
24 2014, e-mail from D. Davis to D. Shafar; is that
25 correct?

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1 MR. JOHNSON: No, that's not correct, Your
2 Honor. I'm sorry, maybe I got the wrong one. What did
3 I say, 238 -- no, it's 283.
4 JUDGE NOBLE: That was 283 according to
5 my --
6 MR. JOHNSON: Okay. And we just looked at
7 this exhibit and 0283 was a pipeline schematic, Your
8 Honor. This is a TSS exhibit, 0283.
9 JUDGE NOBLE: Is it dated November 14, the
10 transfer pipeline plan view; is that right?
11 MR. JOHNSON: Yes.
12 JUDGE NOBLE: Okay. That is listed above
13 the exhibit number in my list. But it's listed beside
14 the date of November 14. I think we're looking at the
15 same thing.
16 MR. JOHNSON: All right, Your Honor.
17 JUDGE NOBLE: Is there an objection to the
18 admission of Exhibit 0283.
19 MS. BOYLES: No, Your Honor.
20 JUDGE NOBLE: Exhibit 283 will be admitted.
21 BY MR. JOHNSON:
22 **Q. All right. Mr. Corpron, thank you. Can you**
23 **tell us where you are employed?**
24 A. I'm currently employed with Savage.
25 **Q. Okay. And what's your position with Savage?**

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A. I'm a senior project manager.

Q. Okay. And as the senior project manager, does that relate to this -- the Vancouver terminal project?

A. Yes, it does. In my role as the senior project manager, I oversee project management, engineering oversight, construction startup of the facilities that we operate, and maintenance, when they do a maintenance turnaround or some activity like that.

Q. Okay. So is it fair to say that you're responsible for the design of --

MS. BOYLES: We can't hear him. Can he turn on his mic.

JUDGE NOBLE: Is your mic on?

THE WITNESS: Hello?

JUDGE NOBLE: Just turn it on till the green light is on.

BY MR. JOHNSON:

Q. Test it now.

A. Testing.

MS. BOYLES: Thank you.

BY MR. JOHNSON:

Q. Is it fair to say that you are the engineer responsible for the design of the Vancouver terminal project?

A. I oversee all the design of the facility for the

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1 Vancouver project, yes.
2 **Q. And does that include leading the design**
3 **engineering team?**
4 A. That is correct, with surveying, civil,
5 structural, mechanical, electrical and controls.
6 **Q. All right. And can you just briefly -- oh, by**
7 **the way, I should note, you didn't provide prefiled**
8 **testimony in this case, did you?**
9 A. No, I did not.
10 **Q. Okay. Can you briefly describe for the council**
11 **your educational background.**
12 A. Yes. I have a bachelor of science from the
13 University of Utah in mechanical engineering. I'm also
14 a certified welder by the American Welding Society, and
15 I was a journeyman millwright.
16 **Q. And can you briefly describe some projects that**
17 **you've worked on that relate to rail projects such as**
18 **this terminal?**
19 A. Yeah, on rail projects I have done two projects
20 in Utah: One was a switching and inspection yard;
21 another one was a storage and transit. We installed
22 about a mile and a half of track. I did one in Toledo,
23 Ohio, where we installed about three and a half miles of
24 track so the customer could more readily access and
25 switch out their products on their site.

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1 **Q. And with regard to past work you've done**
2 **relating to refining or petrochemical industry, do you**
3 **have some examples of projects you've worked on?**
4 A. Yes. I've worked as quality control at the
5 Tesoro Martinez refinery when they were installing a new
6 petroleum coke handling system.
7 And then in Port Arthur, Texas, we have a
8 facility that handles petroleum coke for Motiva. And I
9 was there for the rebuild of that facility to bring it
10 up to the current standards.
11 I also worked in Galveston, Texas, built three
12 prilling facilities. And a priller -- a priller is --
13 it takes liquid sulfur and turns it into little BBs, is
14 all it really does, so it can be transported easier. So
15 I did three of those in the Gulf Coast.
16 I also did the rebuild of that same facility
17 after Hurricane Ike came through and put four and a half
18 feet of water across the property. So I rebuilt --
19 rebuilt that facility.
20 And then I permitted a sulfur facility and
21 rebuilt the facility in Chicago, Illinois.
22 **Q. And do you have any experience regarding**
23 **engineering and project lead for a project similar to**
24 **the Vancouver Energy terminal?**
25 A. Yes. I was the lead for the permitting

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1 engineering and construction oversight for a facility
2 that Savage built in Trenton, North Dakota. It is an
3 origination terminal, and we load out crude oil trains
4 at that terminal. It's a double loop, has 14 loading
5 arms, 12 stations for trucks to be received at it.
6 I also built a facility on the East Coast in
7 Delaware City, Delaware, as a receiving station, which
8 would be similar to this, with a 25-spot unloading
9 station and a double loop track.
10 **Q. All right. And did those projects include the**
11 **range of engineering issues that you -- that you**
12 **referred to previously, that is civil, geotechnical,**
13 **structural, mechanical, et cetera?**
14 A. Yes, I did.
15 **Q. Okay. And in regard to your lead engineer -- or**
16 **your roles at those projects, did you have occasion to**
17 **deal with geotechnical issues and specifically those**
18 **issues as they relate to seismic risk and hazard?**
19 A. Yes. Especially on the Gulf Coast, with
20 hurricanes, you have seismic and wind forces so you have
21 to design for that. Specifically in Chicago, we did
22 ground improvements with stone columns for the tanks
23 because of the seismic findings -- the geotechnical
24 findings from the site, we ended up doing ground
25 improvements at that site underneath the tanks.

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1 **Q. Okay. So now I would like to turn to your -- to**
2 **a discussion of the design team that you referred to a**
3 **few minutes ago. You said you led the design team for**
4 **the Vancouver terminal?**
5 A. That is correct.
6 MR. JOHNSON: Can we have Exhibit 1, 214,
7 please, page 214.
8 BY MR. JOHNSON:
9 **Q. I would like to talk to you or have you talk to**
10 **the council about the design team, how it was comprised**
11 **and how you organized with reference to the various**
12 **components of the terminal as described by Mr. Larrabee**
13 **yesterday.**
14 A. So the first job on any project is just doing
15 the initial layout, is this feasible for some of the
16 concept drawings. We had R&M Engineering help with
17 those, and those later turned into the general
18 arrangement drawings, which is more of what you're
19 seeing right now as a topographical view -- or a site
20 layout, sorry, of that facility.
21 Once we have that and everyone's agreed on --
22 the general arrangements work, then we need to hire a
23 surveyor. In this case we hired MacKay Sposito. One of
24 the reasons we hired them is they do a training program
25 with surveyors, and it might even be at this college

where they help train them, and that's one of our core beliefs at Savage, and they were highly recommended by the port. So we had them come out and do -- verify elevations and coordinates on site, so as we locate the facility, it was all in the right spot and we didn't run into anything unexpected. At that same time we would also do manhole covers, fire hydrants and similar.

Q. Okay. So you surveyed the site. What's the next step in the design process?

A. The next step on the design process is to kick off the geotechnical engineers and let them start with the borings and the cone penetrant tests. The cone penetrant tests are a probe that they push down at an even -- even pace and it has leads on it so it registers the force on -- the resistance force going through it. It can also look at water, you know, conductivity, a couple other things. So it tells the engineers the bearing capacity of that soil.

Q. All right. And who was the geotech firm that did the work for this project?

A. GRI did the geotech work. I worked with them. They had done extensive work at the Port of Vancouver, and so we chose them. And in reviewing past projects they had done, they had good history in this -- in this area and working with the port and at the facility

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1 itself.
2 In addition to that, we also kicked off, in
3 parallel, the other engineers. So we had R&M
4 Engineering, who had done this initial layout, was doing
5 the structural engineering for the tanks in area 300.
6 So they did the tank foundations, they did the liner,
7 they did the berm. They also did the structures at
8 area 400 for the access/egress for personnel and for the
9 loading platform to load the vessels. And they did the
10 foundations for the pipeline in area 500, and they did
11 the foundations for the building in area 600 to bore the
12 building.
13 **Q. And could you just briefly -- you've got a laser**
14 **pointer there on your table. Could you just briefly, to**
15 **refresh our memories, point out those areas you're**
16 **referring to, because we're going to be speaking for the**
17 **next -- for a while.**
18 A. Yes. So area 200 is in the loop. It is this
19 area. Area 300 is the tank farm area. Area 400 is
20 Berth 13-14 at the dock, and area 500 is the
21 interconnecting piping going to them, and then area 600
22 is where the boiler building is sitting.
23 **Q. All right. And so you referred to the work that**
24 **R&M was doing. Were there other firms that you brought**
25 **onto the project to do engineering elsewhere?**

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1 A. Yes. We also brought on Intermountain Consumer
2 Professional Engineers, or ICPE. We had used R&M and
3 ICPE on both the previous projects with the
4 crude-by-rail that I had mentioned, and we had -- ICPE
5 did the design on area 200 for the structural,
6 mechanical, piping, electrical. In the tank farm,
7 area 300, they did the tank orientation, the piping
8 interface, the pumps, which would be the mechanical.
9 And then they did the interconnecting piping, which is
10 area 500. And then at the dock they did the interface
11 and the electrical at the dock as well.
12 **Q. All right. And were there any other firms that**
13 **were working on the engineering of the project?**
14 A. Yes. We had -- we hired BergerABAM to do the
15 site civil. And they did the site civil in all the
16 areas and the grading and drainage. And we also had
17 BergerABAM look at the dock for review of the dock and
18 the structural improvements.
19 **Q. All right. And a minute ago when you were**
20 **talking about geotechnical analysis of the site, you**
21 **said something about following with ground improvements.**
22 **Can you describe what ground improvements are?**
23 A. Yes. Ground improvements are typically what you
24 do to change the density of the soil or the load-bearing
25 capability. So some typical examples of a ground

1 improvement would be driven piles. That could be in the
2 shape of a pipe or an I-beam, where the pile is driven
3 until it hits a resistive force that was predetermined
4 by the engineers. It can be a stone column. And a
5 stone column is when they will go in and drill a hole,
6 put the probe in and then through the center of that,
7 they fill in rock and then proceed to compact it until
8 it hits a specific resistance and bring that up. So
9 they're increasing the capacity of that soil while they
10 do it.
11 Another one is deep soil mixing, where they take
12 a concrete, and it's actually like a beater, and mix it
13 in with the concrete and create a low-quality concrete
14 column.
15 And another one is jet grouting, where they
16 actually have a jet head and it is -- it can be
17 controlled on which direction they want that and they
18 will put that in the hole and slowly bring that back up,
19 and while it does it, it puts the jet grout mix in
20 there, creating a solidified and more dense column.
21 **Q. And who was responsible for ground improvement**
22 **design of the Vancouver Energy terminal?**
23 A. At Vancouver Energy, once we had realized that
24 we needed it, we went and hired Hayward Baker. Hayward
25 Baker had a very good reputation. They were based in

1 Seattle. They had done work at the Terminal 5 area
2 already. They had done ground improvements for BHP
3 Billiton within Terminal 5, and they were currently
4 working on the seawall up in Seattle.
5 **Q. And in terms of the design team and the tasks**
6 **they're performing, is any of this going on in parallel**
7 **or is it all sequential?**
8 A. It is going on in parallel. We continue to push
9 forward the design while we're waiting for the geotech.
10 So while we're looking at -- we will design assuming a
11 certain soil condition, and if that, as in this case,
12 came back and it was not the bearing capacity that we
13 were -- started out the design, then we will adjust it
14 and -- but it gives us a starting point on looking for
15 how much movement, where everything is running and
16 where -- what codes need to be followed.
17 **Q. All right. And with regard to codes, what is**
18 **the primary governing code with regard to the design of**
19 **the facility that dictated your work in designing the**
20 **terminal?**
21 A. On designing the terminal, we followed the WAC.
22 The WAC by reference has done IBC -- the IBC is the
23 International Building Code. When we started this it
24 was the 2012 edition. And so we followed that, and then
25 any intricacies that were associated with the WAC

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1 specific for the State of Washington.
2 **Q. All right. You said that you had the geotech**
3 **work done, and I have some questions for you about that,**
4 **and then there were ground improvements designed based**
5 **on that work; is that right?**
6 A. That is correct.
7 **Q. Okay. And the rest of the design team, were**
8 **they also taking into account seismicity when they were**
9 **designing the various features you referred to?**
10 A. Yes. The rest of the design team was as well.
11 One of the things about seismic and design is several
12 years back they changed from looking at a magnitude
13 event and went to peak ground acceleration and what does
14 that do for -- do at the facility. Because instead of
15 focusing on magnitude, they look at magnitude,
16 frequency, duration, soils and distance from the event.
17 Because you can have a large magnitude event if it's of
18 short duration that does little to no damage; whereas a
19 smaller magnitude event could have much more
20 implications on the facility. And that was one of the
21 reasons they switched to the peak ground acceleration to
22 look at that for designing this facility. On the
23 facility that we have proposed, we looked at a 9.0
24 design quake and a .37 for the peak ground acceleration.
25 **Q. Okay. And when you say "event," are you talking**

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about an earthquake?

A. Yes. I'm talking --

Q. All right.

A. Talking about an earthquake.

Q. So you determined what size, that is, I guess, you said magnitude and that refers to duration; is that right?

A. The magnitude is how tall it is. When people used to refer to a 9.0 quake or a 6.8, that would be the magnitude of the event. But with the change in code, they look at the response during an event, what the ground does. So the USGS, or US Geological Society -- sorry, I keep using acronyms -- in their 2008 version, what they do is they compile a list of events for different areas of the country and look at that. So when you design per the USGS, you are actually taking into account multiple quakes that have happened and looking at different magnitudes, different frequencies and pulling those into the design of how they rated the area when they did the rating.

Q. All right. Let's back up a little bit to the -- to the geotech analysis itself. Did GRI prepare any reports of their analysis?

A. Yes. They performed two reports for us where they did the testing. As I said, they did the cone

1 penetrant test, and they also took core samples to
2 measure the soils and classify them at different depths.
3 The first report was on the upland above the
4 ordinary high water on the facility, which encompassed
5 area 200, 300, and parts of 400 and the pipeline area.
6 And then they did a second report, which was at
7 the dock and below the ordinary high-water mark. The
8 reason they didn't do it at first is we needed to pull a
9 permit to do the below water -- the drilling below
10 ordinary high water mark.
11 **Q. All right.**
12 MR. JOHNSON: And for the council's
13 reference, and I won't pull them up, those reports are
14 included at Exhibit 1, page 6453 and 6609.
15 BY MR. JOHNSON:
16 **Q. Did they perform any other reports -- I'm sorry,**
17 **create any other reports?**
18 A. From those two reports -- that's all they
19 created.
20 **Q. Okay.**
21 A. But they did find from those that the soils
22 were -- in this area are susceptible to
23 liquefaction-induced settlement and also at the dock
24 area, to lateral spreading.
25 **Q. All right. And I'm going to want you to**

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1 describe those phenomena.
2 MR. JOHNSON: Can you pull page 450, please.
3 BY MR. JOHNSON:
4 **Q. So you referenced something called**
5 **liquefaction-induced settlement. What is that?**
6 A. Liquefaction-induced settlement is basically
7 when the ground has shaken and instead of being
8 separated in layers, it becomes homogenous and the water
9 and whatnot that is in there, allows -- you lose
10 strength in the ground, basically. It's like when you
11 mix up your ice cream and it gets runny.
12 **Q. All right. And how about lateral spreading?**
13 A. Lateral spreading is where the soils will
14 actually move, so you do get movement. And in this case
15 in area 400, they said there could be up to six feet of
16 lateral spreading.
17 **Q. All right. And obviously we jumped -- we jumped**
18 **forward to liquefaction and lateral spreading, and it**
19 **sounds like those are consequences of an earthquake.**
20 **Did they have general findings about the potential for**
21 **an earthquake here at the vicinity of the terminal?**
22 A. At the vicinity of the terminal, we had them
23 look at where the other nearest faults were, and GRI can
24 testify to that later on what they looked at. But in
25 essence we had them look at the same areas that would

1 have been looked at under the USGS 2008. And as you
2 look at that, and you can see from this exhibit, it's
3 not just the site that has liquefiable soils. It
4 goes -- on the far right is the I-5 bridge, and there
5 are liquefiable soils throughout the city of Vancouver,
6 and it would be expected up and down the river, in most
7 cases.
8 **Q. All right. Now, with regard to the design of a**
9 **terminal, such as the Vancouver Energy terminal, what's**
10 **your primary concern with regard to seismicity issues,**
11 **particularly in an area where there's been a finding**
12 **that there's the possibility of a strong earthquake?**
13 A. Our number one design factor is human safety.
14 We want to protect our employees. We want to protect
15 the other folks that may be in the area. We want to
16 ensure that none of the structures or buildings collapse
17 and all of the -- all of the facilities remain standing.
18 **Q. All right. And a few minutes ago you were**
19 **talking about a seismic event and -- you know, with a**
20 **certain magnitude of, I think you said, 9.0 and what you**
21 **called peak ground acceleration of .37. Is that the**
22 **standard from which you then designed this terminal?**
23 A. That is the standard that we designed this
24 terminal. One of the things to note on -- there was a
25 code change in 2012 as it relates to liquefiable soils.

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1 So the International Building Code increased how you
2 have to treat liquefiable soils and they increased it by
3 50 percent.
4 So after 2012 the soils in a liquefiable area
5 were taken to a level where it would be immediate
6 occupancy, something similar to a hospital or design
7 like that, where you try and design for the maximum
8 design earthquake event -- or maximum considered
9 earthquake event.
10 On this facility we designed to a 9.0, and then
11 we took a conservative number and did the .37 for the
12 peak ground acceleration.
13 **Q. And how likely is it that there will be a**
14 **magnitude 9.0 earthquake with peak ground acceleration**
15 **of .37 at the terminal site?**
16 A. Well, I am not the geotech and Hayward Baker or
17 GRI could answer that better, but it is a very unlikely
18 scenario.
19 **Q. With regard to GRI's geotechnical conclusions,**
20 **did you have those reviewed?**
21 A. We did. We paid Kleinfelder in California to
22 review the findings. So they looked at the borings,
23 they looked at their analysis and agreed with their
24 analysis. So we continued on with the design.
25 **Q. All right. Once you received GRI's findings and**

1 reports, what was the next step?
2 A. Once we had found that, we hired -- as I
3 mentioned, we hired Hayward Baker to actually do the
4 design and incorporate it. So Hayward Baker came out to
5 the site, they performed additional testing at the site
6 and came up with a preliminary design of what those
7 ground improvements would look like.
8 **Q. All right. And did Hayward Baker prepare a**
9 **report?**
10 A. Yes, they did.
11 **Q. And did that include their preliminary, at**
12 **least, designs for the ground improvements?**
13 A. Yes, it did.
14 MR. JOHNSON: And for the council's benefit,
15 again, I'm not going to pull it up, but that's included
16 at exhibit -- this is PCE Exhibit 001-6695.
17 BY MR. JOHNSON:
18 **Q. I would like you to provide some examples to the**
19 **council regarding these ground improvements.**
20 MR. JOHNSON: Could you pull up page 669 --
21 I'm sorry, page 7238, please.
22 BY MR. JOHNSON:
23 **Q. Before we get to that photo, however, can you**
24 **just describe, for instance, in the area 200 unloading**
25 **area, what ground improvements were recommended and how**

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1 those have been designed?
2 A. Yeah. In area 200, it had the most
3 liquefaction-induced settlement. So we ended up going
4 with driven piles in that area, and they are ten feet on
5 center all the way down the entire length of the
6 building. So you have four piles in every ten feet for
7 the 1850 feet of the building.
8 **Q. All right. And we're still waiting for the**
9 **exhibit to come up. But maybe you can describe what you**
10 **did in area 300. And area 300 is the tank area; is that**
11 **correct?**
12 A. That's correct.
13 **Q. All right. Now we have an exhibit. Can you**
14 **just describe what this exhibit shows?**
15 A. This exhibit shows the tank farm, and the
16 colored areas are where the piping and interconnecting
17 piping between the tanks are and the depths of the
18 ground improvements that would need to be made.
19 As you can see from this, it wasn't a blanket
20 design saying, this will be good enough. There were
21 tests, you know, different borings taken at different
22 measurements to assess this, and that is how we came up
23 with the design that you see in front of you right now,
24 with the different depths on there.
25 MR. JOHNSON: All right. And 7240, please.

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1 Is there any way to rotate that?
2 BY MR. JOHNSON:
3 **Q. While she's working on that, maybe you could**
4 **just describe what this is depicting.**
5 A. Yeah. This is depicting the number of stone
6 columns that would be installed underneath an individual
7 tank. If you count them out, you know, it's about 17
8 going one way, 17 going the other way. And each tank
9 was also looked at individually. There's one more
10 example on this, but you can see in this example --
11 yeah, perfect. The other example shows a tighter
12 concentration of stone columns, and that was done
13 because the thickness of the soils changed. In this
14 area we had about 25 or 30 feet of good compacted soils.
15 In the other area we had about 15. So it changes the
16 design on how we address each and every tank throughout
17 the facility.
18 MR. JOHNSON: And 7242, please.
19 MS. MASTRO: That's actually 42 on the
20 screen right now. There's 40. My apologies.
21 BY MR. JOHNSON:
22 **Q. And again, can you describe the differences**
23 **between these two?**
24 A. Yes. As was mentioned on the ring wall section,
25 this is a much more dense area on this design than on

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1 the other one, and that was due to the soil --
2 difference in soil depths of good construction soils.
3 **Q. Okay. So how do these ground improvements**
4 **designs address the seismic risks in area 300 with**
5 **regard to the tanks?**
6 A. With regard to the tanks, we gave Hayward Baker
7 a design criteria and said, we want two inches of total
8 settlement, one inch of differential settlement, and
9 differential settlement is from one side of the tank to
10 the other. So over the 240 feet, you can't be out more
11 than one inch. So they designed the facility so in a
12 design event that they would get no more than two inches
13 of settlement and the one inch of differential
14 settlement.
15 **Q. Okay. And are the tank bottoms flat?**
16 A. No, the tank bottoms are not flat. The tank
17 bottoms are convex so -- actually raise up the floor
18 inside the tank for any settlement that could happen
19 when we hydro test the tank. The hydro testing process
20 is designed to take all the settlement out before you
21 put the tank in service. So we would mound that up.
22 I'm trying to remember how tall it was. And then when
23 we first load that, we would expect that to go down some
24 so you're not prestressing that tank.
25 One of the other design features, we show the

ring wall in this, but the ring wall actually is a seismic design feature as well, because it does help spread the loading just like in your house. Your house is built on a foundation to help spread the loading and it also presents -- prevents any freeze/thaw changes in the tank, prevents effects from weather conditions as well.

Q. All right.

MR. JOHNSON: And could we have --

BY MR. JOHNSON:

Q. Well, I tell you what, since we're -- you're talking about tanks, can you just describe how the tanks are more generally designed?

A. Yeah, more generally. The tanks have a diameter-height ratio that is conducive of being better in a seismic event. The tanks have a double bottom, so that you have a fully welded bottom, then you have a space in between those with interstitial monitoring where you will look at -- where you monitor for any leaks and then you have another fully welded bottom below that.

Then the tanks also have full fire detection system and nozzles on each tank. There's an internal and external floating roof. The internal floating roof has dual seals and all of the supports also have seals

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that penetrate it. The external roof is to prevent rain water from commingling with any of the hydrocarbons and the internal floating roof is for vapor -- vapor emissions reduction.

Q. And yesterday Mr. Larrabee was showing a photograph that seemed to show the level of crude in a tank. Is there automatic gauging or electronic gauging?

A. There's an automatic tank gauging system in this that is accurate to within 2 millimeters that looks at the tank and what the tank is doing. We also have low-level alarms, high-level, high-high, where they are -- you're not just relying on one device; you have multiple devices to make sure that everything is staying in compliance.

Q. And when -- so the roof is floating, is that what you said?

A. The roof is floating.

Q. Okay. So is there any -- do you fill a tank all the way to the top; you top it off like a gas tank when you fill it up?

A. No, we do not. We leave a vapor -- there's a space up at the top and these tanks are designed with notches on them. So while you have the ring around the tank where the fire system is and you have the internal structure for the external tank, we always leave a gap.

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1 One of the other design elements of the internal
2 floating roof is that it has an 18-inch foam dam. So in
3 the event of a fire, it would keep all the foam and --
4 right at the seal where it's most likely to occur. So
5 we do not ever fill the tanks, and these tanks are not
6 designed to run all the way to the top.
7 **Q. And in an earthquake, is there a possibility**
8 **that the crude inside would effectively slosh and weaken**
9 **the tank?**
10 A. Sloshing is a factor. With an internal floating
11 roof, that is greatly reduced. You will have -- because
12 it's floating on it, it's not an open can that you can
13 shake. The roof, as I said, did have guides on it so it
14 helps dampen that during a seismic event as well.
15 **Q. And how about -- so you showed -- how many, six,**
16 **six tanks?**
17 A. Yes, there are six tanks.
18 **Q. Are they spaced a certain space from one**
19 **another?**
20 A. Yes. The spacing was taken from the American
21 Petroleum Institute and NFPA recommendations on tank
22 spacing. And that is half a diameter of the tank away
23 from the next nearest tank.
24 **Q. All right. And in the event that a tank were to**
25 **leak or there was some other problem, is there another**

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1 form of containment to prevent crude from moving outside
2 the tank area?
3 A. Yes, there is. The number one failure point on
4 tanks is the tank bottom, and that's why we put in
5 double bottoms with interstitial monitoring so we can
6 take it out of service immediately if something were to
7 happen. But we also have 60-mil HDPE liner within the
8 tank area. The berm area is designed to hold
9 110 percent of the largest tank. And since all these
10 tanks are the same, that makes it easy. And the code
11 says you need to design it for a 24-hour, 25-year storm
12 event. And we designed it for a 24-hour, 100-year storm
13 event.
14 **Q. So there's a berm around each tank or around all**
15 **of the tanks?**
16 A. There's a berm around all of the tanks. That
17 berm is roughly 22 feet at the base and 10 foot at the
18 top and six -- and sits six-foot tall as it runs around
19 the perimeter of all these tanks. And the liner is tied
20 into the foundation of all the tanks and it's tied into
21 the berm as well.
22 **Q. All right.**
23 MR. JOHNSON: Could you pull up Exhibit 370,
24 page 83, please.
25

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1 BY MR. JOHNSON:
2 **Q. And I just want to be sure I understand. So**
3 **there's a big berm around all six tanks; is that right?**
4 **And then are there any berms around each tank as well?**
5 A. Yes. There are smaller berms around the
6 individual tanks. So if there was a bow or something
7 that leaked that wasn't a total loss of containment for
8 a tank, then we would -- there's an 18-inch -- 18-inch
9 berm around each tank for containment as well.
10 **Q. And are there ground improvements under the berm**
11 **itself?**
12 A. There are no ground improvements underneath the
13 berm. There was a question to that in data request 10
14 from EFSEC and their subconsultant as it related to
15 that. So we had our engineers prepare this diagram
16 showing -- showing the berm itself and what the liquid
17 levels would be at in a seismic event and with the
18 liquefaction if the berm -- if only the berm settled and
19 the entire area didn't settle. Because if the entire
20 area settled the same amount, then the berm maintains
21 all of its capacity. And if we assume that the berm
22 settles and the other doesn't, then you can -- it's hard
23 to read from here, but on the top one, there is over
24 nine inches of freeboard. With the space for the oil
25 and the rain event, you still have nine-plus inches of

1 freeboard in that. And if it -- in the bottom -- in the
2 bottom example you have -- what does that say? You
3 still have -- you still have space before you have
4 breached the berm.
5 **Q. And what's freeboard?**
6 A. Freeboard is the amount of the distance from the
7 top of the berm to the liquid level that would be in it.
8 So it's just -- if you're looking at a cup of water, if
9 you wanted it an inch below the top, you would have one
10 inch of freeboard in a glass of water so as not to spill
11 it as you're walking around.
12 **Q. And you may have said this and I may have missed**
13 **it. What are the general dimensions of the berm?**
14 A. The general dimensions of the berm are 22 foot
15 at the base, 10 foot at the top and has a two-to-one
16 slope on it.
17 MR. JOHNSON: Can we look at Exhibit 1-7252,
18 please.
19 BY MR. JOHNSON:
20 **Q. And while we're waiting for that to come up, can**
21 **you discuss what -- specifically what seismic design**
22 **considerations were made for the dock area. That's**
23 **area 400; is that right?**
24 A. Yes.
25 **Q. Okay.**

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1 A. So at the dock -- as you can see from this
2 diagram, the red dots are ground improvements where we
3 do stone columns, the green ones are mixing, deep soil
4 mixing, and the blue columns are jet grouting. And jet
5 grouting was decided to be used at the base of Berth 13
6 because it needed more stability as we looked at the
7 dock.
8 And with the change in the seismic code that I
9 had mentioned earlier, one of the things that we looked
10 at is taking the top off of the dock and going into the
11 piers and installing anchors within the existing piers
12 at the dock and then putting piles in that -- within
13 those piers and then filling that with concrete or jet
14 grout -- or grout to increase the compressive strength
15 of those piles, and then we would put a new cap on top
16 of that.
17 **Q. All right. And so you mentioned lateral**
18 **spreading earlier. Is lateral spreading a risk in the**
19 **dock area?**
20 A. Lateral spreading is only a risk in the dock
21 area.
22 **Q. Okay. And what would that -- if that was**
23 **unmitigated, the risk of lateral spreading, what would**
24 **the effect be?**
25 A. The effect would be you would lose about -- up

1 to 100 feet is where the lateral spreading would occur,
2 and you would see that ground move at -- right at the
3 edge. You would see it move up to six feet and at
4 100 foot in, you would see it move maybe an inch. So
5 depending on where it was located, you would see that
6 ground shift towards the Columbia River.
7 **Q. All right. And the ground improvements you**
8 **described were designed to prevent that from occurring?**
9 A. Yes.
10 **Q. Okay. I would like to move on and discuss more**
11 **generally some safety systems. And maybe the best place**
12 **to start is with system controls. Maybe -- I've heard**
13 **you talk about system controls, but maybe you can tell**
14 **the council what you mean when you talk about system**
15 **controls.**
16 A. Yeah. So Mr. Larrabee mentioned the PLC
17 controller, which is a process logic controller. The
18 process logic controller looks at everything on site,
19 whether it's a pump, a valve, how it's positioned, the
20 tanks. It looks at the fire systems. It looks at the
21 gas detection system. It is basically monitoring all
22 aspects of the system at once. And one of the nice
23 things about these systems is they're all designed with
24 a fail-safe condition. So if a PLC module goes out, it
25 is designed to fail in a fail-safe condition. So it

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1 would shut the facility down, if there was a failure in
2 the system.
3 MR. JOHNSON: And could you just put 214 up,
4 Ms. Mastro, just so we can more generally reference some
5 areas where some of these features are located.
6 BY MR. JOHNSON:
7 **Q. Are there any sensors specifically related to**
8 **seismic events, that is, earthquakes?**
9 A. Yes. Within all of -- the different areas have
10 PLC cabinets where the process logic controllers are
11 housed. And within those, because this is a seismic
12 area, we have seismic sensors in all the PLC cabinets.
13 And those seismic sensors will shut down the facility in
14 a seismic event. They will be triggered -- trying to
15 remember the details. I think at a .1 peak ground
16 acceleration and they will have activated by a .15. So
17 the facility is designed for a .37. So the facility
18 would be shut down in a holding state if an event were
19 to continue.
20 **Q. All right. And how about with regard to fire**
21 **detection? Are there specific systems related to fire**
22 **detection?**
23 A. Yes. We have linear heat detection in all the
24 areas. In area 200, Mr. Larrabee spoke about it, we
25 have nozzles above the rail cars as they're being

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1 unloaded. We also have it by the pumps in the
2 below-grade sections.
3 The fire detection system is a dry system with a
4 closed head, which means that it doesn't have water and
5 foam in it all the time. Once it's activated, the water
6 and foam flow into the system and go to the heads. With
7 it being a closed head similar to the sprinklers we have
8 here with the little redheads, if you look up, once one
9 of those is broken, then the water would come out of
10 that, and those are based on temperature as well.
11 One of the things that we had done with this
12 system is we talked with a company called Solberg, and
13 they have a biodegradable self-healing foam. And one of
14 the neat things, we were able to talk with the City of
15 Vancouver and Portland Fire Departments and show them
16 this foam and how well it works.
17 One of the reasons we looked at this is because
18 the Columbia River is such a treasure. This foam does
19 not have any lasting effects on fish, like an AFFF
20 would. It also can go directly to sanitary sewer, where
21 they -- where Solberg has tested this and run it. They
22 sent it to the sanitary sewer and it doesn't kill any of
23 the bacteria or anything within the City's treatment
24 plants.
25 **Q. And you -- again, you may have said this. But**

in the event of a fire, valves automatically close; is that right?

A. Yes. In the event of a fire, we have designed the system to automatically close. All the valves are fire-rated valves, and all of the valves close within 30 seconds. So that was one of the design improvements that we had done to this system, is put 30-second automatic fail-close actuators or fail-safe actuators on the valves within the system.

Q. Okay. And Mr. Larrabee testified that there would -- this facility will be manned 24 hours a day.

A. That is correct.

Q. Are there design safety features to account for that 24-hour presence of employees?

A. Yes. One of the things that we have done is we did LED lighting. The last thing you want to do is have a light bulb go out while you're in the middle of your shift, and ensure that the lighting is accurate and there's enough light on the ground, enough overcoverage.

With people being there 24 hours a day, we also have lightning protection at all the buildings and the tanks. And I can tell you personally, I was in a lightning storm in North Dakota and it struck the building when we were in it, and it's kind of exciting to be in a building when it's actually hit by lightning,

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1 but the systems do work.
2 And then the third one is gas detection systems.
3 Since this is a material that you need to be careful
4 with, we are monitoring in areas 200 and 300 for the
5 presence of any H2S, and we're also measuring -- looking
6 for the presence of any hydrocarbons, and in the
7 below-grade areas, we also are measuring the oxygen
8 levels at any below-grade area as well.
9 **Q. All right. With regard to design, when you do a**
10 **startup of a facility, do you test to ensure that these**
11 **safety systems are operational?**
12 A. Yes. We test all the systems. As I mentioned
13 before on the hydro test, because of the water level
14 here, we actually have described in our application two
15 different methods that we could look at for doing the
16 hydro test, but you fill it up, let it set a little bit,
17 fill it a little more, measure any settlement that is
18 happening. Then once it's fully filled, in one of the
19 options, it would take 30 days to displace any of the
20 water because of the high groundwater in the area to
21 ensure we got the settlement out.
22 The other thing we do is welding inspections.
23 Every welder has a minimum of 10 percent of all their
24 welds inspected and x-rayed to ensure quality. We x-ray
25 all of the corners where three pieces of metal come

1 together on the tanks before the hydro test.
2 We also do pressure tests of the pipeline and
3 the system. So we pressure up -- pressure that up to
4 two times the operating pressure and verify that, have
5 it hold for two hours, make sure there's no problems
6 with that system.
7 And then we go through and actually trip all of
8 the safety devices. We will trip the gas detection.
9 We'll trip the H2S. We'll trip the oxygen. We'll trip
10 the fire system. We actually kick-off the fire system
11 and make sure that there is no place on the facility
12 that as soon as that alarm is tripped, that water and
13 the foam is there in under two minutes.
14 **Q. All right. Mr. Larrabee testified about the**
15 **different ranges of crude that might pass through the**
16 **terminal. Do you recall that testimony?**
17 A. Yes.
18 **Q. Okay. Are there design features at the terminal**
19 **that account for those variations in types of crude?**
20 A. Yes. So for the lower API crudes, they need to
21 be heated to ensure the viscosity and the flow rates
22 that we're looking for. So we have the boiler building,
23 which is in area 600. We have one heated line for the
24 unloading area where the cars would pull in, connect up,
25 steam; once they've been steamed, then they would be

unloaded. And then that line runs over to the tanks, and we have two tanks with electric heat in those tanks where it's a sleeve that goes in. And so the heater is never in contact with the material. The heater is in a sleeve and can be pulled out and serviced or fixed as needed.

Q. All right. And how about with regard to the unloading itself?

A. With the unloading, one of the specifications that we have told the pump manufacturers was is it was a 15 to 45 range that those pumps could see. And so that was one of the design criteria for the facility.

Q. And were the -- will there be on-site boilers at the facility?

A. There will be two. That was in area 600, if I was unclear on that.

Q. Can you just point those out again, please.

A. Yeah. So area 600 will have the boilers and the boilers will be used to heat that. There is only enough capacity to do a single train a day in this system for the lower API crudes.

Q. Okay. Now, looking at the rail unloading facility itself, can you discuss generally how spill and fire risks are addressed there?

A. Yes. In area 200, as Mr. Larrabee spoke about

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1 the other facilities --
2 **Q. I'm sorry, could I just interrupt because I want**
3 **to get an exhibit pulled up.**
4 MR. JOHNSON: Could you pull up Exhibit 228,
5 please.
6 BY MR. JOHNSON:
7 **Q. I'm sorry for interrupting. Please continue.**
8 A. In area 200, as I mentioned before, we put in
9 driven piles. One of reasons for the driven piles is
10 the pipe trench area also serves as tertiary
11 containment. The primary containment is the piping that
12 the material would -- is planned and designed to be in.
13 The secondary containment is the spill pans that
14 Mr. Larrabee mentioned, and we have a 1,500-barrel
15 storage tank capacity per code as well. But the
16 tertiary containment can hold up to 20 rail cars within
17 that as well. And everything below grade is classified
18 in the electrical world as Class I, Div 1, which is
19 explosion proof. It's all sealed off. So if it were to
20 ever have an event, we have primary, secondary and
21 tertiary containment well above what is required in
22 that.
23 **Q. All right. Thank you. And I draw your**
24 **attention to the exhibit. Can you just describe for the**
25 **council what they're looking at there. And I'm sorry,**

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1 this was Exhibit 1-258. I didn't quite -- 228. I
2 didn't clarify. So Exhibit 1, page 228.
3 A. So this is a cross section of what the track
4 would look like with the rail car on it and the
5 associated piping and pipe trench area. So as you can
6 see, the tank sits here, has the connections that
7 Mr. Larrabee spoke of yesterday and the hose that goes
8 on. One of the things that is different about this
9 facility is every single one of these arms has automatic
10 shutoff valves, so they have an actuated valve as well
11 as the manual valves. So in the event of an emergency,
12 all those valves can shut and isolate as well. But you
13 can see from the pans, from the spill pans, containment
14 pans, that it goes to a containment pipe and then that
15 is routed over to the holding tanks that are in
16 area 200.
17 And as I said before, this area could hold up to
18 20 rail cars of capacity as well. And so when we do the
19 design and put the piles underneath this, we'll have
20 water stops in here and seal this so you don't have any
21 weepage -- because concrete is a porous material and we
22 wouldn't want any soaking into that.
23 **Q. All right. I'm sorry.**
24 A. I was just going to say, one other thing, Jared
25 mentioned the platform that the people were working on.

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1 This is the platform. And as you can see, it has the
2 same access and guards on the top, same vent-type hoses,
3 but this one slides along the platform in the fixed
4 positions and it doesn't require a mobile cart to go up
5 and down the rails.
6 **Q. All right. Thank you.**
7 MR. JOHNSON: Can you pull up Exhibit 1,
8 page 252, please.
9 BY MR. JOHNSON:
10 **Q. And while we're waiting for that exhibit to come**
11 **up, I just want to ask you a question -- back to the**
12 **crude. We talked about crude types. Is crude vapor or**
13 **vapor pressure a safety issue, potential safety issue?**
14 A. Yes.
15 **Q. Okay. And can you just describe what vapor**
16 **pressure is?**
17 A. Vapor pressure -- Reid vapor pressure, when they
18 talk about that, is a -- it's a way of normalizing the
19 different types of crudes to say, at 100 degrees this is
20 how the crude behaves, this is how much vapor is in the
21 crude. And true vapor pressure is when they look at the
22 average temperature for where it's operating. So
23 they'll look at the monthly average. In North Dakota
24 it's obviously much lower than it would be here. But
25 they look at that average daily temperature and then do

1 it based on that average for the true vapor pressure
2 instead of the Reid vapor pressure.
3 **Q. And are there any vapor pressure restrictions**
4 **for this terminal, "this" being the Vancouver terminal?**
5 A. Yes, there are. There's federal guidelines in
6 place that talk about true vapor pressure. And one of
7 the reasons we have the internal floating roofs is
8 anything with a vapor pressure over -- I would have to
9 get with my air guys, but I think it's seven, requires
10 an internal floating roof. And once it hits 11, you
11 need to look at capturing those and treating those.
12 So one of the things we would do is put in our
13 contracts what is an acceptable level of material that
14 we would receive into this facility. And we do that
15 currently at our facilities in North Dakota, and we test
16 for that on a regular basis.
17 **Q. So just to clarify, would the upper bound of the**
18 **true vapor pressure for your facility be 11, then? You**
19 **said 11; is that right?**
20 A. That is correct.
21 **Q. Okay. All right. Could you describe what this**
22 **depicts?**
23 A. This depicts the dock and some of the
24 improvements that we were looking at doing there. As I
25 mentioned before, we are doing -- on the pilings, the

1 improvements to the piles, one of the other improvements
2 to the dock is we are tying the dolphins together. So
3 this will act as one structure. We are also adding two
4 land-based mooring dolphins. One would be here and the
5 other one -- the other one sits here.
6 **Q. And just let the record reflect that Mr. Corpron**
7 **is referring to the exhibit and pointing at areas in the**
8 **upper half, one in the area approximately the area**
9 **marked 3, and then just to the right of that on the**
10 **other side of the dock structure. Thank you. Please**
11 **continue.**
12 A. One of the other things that we had done is we
13 will replace the fendering on the front of the dock.
14 And at each of these points, we are pointing in mooring
15 hooks with feedback. So what the mooring hooks do is,
16 as a ship is tied up, each of these hooks has a strain
17 gauge in it so you're getting positive feedback on how
18 much tension is on each line. So it helps ensure that
19 every line on that vessel is maintained at the right
20 tension. And if one of the lines starts to slack off,
21 because while you're loading you're going to go lower in
22 your draft and they have to keep adjusting the lines,
23 this gives them a -- on the ship and on the shore, a
24 feedback of how those lines are performing and what
25 needs to be done to ensure safe mooring while at the

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1 dock.
2 One of the other improvements that we're talking
3 about, because this is a T-shaped dock where it goes out
4 and then as the T, like that, there is not a -- there's
5 not a lot of room. So for access/egress off of the
6 ships or when the people on the vessel come and go, we
7 have a structure there that will go onto the ship and go
8 up and down to address that and then they will access it
9 via the stairs.
10 The other thing on this system is we do have
11 a -- once the ship is connected there, we will look
12 at -- or you have a dock safety skid which then takes
13 the air that is displaced as we're loading the vessels
14 and takes that to the marine vapor combustion units for
15 destruction.
16 And I would note that the marine vapor
17 combustion units have a 99.8 percent destruction rate,
18 and one of the things that we have added to this,
19 because there was concern in the -- there was concerns
20 raised about H2S, we put in an H2S scrubber ahead of
21 that system. So that system functions on a vacuum
22 basis. It has a couple of blowers where it will pull
23 from the vessel. The vessels are required to have a
24 slight pressure from the Coast Guard. So they're
25 required to be under pressure via Coast Guard. But we

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1 have three different differential switches that are
2 monitoring that pressure. So once it crosses -- once it
3 has left that and we're maintaining, it's about .15 PSI
4 of pressure on that system, then it's pulling a vacuum
5 on the other side of that to draw those into the system
6 and ensure we get the destruction efficiency that the
7 system can perform.
8 One of the interesting things about the system
9 is it is not -- it is definitely not a flare. It is an
10 emissions control device. And they have a patented
11 technology. It looks like it's going through steel
12 wool. They're three foot in diameter. And what that
13 does is it gives you a lot of individual flames instead
14 of one big flame and you get a more complete burn and
15 that's why the destruction efficiency is so much higher.
16 **Q. All right. Are there any features that assist**
17 **vessel navigation into or out of the dock area?**
18 A. Yes. One of the other things that will be on
19 the dock is a scoreboard so it can tell the vessels and
20 the pilots as they are bringing the vessels up and
21 they're being assisted by the tugs that are pushing them
22 towards the dock the speed at which they're approaching,
23 the angle that they're coming at so we don't have
24 impacts with the dock and no damage to the dock or to
25 the vessels.

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1 JUDGE NOBLE: Mr. Johnson, we need to have a
2 break for the court reporter. So I'm wondering about
3 your ETA completion on this testimony.
4 MR. JOHNSON: It will be a while, Your
5 Honor, but I could wrap up the dock issues if that's --
6 JUDGE NOBLE: Let's wrap up the dock issues
7 and then we'll have a break and you can complete the
8 testimony and then it will be time for council
9 questions. I know Mr. Stohr has a question.
10 Mr. Stohr, do you want to ask your question
11 now just so you don't have to wait?
12 MR. STOHR: If that's all right.
13 JUDGE NOBLE: I think he wants to ask a
14 question.
15 MR. STOHR: Just a couple questions,
16 Mr. Corpron. Could you talk a little bit -- you talked
17 about the seismic issues and the storage and the
18 receiving area. How about the pipeline itself? What
19 considerations did you have to take into account for the
20 pipeline itself?
21 THE WITNESS: The main consideration is the
22 pipeline along the dock. And as you saw, we did the
23 ground improvements along that area. In the other
24 areas, we designed a different anchor point. On
25 pipelines, they all have anchors and guides, and anchors

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1 are meant to hold the pipe in place so it doesn't move.
2 You wouldn't think of steel as growing and shrinking,
3 but with pipes about every 100 foot and 100 degrees, you
4 get about a three-eighths-of-an-inch growth in the
5 metal. And so we have to put in expansion loops to
6 allow for that thermal growth.
7 And with that thermal growth, you want it
8 growing in areas that -- you only want it moving in
9 areas you want. So the anchors hold the pipe still --
10 you want it held still, and the guides ensure that it
11 moves the way you want it to move, towards the expansion
12 loops so everything is moving correctly. And then we
13 put in spread footings in that area to take up the
14 loading.
15 MR. STOHR: How about maintenance of the
16 pipeline over time, accumulation of various heavier
17 hydrocarbons inside the pipes? Do you worry about that
18 like they do on some of the longer crude transfer
19 situations?
20 THE WITNESS: Actually, that's a great
21 question. One of the things with pipelines is we will
22 be doing daily inspections on the pipeline. We also
23 will do yearly pressure testing on the pipelines, and we
24 have the capability to pig the pipeline and run smart
25 pigs through it to check for -- it will help clean it

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1 out and prevent that buildup that you're talking about.
2 And we can also test the thickness from the inside, as
3 well as going out on the outside and doing thickness
4 testing.
5 MR. STOHR: Is that a routine or is that as
6 needed?
7 THE WITNESS: No, we could do that yearly as
8 well.
9 MR. STOHR: Thank you.
10 JUDGE NOBLE: You said -- I am curious about
11 a term. It sounded like you said "smart pigs."
12 THE WITNESS: I did say "smart pigs."
13 They're not actual pigs.
14 JUDGE NOBLE: I know.
15 THE WITNESS: They are -- they're a -- they
16 can be foam or another material. A smart pig is -- a
17 smart pig has devices on it so as it moves through the
18 pipeline, it's taking thickness readings. So you're
19 doing -- you're measuring the thickness of the pipeline
20 as it's passing by. Think of it as -- you know, my dad
21 used to talk about he used to love going to ZCMI when he
22 was a kid because they had the x-rays in the foot
23 department and he would put his foot down and you could
24 see all your bones and everything. This is doing an
25 inspection of the pipeline as it's moving through.

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1 JUDGE NOBLE: And it's the smart pigs that
2 you're going to be using?
3 THE WITNESS: We can use smart pigs and
4 standard pigs for cleaning.
5 JUDGE NOBLE: Thank you for that
6 clarification.
7 BY MR. JOHNSON:
8 **Q. All right. My questions aren't that**
9 **entertaining, I don't think, but we'll wrap up. So just**
10 **a couple questions on the dock. First, you talked about**
11 **secondary containment at the rail loading facility. Is**
12 **there any similar secondary containment at the dock**
13 **loading area?**
14 A. Yes, there is. One of the reasons we stayed
15 with a full concrete system, even though we reduced the
16 total over water coverage with the design changes we're
17 making on this or the seismic upgrade changes, there is
18 a three-barrel containment underneath the load-out
19 structure, and that goes to an oil-water separator and
20 then a pretreatment filter and then an activated carbon
21 system before going back to -- and there is a valve on
22 there that we would look at first before we put it into
23 those systems to make sure that -- if there was a sheen
24 or anything on it, we would get a pump truck there, but
25 there is three-barrel capacity for -- on the dock

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1 itself.
2 **Q. Are the marine vessels loaded using rigid pipes**
3 **or some other device?**
4 A. No, we took the design from one of Tesoro's
5 operations, went up and visited several facilities, saw
6 Tesoro's facility in Alaska. And in Alaska they have
7 37-foot seas. So from high tide to low tide, it moves
8 37 feet. And so that -- that creates some unique
9 challenges. The Columbia River does not have that with
10 the dam system obviously. But with that in mind, that
11 was one of the reasons we looked at, you know, best
12 practices was to use mooring hooks, and we're using a
13 loading tower with hoses that will move up and down and
14 go out to the vessels via crane, be connected and
15 then -- so it is not a rigid connection.
16 **Q. And are those hoses inspected and/or replaced as**
17 **needed?**
18 A. Yes, they are. They're inspected and Marc Bayer
19 can talk to this more as he is the marine -- he is a
20 captain and oversees the marine operations for Tesoro.
21 But the hoses are inspected annually and pressure tested
22 and they are replaced every five years.
23 **Q. And is that an industry standard for**
24 **replacement?**
25 A. No, that is the standard that we have taken. I

1 think the manufacturer's recommendation is eight to
2 ten years on the life of the hose.
3 **Q. Okay. And is there emergency response equipment**
4 **staged at the dock?**
5 A. Yes, there is. There is actually -- the
6 equipment is already purchased and sitting out at the
7 dock right now. We did that ahead of time to show our
8 commitment to it and to safety and bring the resources
9 to this area, and we also, you know, wanted to be --
10 have our personnel trained on it. And we have done
11 drills with that equipment to date to make sure that
12 they know how to use that equipment with our -- when I
13 say "our people," it would be the third-party response
14 groups, like Clean Rivers, that have been trained on
15 that.
16 **Q. All right.**
17 MR. JOHNSON: And for the council's benefit,
18 we'll have testimony from Mr. Eric Haugstad who can
19 describe in greater detail what some of that equipment
20 is and how it's used.
21 BY MR. JOHNSON:
22 **Q. Final question regarding the dock facility. How**
23 **do personnel get on and off the dock?**
24 A. As I mentioned before, if it was a larger dock,
25 they would just put a platform on and it would roll out

1 as the ship is loaded and goes deeper. But with this
2 facility, we put an access platform to ensure safe
3 access and departure from the vessel.
4 MR. JOHNSON: All right. Your Honor, this
5 would be a good spot for a -- I'm sorry.
6 JUDGE NOBLE: Thank you. We will be in
7 recess until 4:07.
8 (Recess taken from 3:52 p.m. to 4:09 p.m.)
9 JUDGE NOBLE: All right. We're back on the
10 record. It's time for council questions of Mr. Corpron.
11 MR. JOHNSON: I'm sorry. Just so we
12 understand, Your Honor, I'm not done with direct
13 examination.
14 JUDGE NOBLE: Oh, that's right, you're not.
15 Never mind.
16 MR. JOHNSON: Again, I'll do my best to get
17 it --
18 JUDGE NOBLE: It was just wishful thinking.
19 MR. JOHNSON: Thank you.
20 JUDGE NOBLE: Strike that.
21 MR. JOHNSON: We'll try to work some farm
22 animal references in.
23 BY MR. JOHNSON:
24 **Q. Mr. Corpron, before the break, there was a**
25 **question from the council regarding some of the transfer**

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1 pipelines, and you've answered some of the questions
2 about those, but I want to touch on a few issues. First
3 of all, can you look at the exhibit -- and this is
4 Exhibit 283, page 3, and just describe what that shows.
5 A. Yes. This is -- on the larger key map on the
6 left-hand corner, you can see that this is that area of
7 the pipeline at the -- going to the dock or area 400.
8 **Q. Okay.**
9 A. From this, one of the things to look at is it
10 shows the above- and below-grade piping at the roadway.
11 That is a dashed line. So there are a couple of areas
12 on the pipeline that are below grade. This is showing
13 one there with improvements the port has done.
14 **Q. And can you point those out using the pointer.**
15 A. So right at the roadway, to be able -- one of
16 the things the port wanted to ensure is that their large
17 cranes could come through this area. So we put the
18 pipeline below grade and designed it to handle the
19 load -- the pipeline will never see the load, but will
20 have a sleeve in there to protect it from the load of
21 the cranes going over the top.
22 And then on this side, the port has -- we may do
23 some improvements and have a small section that is not
24 underground but has a ramp coming down into this
25 section.

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1 **Q. All right. And you talked a bit about how you**
2 **inspect the pipes. Is there any special protection for**
3 **the underground portions?**
4 A. Yes. On the underground portions we have
5 cathodic protection. Cathodic protection, they use it
6 in submarines. The military uses it. It's putting an
7 induced current into the steel so that you don't get the
8 deterioration of your base metal.
9 The tanks also have cathodic protection in all
10 the tanks. But all the below-grade areas have cathodic
11 protection, as I mentioned. They all are sleeved. They
12 have leak detection within them. So because they're not
13 above grade and we are not able to do our daily
14 inspections on those sections of the pipeline, we do
15 have leak detections on those.
16 Where we have flanges on the pipeline, we're
17 using flex metallic gaskets, and we also put a gasket --
18 a cover over all the flanges that reacts to
19 hydrocarbons. So if there was anything -- any
20 hydrocarbons that came in contact with that cover, it
21 changes color so it's a visual indication to someone
22 that there could be a problem as well.
23 **Q. And is there any way to monitor the flow through**
24 **the pipeline?**
25 A. Yes. We monitor the flow from the -- from

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1 area 200 over to the tanks, and we have flow meters
2 there where we'll actually do the custody transfer and
3 then we actually have a prover there as well to ensure
4 that it's accurate. And then from the tanks back to the
5 dock, we have flow meters. And one of the systems, if
6 there's ever flow and there's not supposed to be flow,
7 then it shuts down all the systems, the PL -- I say
8 "it." The PLC shuts down the entire system. So it
9 monitors the pipeline as well so we know what is flowing
10 to the dock and what is flowing to the tanks at any
11 given time.
12 **Q. All right. And it's my understanding that there**
13 **is a proposed or existing substation at the site; is**
14 **that correct?**
15 A. That is correct.
16 **Q. And is it depicted on this exhibit?**
17 A. It's just up from this exhibit.
18 **Q. Can you generally show where it would be?**
19 A. It's sitting right at -- if I can hold it still.
20 Right at this corner.
21 **Q. And when you say "right at this corner," you're**
22 **pointing to the upper left-hand corner of the exhibit**
23 **where there's a smaller site plan. Is that -- are you**
24 **saying that the substation would be --**
25 A. It's right in line with the pipeline that's

1 running out of the page. It would be about -- if you're
2 looking at distances, about the same distance that's on
3 this page to the top you would be at the proposed
4 substation.
5 **Q. And when you say "it's there," is it there**
6 **presently?**
7 A. No, it is not.
8 **Q. Okay. So it's proposed?**
9 A. It's a proposed substation. It was -- BHP
10 Billiton needed the power for their facility and it was
11 proposed. So when we looked at the design, we talked
12 about grounding and making sure that we had ample
13 grounding. We talked with -- we actually talked with
14 the power company, met with them, we said, what about
15 maintenance and turnarounds? What kind of equipment do
16 you need to go in that area? What are we looking at?
17 And then I also reached out to some friends that
18 work for PacifiCorp and asked them what they do on their
19 transmission lines and what they do in corridors and
20 what is typical. So yes, we did anticipate the
21 substation being there.
22 **Q. Okay.**
23 MR. JOHNSON: And just to move along, for
24 the council's reference, the proposed substation is
25 depicted on page 1 of this exhibit, its actual location.

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1 BY MR. JOHNSON:
2 **Q. So just for -- in terms of a little more detail,**
3 **can you describe the location of the pipeline --**
4 MR. JOHNSON: In fact, could you just pull
5 up page 1, please, Ms. Mastro.
6 BY MR. JOHNSON:
7 **Q. So I draw your attention to the upper right-hand**
8 **corner of the exhibit. Do you see where the substation**
9 **is depicted?**
10 A. Yes.
11 **Q. Okay. Can you show that by pointing? Thank**
12 **you. Again, for the record, you're pointing to the**
13 **upper right-hand corner of the exhibit, the area marked**
14 **proposed substation.**
15 **Did you take into account a distance from that**
16 **proposed substation for the pipelines?**
17 A. We took into account what is standard for
18 transmission lines and whether any stray occurrence
19 could affect the line, and we looked at grounding and
20 the cathodic protection and what the effects of the line
21 could be -- the substation could be on our line and us
22 on them.
23 **Q. Okay. Thank you. I would like to move to a**
24 **different topic. And Mr. Larrabee testified about this**
25 **as well, and that is decommissioning. Are you familiar**

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1 with EFSEC's decommissioning requirements?
2 A. Yes, I am.
3 **Q. Okay. And generally what are those**
4 **requirements, as you understand them?**
5 A. As I understand them, you need to take the site
6 back to preapproval levels and make sure that it's
7 returned, after the facility is no longer in use, to its
8 prior state.
9 **Q. Okay. And have you had discussions with port**
10 **representatives regarding decommissioning?**
11 A. Yes, I have.
12 **Q. Okay. And describe what those discussions have**
13 **involved, please.**
14 A. We have talked about what would -- what would
15 remain; what would be removed. And in general terms,
16 you know, the ground improvements increase the value of
17 the property because the neighbor next door for the
18 steel had to do ground improvements underneath their
19 facility. BHP Billiton had to do ground improvements.
20 So having ground improvements there does nothing but
21 improve the value of the port property. So the ground
22 improvements would stay.
23 Also the utilities and the sleeves. So any of
24 the sleeves that we put in for the pipelines underneath
25 the rail track would stay, as they could reutilize those

1 for future customers in the area. And utilities and
2 improvements, such as water loops and sewer and stuff,
3 that remains as well.
4 **Q. All right.**
5 MR. JOHNSON: Ms. Mastro, could you please
6 show us Exhibit 278, page 3.
7 BY MR. JOHNSON:
8 **Q. Again, with regard to improvements that would be**
9 **left behind at decommissioning, would it also include**
10 **improvements at the Berth 13 and 14?**
11 A. Yes, it would. With the seismic upgrades we're
12 looking at doing to the dock, obviously we wouldn't try
13 and remove the piers and the concrete from the -- from
14 the existing structure.
15 **Q. I'm sorry, I didn't mean to cut you off.**
16 A. Go ahead.
17 **Q. Has the port agreed to those elements of**
18 **decommissioning and what would be left behind?**
19 A. Yes, they have.
20 **Q. And we are showing you Exhibit 278. Can you**
21 **describe what this is?**
22 A. This is in general terms just what I walked
23 through, talking about the elements of the facility that
24 will be removed and what will remain, and an associated
25 cost for the different areas to do that work.

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1 **Q. And what is the total cost estimate?**
2 A. Between 11 and 16 million.
3 **Q. And just to wrap things up, as the senior**
4 **project engineer for the Vancouver Energy terminal with**
5 **overall responsibility to design, can you describe**
6 **generally your approach to the design of this facility,**
7 **instructions to the design consultants and team in terms**
8 **of conservative assumptions and redundancies and issues**
9 **such as that?**
10 A. Yeah. We -- I instructed the team we want to be
11 conservative. We still have to build the facility. As
12 I described earlier, when we were looking at the design
13 event for rain and do we design the berm for a 25-year
14 event or do we design it for 100 years, the difference
15 was not a large magnitude, so we did that.
16 When we were looking at all of the motor control
17 centers, which is basically like the breaker panel in
18 your house where those are located, we designed those to
19 all be above the 500 year -- to be at or above the
20 500-year flood event. So we wanted -- you know, where
21 we can be conservative and say, let's do this and let's
22 lead, we definitely wanted that.
23 **Q. Previously you discussed automatic shutdown**
24 **systems and particularly with regard to valves. What is**
25 **the timing of that?**

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1 A. As I have said, all the valves on the facility,
2 the Coast Guard requires that the valve on the land side
3 shut within 30 seconds. We did -- every single valve on
4 the facility will close within 30 seconds. One of the
5 things that that caused is normally they look at
6 pipelines and you don't want to shut it down because you
7 have a liquid moving in it and it will cause water
8 hammer. If you've ever been in an old house and seen
9 the pipes shake, to eliminate that, we have designed a
10 secondary line that will go back to the tanks. So in
11 the event of a shutdown, we won't see the overpressure
12 situation and we can shut the facility down safely in a
13 very quick manner.
14 **Q. All right. And how quick?**
15 A. It's the 30 seconds.
16 **Q. Okay. And do the valves stay open throughout**
17 **the facility if some -- an incident were to occur?**
18 A. No. As I mentioned before, they are fail
19 closed, fail-safe-type valves. So they fail in a safe
20 position, which in most instances is a closed position.
21 **Q. And with regard to fire detection and**
22 **suppression, are there any features or redundancies that**
23 **you've built into the design?**
24 A. One of the things with the fire protection
25 system is, instead of running a line to feed the

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1 different areas, we put fire pumps and foam in each
2 area. So we have foam and the fire pumps at each area.
3 So we could have designed the system to say, we will put
4 the pumps here, we'll run piping to the other areas, but
5 instead we did a design that incorporated fire pumps at
6 all the main areas; in area 300 at the tanks, 200 at the
7 unloading and 400 at the vessel loading.
8 **Q. All right. And you -- a few minutes ago you**
9 **referred to incorporation of an H2S and hydrocarbon**
10 **detection system. Is that required by some regulation?**
11 A. No, it is not.
12 **Q. Okay. So why include it?**
13 A. As I said before, it's to ensure our employees
14 are safe. We want to be environmentally responsible as
15 well. If you detect something at a gas level, you can
16 go in. You would obviously evacuate the area, pull
17 people out, go in, sniff it, find out where it's coming
18 from, fix that before it became a bigger issue. And it
19 allows for an early detection system if something were
20 to happen or if someone forgets something.
21 MR. JOHNSON: Thank you, Mr. Corpron.
22 That's all I have, Your Honor.
23 JUDGE NOBLE: Thank you. It's time for
24 board questions based upon direct examination -- excuse
25 me, council questions.

CORPRON

1 MR. SHAFER: I've got a question.
2 MR. PAULSON: I do too.
3 JUDGE NOBLE: Which of you would like to go
4 first? Mr. Shafer or Mr. Paulson?
5 MR. PAULSON: Two quick questions,
6 Mr. Corpron, related to the dock access. You may or may
7 not be the person to answer this. Is there any plan to
8 bunker in the river?
9 THE WITNESS: No, there is not. And
10 bunkering is taking on fuel?
11 MR. PAULSON: Yes.
12 THE WITNESS: We will not be bunkering in
13 the river.
14 MR. PAULSON: Secondly, again, you, I think,
15 someone else might answer the question about the spill
16 could occur into the water. Is that your area to cover
17 or does somebody else cover that?
18 THE WITNESS: From the design standpoint, we
19 put up a fence boom, which is a permanently mounted boom
20 along the dock face, and then all of the facilities --
21 the vessels will be preboomed before they're loaded.
22 And on general response that would go to Eric Haugstad
23 for spill response.
24 MR. PAULSON: Thank you.
25 JUDGE NOBLE: Mr. Shafer?

CORPRON

1 MR. SHAFER: Mr. Corpron, just a few
2 questions here to clarify if you would. If I understood
3 correctly, you talked about designing to a peak ground
4 acceleration in terms of liquefaction. But then it
5 seemed like you just followed on the 9.0 earthquake, but
6 you did also explain that earthquakes of lesser
7 magnitude, if they -- if they went for longer durations
8 could actually cause a greater peak ground acceleration.
9 So my question is, was the design done
10 across a range of different scenarios there between
11 earthquake magnitude and the duration of that given
12 magnitude?
13 THE WITNESS: Yes, it was.
14 MR. SHAFER: Could you clarify kind of what
15 that range was?
16 THE WITNESS: The range took into account --
17 as I mentioned before, it looked at six point -- I'm
18 trying to remember from memory. GRI or Hayward Baker
19 could answer this better. But it looked at a 6.0, a 9.0
20 and another lower magnitude quake and they looked at the
21 different faults. So they looked at the Cascadia
22 subduction zone and they looked at crustal faults, and I
23 can't remember the other name, but there's some of the
24 other closer faults or active areas that can induce
25 earthquakes.

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1 MR. SHAFER: Okay. Do you happen to know
2 which resulted in the worst-case scenario of that
3 between -- the relationship between the magnitude and
4 the duration?
5 THE WITNESS: I do not know that.
6 MR. SHAFER: Okay. We talked just briefly
7 about your piping and connections, and I'm sure that all
8 of that is designed to handle certain pressures and
9 whatnot, but I just was curious if that is also brought
10 into account in terms of an earthquake scenario,
11 particularly with the joints of the pipings to the tank,
12 and there's quite a bit of infrastructure there, of
13 course. So is that also designed like say your tank
14 structures? I mean, do you get down to that detail of
15 the actual fitting connections in the joints
16 particularly?
17 THE WITNESS: On a lot of the fittings on
18 pumps, they're 300-pound connections instead of a
19 150-pound connection. So we did a higher -- it's a
20 higher bolt count on those. And we did look at that.
21 That's one of reasons there are ground improvements
22 underneath the pipeline in the tank farm area, because
23 if the tank held still and the pipeline moved, it would
24 cause an event like you're talking where it's stressing
25 it.

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1 One of the benefits of using flex metallic
2 gaskets is it allows the most flex without failing;
3 whereas if you were using a Garlock or something like
4 that, if you have that separation, that pressure could
5 blow out the gasket. But by using an internal ring and
6 external ring on flex metallic, they're a lot less
7 likely to fail.
8 MR. SHAFER: Can you say, though, that that
9 is thoroughly also modeled in the earthquake scenario,
10 the reaction of the joints in particular?
11 THE WITNESS: We have modeled -- there's
12 only a couple of joints on the pipeline going from the
13 unloading area to the tank. Most of it is fully welded.
14 So there's only a few joints. We did model the piping
15 and the pipe stresses. We have modeled them at the dock
16 area specifically to do two inches of settlement. The
17 pipe can handle up to 12 inches, but we have done it to
18 two inches. And that is what the code is looking for,
19 but the pipe can handle a much greater stress than we
20 have allowed it to be designed to accommodate some of
21 that.
22 MR. SHAFER: Okay. Thank you. One final
23 question. You also brought forth quite a bit of
24 testimony, and I do appreciate that in terms of the
25 testing and such. Is any of that testing on welds or

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1 wall thickness or the pressure testing, is any of that
2 done by independent agencies or does it at least have an
3 independent review or, if not that, is it audited? Can
4 you help us with that?
5 THE WITNESS: That's a great question. We
6 do bring in a third party to review that and do those
7 inspections because we don't have the people that do the
8 welds do the inspections. We always bring in a third
9 party to inspect those and do the x-rays and the
10 testing.
11 MR. SHAFER: Thank you very much.
12 JUDGE NOBLE: Mr. Stone?
13 MR. STONE: In your testimony you stated
14 that the tertiary containment system was sized to
15 contain a volume of oil equivalent to 20 tank cars?
16 THE WITNESS: That is correct.
17 MR. STONE: I'm just wondering why that
18 20-tank car design level was selected.
19 THE WITNESS: It wasn't selected so much as
20 that's what it ended up being. We designed -- we
21 designed the pipe trench to hold the piping and allow
22 for maintenance and people to get in there. And based
23 on size, once we had done that, it ended up that -- the
24 final number ended up being at the 20 rail cars.
25 MR. STONE: I see. And how does that strike

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1 you as being sufficient, given that there's way more
2 than 20 tank cars in a unit train?
3 THE WITNESS: Well, it strikes me as being
4 extremely conservative, because the likelihood of having
5 20 rail cars fail at the same time is extremely,
6 extremely unlikely. And with the automatic shutoff
7 systems that we have on the headers and on the pumps, so
8 if there's a problem, it will ramp those down. You
9 know, 20 rail cars failing all at once is a very, very
10 unlikely scenario.
11 MR. STONE: Okay. Thank you.
12 JUDGE NOBLE: Are there any other questions
13 of Mr. Corpron?
14 MR. STEPHENSON: Thank you for your
15 testimony. Let's maybe continue on this line. We have
16 20 cars and then remind me, you've got six tanks and
17 there's a lined berm that holds how many tanks?
18 THE WITNESS: It holds one tank plus
19 10 percent in the 24-hour, 100-year storm event.
20 MR. STEPHENSON: Thank you. And then the
21 last one -- I guess we're going down to smaller. Three
22 barrels at the dock?
23 THE WITNESS: Yes, three barrels at the
24 dock.
25 MR. STEPHENSON: That seems low at 360,000

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1 barrels a day, 30-second shutoff. Isn't there going to
2 be a lot more than three barrels?
3 THE WITNESS: The basis for that -- and Marc
4 Bayer can speak more to this, but -- is you want the
5 capacity that's in the hose and be able to contain that.
6 So that's what it's designed for. All the piping going
7 out to the dock is fully welded, you have shutoff valves
8 at the dock and you have a shutoff valve at -- on the
9 land side. So it -- you know, and with the replacement
10 of the hoses as often as we do and the testing and
11 inspections, it's really there for the what-if scenario
12 that we don't expect to happen.
13 MR. STEPHENSON: So you think three barrels
14 would cover a 30-second incident, then?
15 THE WITNESS: It depends on what the
16 incident is. If it is a pinhole, or what happens -- and
17 we actually looked at that more, DNV GL in their study,
18 looked at different incidents and looked at spill
19 volumes and whatnot in that as well.
20 MR. STEPHENSON: Thank you.
21 JUDGE NOBLE: Mr. Moss?
22 MR. MOSS: Let me just follow up on that
23 directly. Put it a little different way so I can
24 understand it, not being an engineer. Let's say you had
25 a total failure at the end of the pipe that's loading

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1 the ship and then we would be depending on the land-side
2 valve shutoff in order to stop the flow of oil. How
3 much oil would flow before that -- in other words, how
4 much oil is in the pipe from the shore to the ship?
5 THE WITNESS: Are we loading at the same
6 time or --
7 MR. MOSS: Yes, you're loading.
8 THE WITNESS: Okay. Then my next question
9 would be at what state are we loading? Because we start
10 loading slower. So you're -- when you initially start
11 filling a vessel, you load at a slower rate. And if
12 you're at the end, you're loading at a slower rate as
13 well.
14 MR. MOSS: So let's assume that we're
15 loading at the point in time when the rate is at its
16 maximum.
17 THE WITNESS: Okay.
18 MR. MOSS: Can you answer my question now?
19 THE WITNESS: Remind me of your question.
20 MR. MOSS: My question is, how much oil is
21 going to flow when that pipe fails at the ship side and
22 the valve -- the shore valve is the one that's going to
23 be the safety valve, so to speak?
24 THE WITNESS: I don't have it per minute.
25 It's 32,000 barrels an hour is the maximum capacity,

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1 and -- in that line. So to take that down per minute.
2 MR. MOSS: Mr. Stephenson can do the math
3 for me later. It's a lot more than three barrels,
4 though?
5 THE WITNESS: It's more than three barrels,
6 yes.
7 MR. MOSS: That's fine. That's sort of a
8 simplistic approach, I realize.
9 THE WITNESS: And part of that goes to the
10 likelihood of an event like that happening and a
11 complete pipe rupture, and that is one of the reasons
12 you test the pipe before, you do all the pressure
13 testing, and that goes into the risk scenarios that the
14 other consultants look at as well.
15 MR. MOSS: Sure. Thank you.
16 JUDGE NOBLE: Mr. Siemann?
17 MR. SIEMANN: I have a series of questions,
18 but I'll just follow on that. So there's a shutoff
19 valve at the ship, assuming a leakage of some sort. If
20 that shutoff valve were to fail, what would happen then?
21 THE WITNESS: At the ship?
22 MR. SIEMANN: Yes, transferring the oil to
23 the ship at you said 32,000 barrels per hour and that
24 30-second shutoff valve were to fail, what's the next
25 fail safe after that?

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1 THE WITNESS: Well, there's a couple of
2 them. There's multiple valves. There's valves at the
3 dock as well, but there has to be one on the land side.
4 So you have valves at the dock, at the header. There's
5 valves on the land side per Coast Guard requirement. As
6 soon as an incident would happen, if that were to
7 happen, the PLC also shuts down all the pumps and ramps
8 the pumps down, so they stop. It shuts the valves on
9 the tank so there's no more feed there. And with the
10 pipeline designed the way it is with vertical expansion
11 loops, if you were to get an amount in there -- if the
12 line were to rupture completely, then it would only flow
13 so much material before it was air gapped and stopped.
14 MR. SIEMANN: And I can understand that
15 you're not equipped at the moment to estimate the amount
16 of oil that might be lost if that -- given that
17 scenario, but just to put it out there, I would be
18 interested in having that information at some point
19 during these hearings, assuming that maximum flow and
20 assuming a failure of that first valve, that first
21 shutoff valve. I would just be interested in
22 understanding what that is. Unless you want to respond
23 now.
24 THE WITNESS: I was just going to say that
25 DNV GL's report looked at that, and I would have to pull

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1 up the information or would talk to DNV when they
2 testify.
3 MR. SIEMANN: Thank you. I have other
4 questions here. I think you said during your testimony
5 that the probability of a major earthquake, major
6 seismic event, was minimal. Is that what you
7 understand?
8 THE WITNESS: No. The seismic event of a
9 9.0 and the peak ground acceleration of .37 at the same
10 time is a low likelihood.
11 MR. SIEMANN: Do you know -- did your
12 consultants estimate the probability of a Cascadia
13 subduction event occurring during the life of your
14 project?
15 THE WITNESS: Yes, they did. They looked at
16 what the effects would be on site. That would be GRI
17 that would testify to that. He can tell you what the
18 peak ground acceleration was, but I know it was lower
19 than the .37 that we had talked about if you had --
20 because the Cascadia subduction zone quake is estimated
21 to be between a 7 and a 9, right? But the peak ground
22 acceleration in that event at our site is much less than
23 that.
24 MR. SIEMANN: And do you know what the
25 probability of such an event would be, in terms of over

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1 the -- during the life of the project?
2 THE WITNESS: I do not.
3 MR. SIEMANN: And another question I have
4 is, you mentioned a lot of retrofit -- sorry, seismic
5 reinforcements in many areas. You did not mention
6 seismic reinforcement under the tracks. Was there any
7 seismic reinforcement under the tracks?
8 THE WITNESS: There's no seismic
9 reinforcement under the tracks. The tracks are
10 ballasted. They're fully welded tracks. The port has
11 invested a lot of money. It's 115-pound rail with a
12 hardened top. And with it being fully welded, you're
13 not creating the stresses on bolts or pins in those
14 areas. So if you had seismic-induced settlement, it
15 would be expected that the track would settle, and if it
16 did, you would just pick it back up and re-tamp it.
17 MR. SIEMANN: Was there any assessment of
18 train toppling in an earthquake, a rail car toppling?
19 THE WITNESS: Not to my knowledge. On a
20 train sitting there, they're ten feet in diameter, for
21 them to tip over, I don't know what size force would be
22 required to tip that over.
23 MR. SIEMANN: Turning to the tanks, you
24 mentioned that the bottom is double holed, the top is
25 double roofed. What about the sides?

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1 THE WITNESS: The sides, we designed it for
2 the API thickness, the American Petroleum Institute.
3 And then we added three-sixteenths of an inch to that
4 for corrosion allowance. That's not code. That's just
5 one of the conservative things that we had done on the
6 sides. And the sides -- the bottom shell is the
7 thickest and then it goes less as you're going up. But
8 we're over an inch thick on the bottom shell of that
9 tank.
10 MR. SIEMANN: And finally, you mentioned
11 designing to the -- to flood levels. And is it -- and I
12 think you mentioned 500-year flood. Is that true across
13 the entire project area?
14 THE WITNESS: No, it's not true for the
15 entire project area. We did it -- it's true for the
16 entire project area as it relates to the MCCs and the
17 electrical controls. It is not as it relates to
18 area 200. Area 200 is at a fixed height right now.
19 MR. SIEMANN: Remind -- sorry. Remind me
20 what area 200 is.
21 THE WITNESS: No problem. Area 200 is the
22 rail unloading in the Terminal 5 loop. And because the
23 grade is already set where the rail is coming in and
24 exiting, and there are codes saying you don't have more
25 than 2 percent slope on a loop track, the elevations are

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1 what they are there.
2 So area 300 is outside of the 100-year storm
3 event and I think it's outside the 500-year. Area 400,
4 the critical components of it on the electrical and
5 controls are out of that.
6 MR. SIEMANN: And when you consider the
7 100-year or 500-year storm event, are you factoring in
8 climate change or are you just using the FEMA's FIP
9 flood rate maps?
10 THE WITNESS: We're just using the FEMA
11 maps.
12 JUDGE NOBLE: Mr. Rossman?
13 MR. ROSSMAN: Yeah. Taking you back to the
14 very beginning of your testimony when you were talking
15 about the codes in which -- you referred to the 2012
16 IBC; is that right?
17 THE WITNESS: That's correct.
18 MR. ROSSMAN: My understanding, and I could
19 be wrong about this, is that we're assuming you're
20 moving into the 2015 IBC in Washington state. Do you
21 know anything about that at all?
22 THE WITNESS: The code changes every three
23 years, and one of the things -- I actually had some of
24 our engineers look at some of the differences between
25 the code, and the code references American Society of

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1 Civil Engineers, Section 710, on most of their
2 calculations, and the references and the equations still
3 remain the same for I want to say all of the facility as
4 it relates to that.
5 MR. ROSSMAN: So I saw a number of places in
6 the prefiled testimony -- are you able to testify -- I
7 saw in the prefiled testimony in a number of places
8 references to the project meeting the 2012 code. Are
9 you able to testify today that the project will meet the
10 2015 code?
11 THE WITNESS: Right now it is my
12 understanding that it already meets a majority of that
13 code. I haven't gone through the 2015 code to be able
14 to say whether it meets every single aspect of it.
15 MR. ROSSMAN: All right. Thank you.
16 JUDGE NOBLE: Mr. Snodgrass?
17 MR. SNODGRASS: Thank you for your
18 testimony, which was very informative. Quickly, I just
19 had one question on the storm, and then some other
20 questions on, I guess, the historical record.
21 It sounds like you had undertaken a
22 number -- or you talked about undertaking a number of
23 voluntary measures. I assume that the compliance with
24 the 100-year storms, that's for the regulation that
25 you're complying with, or is some of that prudence you

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1 want to take?
2 THE WITNESS: It's prudence that we decided
3 to do with -- you're required to do the 25-year storm
4 event and...
5 MR. SNODGRASS: Is the -- question, I guess,
6 on the historical record. To what extent can we look to
7 either the recent experience in Japan or Chile or
8 anywhere to show some -- each site is obviously very
9 different. But nonetheless, can you look in a broad way
10 to any past earthquakes whereby roughly similar tank
11 technology, roughly similar ground improvements were
12 shown to work as intended?
13 THE WITNESS: Well, I think that's part of
14 what the API code intends to do. API has been around
15 for almost a hundred years, and they look at events that
16 have happened in the past, what design changes need to
17 take place. And you speak of the event in Japan. It's
18 hard to know when that was designed, how it was built,
19 what the specifications were. Because there's so many
20 things that can change. In the tanks that I built in
21 North Dakota versus the tanks here, I had to use a
22 different type of steel because of the temperature range
23 that they go into. If you used a standard steel, they
24 would become brittle at 40 below. So that's obviously
25 something you don't want. So that's a design change.

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1 So I think API takes that into account as
2 they keep updating their code and, you know, I think the
3 IBC also does that, as I spoke earlier about the changes
4 in liquefaction and how that has doubled for what that
5 factor is from -- prior to 2012.
6 MR. SNODGRASS: And just a follow-up
7 question also. Something historically related. I'm
8 just reading the media reports I recollect from the
9 Japan earthquake, one of the -- obviously they're a very
10 different facility, but one of the causes of the nuclear
11 meltdown was that the tsunami took out the backup power.
12 And I may be mis-recollecting that wrong. So the
13 question that would lead me to here is, what are the
14 backup systems and what is there in place to ensure that
15 those backup systems are also able to survive at the
16 kind of event you're planning for, a .37 ground
17 acceleration?
18 THE WITNESS: On the backup systems that I
19 spoke of earlier, all the valves are fail close. So if
20 we lose power, if we lose air, they automatically close.
21 So you don't need to send it the command to say, you
22 need to close because we're having a massive power
23 outage that hit the western United States. It will
24 automatically -- when it loses power, it shuts down.
25 MR. SNODGRASS: Is there -- given that

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1 aftershocks could occur, and I'm somewhat ignorant about
2 earthquakes, but aftershocks generally occur days or
3 weeks afterwards. One, is it the case that the normal
4 power systems, when are those likely to be restored, and
5 if those are not restored, are the backup systems, you
6 know, a week after a major event able to deal with
7 essentially a lot of oil in the pipes, in the tanks, in
8 the cars?
9 THE WITNESS: If there's a major event, I
10 can't answer when the power would be restored because
11 that would be to the power company. But with the power
12 grid in the same area as on the map I showed earlier
13 with the liquefiable soils, I would think there would be
14 several downed power lines. When I was in Texas after
15 the hurricane, you know, restoring power, you know, they
16 brought people in from 17 states that were doing
17 transmission lines and bringing the power grid back up.
18 I really can't speak to what would happen in a seismic
19 event as it relates to what it would take to get power
20 back up.
21 JUDGE NOBLE: Are there any other council
22 questions before we go to cross-examination?
23 MR. SIEMANN: I would like to ask just one
24 more.
25 JUDGE NOBLE: Mr. Siemann.

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1 MR. SIEMANN: Just one more question. Was
2 the effect of a potential tsunami considered on the
3 facility?
4 THE WITNESS: Yes, it was.
5 MR. SIEMANN: And what was the estimated
6 effect of the tsunami on the facility?
7 THE WITNESS: Since we're 103 river miles
8 away from the mouth, it would raise -- I think it's one
9 and a half feet of water that comes up. So it really is
10 not going to affect the facility.
11 MR. SIEMANN: Thank you.
12 JUDGE NOBLE: Is that it?
13 Cross-examination?
14 CROSS-EXAMINATION
15 BY MR. HALLVIK:
16 **Q. My name is Taylor Hallvik, attorney for Clark**
17 **County. Is the design of the facility complete right**
18 **now?**
19 A. The design is preliminary. We have -- we're
20 waiting to see what changes come about from these
21 proceedings and if there's anything that we need to
22 change or incorporate with the draft EIS or the final
23 EIS.
24 **Q. So the design is preliminary?**
25 A. The design is preliminary, yes.

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1 **Q. At the time of the original application in 2013,**
2 **I believe, what was the state of the design at that**
3 **point?**
4 A. At that point it was ongoing. I will tell you
5 that, you know, the design has continued from day one.
6 Just this week we were working on the -- all the PLCs
7 and controls, and I sent one of our electrical engineers
8 back to test those systems and see how they're
9 performing. So I would say the design is continuing.
10 **Q. Okay. Is it fair to say that the design of the**
11 **facility that was known in 2013 upon the original**
12 **application is less complete than it is today?**
13 A. Yes.
14 **Q. Okay. You testified earlier that your number**
15 **one concern is human safety. I think that was your**
16 **testimony; is that correct?**
17 A. It was, in a seismic event, what is my number
18 one concern, yes.
19 **Q. Okay. But that assumes construction of the**
20 **facility in the first place; is that correct?**
21 A. Say again.
22 **Q. That assumes that the facility is going to be**
23 **constructed in the first place; is that correct?**
24 A. Yes.
25 **Q. Okay. It's not your job to determine if it's**

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1 safe enough for --
2 JUDGE NOBLE: Mr. Corpron, make sure you
3 speak into the mic so everyone can hear. And after the
4 question it's okay to turn this way. Thank you.
5 A. No, it is not my job. It is the EFSEC council's
6 job to determine that.
7 BY MR. HALLVIK:
8 **Q. Is one of the factors for you, in designing a**
9 **facility to be safe for human beings in the area,**
10 **consideration of where populations of people are either**
11 **living or working in the area?**
12 A. We take into account the risk associated with
13 our employees and with outside groups. We have a
14 consultant that will speak to risk later, but in
15 general, we do look at that, yes.
16 **Q. Isn't it true that it's -- it would be prudent**
17 **to adjust your design to reflect the risk associated**
18 **with those populations in the proximity to your project?**
19 A. We do adjust design as needed, but the risk
20 for -- I assume you're speaking of the jail facility?
21 **Q. That's one of the facilities -- one of the**
22 **groups of people.**
23 A. The risk to them is from our facility --
24 BakerRisk did an analysis of the facility, and
25 they're -- I would say by designing it correctly, they

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have probably the same likelihood of getting struck by lightning as they do getting hurt from our facility.

Q. Is that your expertise or is that theirs?

A. That is me reading what BakerRisk had said. That's not mine.

Q. Okay. What, if any, design steps did you take in designing the oil infrastructure to separate it from potential ignition sources?

A. As I mentioned before, the electrical design, the NFPA code has guidelines on what areas should be classified as, and the electrical classification for this entire facility is Class I, Div 2, at a minimum, and Class I, Division 1, which is explosion proof, everything is 100 percent sealed for any below-grade or near a possible hydrocarbon source.

Q. Okay. Is an electrical substation a potential source of ignition in the event of loss of containment?

A. An electrical substation, it depends on the distance away. Everything is based on distance from the potential source.

Q. Okay. I think you testified earlier that in this design you used the -- a separation that's standard for transmissions lines; is that correct?

A. For what portion?

Q. Excuse me, the distance between the electrical

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substation that's proposed for the northeast corner of the Jail Work Center property and the adjacent 24- to 30-inch Bakken crude pipelines.

A. We looked at the spacing on that and then followed the guidelines for what it would be on crossing a connection, just what they would do for a water connection, a gas line -- a natural gas line that had to run through there that's running to everyone's houses keeping them warm, the same type of care was put into this line as we looked at that.

Q. So you used the same standard that you would use for a natural gas line running to a home and the distance between that as you would the distance between the crude oil pipelines and the electrical substation?

A. When you're crossing the electrical, and I could get my electrical engineers to speak to this, but -- which would be ICBE, but regardless of the material, you need to take certain things into account and I feel we did that.

Q. Okay. Is the quantity of the material a relevant factor in determining the distance between electrical infrastructure and hydrocarbons?

A. The quantity not so much because even on pipelines, you run 600-pound natural gas lines, 1500-pound gas lines and we're running 150 pounds,

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nowhere near those, as we cross this area.

Q. I would like to --

MR. HALLVIK: If we could pull up Exhibit 278, page 1. I'm not sure this is what I was looking for.

MS. MASTRO: What are you looking for?

MR. HALLVIK: Tesoro Savage 278.

MS. MASTRO: This is Tesoro Savage 278.

MR. HALLVIK: I can ask the question without the exhibit.

BY MR. HALLVIK:

Q. How much distance was allowed for between the electrical substation that's on the northeast corner of the Jail Work Center property and the collocated -- or the plant Bakken crude pipelines on the northeast corner of the property? And there we have a picture of the substation and the adjacent pipelines.

A. I don't have the exact measurement. I would have to go pull up those drawings.

Q. Okay. Is there a standard for separation distances for electrical substations as opposed to standard transmission lines? Are you aware of a standard for that?

A. I am not. That would be my electrical team that I'm relying on.

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1 **Q. The team that you supervise?**
2 A. Yes.
3 **Q. Okay. Isn't it true that it would be safer to**
4 **increase the distance between an electrical substation**
5 **and a Bakken crude pipeline when it is adjacent to a**
6 **population of up to 200 people?**
7 A. You're assuming --
8 MR. JOHNSON: Objection, that calls for
9 speculation.
10 BY MR. HALLVIK:
11 **Q. Well, I guess, what is your understanding --**
12 **JUDGE NOBLE: Just a minute. I have to rule**
13 **on the objection. Do you have a response?**
14 MR. HALLVIK: I'll withdraw the question for
15 the moment.
16 BY MR. HALLVIK:
17 **Q. What's your understanding of the rationale for a**
18 **distance between an electrical infrastructure and a**
19 **Bakken crude or a hydrocarbon infrastructure?**
20 A. Once again, it's derived from NFPA.
21 **Q. Isn't the purpose for safety?**
22 A. The purpose is for safety, and that's why the
23 zones and areas in NFPA were created.
24 **Q. Given that -- I'm sorry. Given that it is for**
25 **safety, wouldn't it be -- wouldn't it stand to reason**

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1 that it would be safer to increase the distance between
2 those two things when there's a population that's
3 nearby?
4 A. I would not think so. If the facility has an
5 errant -- current or a shock, we have the grounding in
6 place to take care of that so you're not sending that
7 into the pipeline, and the pipeline's fully welded.
8 There's pipelines running all over the country and they
9 crisscross power and run next to stations all the time.
10 **Q. So it's your testimony it would be no safer if**
11 **you increased the distance between --**
12 MR. JOHNSON: Objection, Your Honor. It's
13 calling for speculation, and as Mr. Hallvik already
14 established, this is not this witness' area of
15 expertise.
16 JUDGE NOBLE: Do you have a response?
17 MR. HALLVIK: Yeah. This witness has
18 testified it's his job and it's his number one concern
19 to promote human safety in designing a facility, and
20 he's testified at some length about -- in direct, about
21 the appropriate distances between an electrical
22 infrastructure and an oil terminal infrastructure, and
23 I'm asking if -- in the circumstance there is a -- that
24 he agrees, as I think he just testified, that there
25 would be no difference in safety if he would increase

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1 the distance.
2 MR. JOHNSON: He testified, Your Honor, that
3 he would have to consult with his electrical engineers,
4 that he was not aware of any standard, and beyond that,
5 to speculate about whether or not it's safe or not safe
6 based on a distance that he's testified he can't testify
7 to, it's speculation and it's calling for a vague
8 response.
9 JUDGE NOBLE: I'm going to sustain the
10 objection because I think you've brought this witness
11 beyond his stated expertise. And so I would ask you to
12 ask another question, and I'm not going to allow that
13 answer.
14 BY MR. HALLVIK:
15 **Q. Is the standard that you used to determine the**
16 **appropriate distance between the oil infrastructure and**
17 **the electrical infrastructure, is it fair to say that's**
18 **a minimum standard?**
19 A. It's fair to say that we followed code and the
20 NFPA.
21 **Q. Okay. Do you have the flexibility to have**
22 **increased that distance if you deemed it appropriate?**
23 A. There's always flexibility in design.
24 Increasing that distance would be difficult with the
25 improvements that the port was doing in West Vancouver

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1 Freight Access.
2 **Q. So the limitations of the site kept it to the**
3 **standard, the minimum standard you just testified to?**
4 A. That's my understanding, yes.
5 MR. HALLVIK: I don't have any more
6 questions. Thanks.
7 JUDGE NOBLE: Thank you. Is there more
8 cross-examination?
9 CROSS-EXAMINATION
10 BY MR. POTTER:
11 **Q. Good afternoon, sir.**
12 A. Good afternoon.
13 **Q. My name is Bronson Potter. I represent the City**
14 **of Vancouver, and I'm going to start by loaning you my**
15 **calculator. I just want to go back to the questions**
16 **about the pipeline leading to the marine terminal.**
17 A. Okay.
18 **Q. That's a big pipe, right, 36-inch diameter?**
19 A. It is 36-inch.
20 **Q. And you said it flows at 32,000 barrels per**
21 **hour?**
22 A. That is the maximum design --
23 **Q. Okay.**
24 A. -- for the largest ship at full feed.
25 **Q. And so if you divide that 32,000 by 60, you**

1 would get 533 gallons per minute? You can trust me,
2 but -- never trust a lawyer.
3 A. Okay.
4 **Q. And if you divided that again by 60, you would**
5 **get 8.9 barrels per second. Does that sound right?**
6 A. About right, yeah.
7 **Q. Okay. And then multiply that for 30 by -- to**
8 **see how many barrels in a 30-second period, you would**
9 **get 267 barrels in 30 seconds. Does that sound right?**
10 A. That sounds about accurate.
11 MR. BARTZ: Excuse me. I heard gallons and
12 barrels all at the same time. Did you mean to do --
13 MR. POTTER: No, I'm sorry if I did. It
14 should be barrels in each instance.
15 MR. BARTZ: Thank you.
16 BY MR. POTTER:
17 **Q. A few questions about the fire suppression**
18 **system. What was your role with respect to the design**
19 **of that system?**
20 A. With respect to the design, we had hired Pool
21 Fire. They had worked with us on similar facilities.
22 They had done the fire system design at the Delaware
23 City facility, and they also have helped with the design
24 at the Trenton facility, and with this design, we
25 initiated what we wanted them to look at.

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1 **Q. You reviewed their design, I assume?**
2 A. Yes.
3 **Q. Okay. And there -- you testified that there**
4 **were auxiliary pumps at three locations of the terminal,**
5 **the unloading area, I think the tank storage area and**
6 **the marine terminal area; is that right?**
7 A. They're not auxiliary pumps. They're -- they
8 are the booster pumps for those areas.
9 **Q. Okay. Booster pumps. And the purpose of those**
10 **pumps is to draw sufficient water from the city's water**
11 **supply system to operate the fire suppression systems,**
12 **correct?**
13 A. Yes. And Dan Shafar can speak to this more. He
14 is one of the civil engineers that has worked on this
15 project and has dealt with the city engineers on water
16 flow. But in general, yes, the booster pumps take the
17 existing city water and increase the pressure. As is
18 the case with most industrial operations, it requires a
19 booster pump to meet the standards for fire suppression.
20 **Q. So just the flow from the city water system by**
21 **itself without using the booster pumps isn't sufficient**
22 **to provide the volume or pressure necessary for the fire**
23 **suppression systems; is that correct?**
24 A. It is not sufficient to provide the pressure
25 needed.

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1 **Q. Okay. Now, in each of those locations, there's**
2 **a single booster pump. There's not a redundant booster**
3 **pump, is there?**
4 A. No, there is not.
5 **Q. Did you review the fire assessment -- fire**
6 **protection assessment report that was prepared for the**
7 **council?**
8 A. I have not seen that.
9 **Q. All right. In it, it states that "the plan**
10 **documents indicate that there would be one 100 percent**
11 **capacity pump at each location. This is highly risky**
12 **since if a pump fails to start for any reason or is down**
13 **for maintenance, there is no fire protection through the**
14 **entire fire system."**
15 **Is that a statement you would agree with?**
16 A. With the testing, these systems are typical to
17 run 20-plus years. With proper maintenance, they are
18 very reliable systems. That is one of the reasons in an
19 area where the power is not reliable enough, it is
20 required to go to a system like this. You need -- I
21 think it's 95 percent on time or reliability. I would
22 have to get with the fire engineers on that. But part
23 of the code says if it's -- if you don't have reliable
24 base power, to use generators.
25 **Q. So these are diesel pumps?**

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A. Yes, they are.

Q. And so when you're talking about power, you're talking about electrical power not being reliable?

A. Correct.

Q. Are you aware of Clark Public Utilities' performance for providing electrical power in this community?

A. I am not.

Q. Well, why do you say it's not reliable?

A. I'm saying in general, as one of the guidelines, if an area had unreliable power, the booster pumps is an option.

Q. Okay. But does this community have unreliable power?

A. Once again, I don't know.

Q. Okay. Is there a plan for a backup electrical power supply at the terminal?

A. We do have a plan for generators. What we do in other facilities, we contract with rental groups in the Gulf Coast area where hurricanes are likely. We contracted with them and have generators on rental. And so should an event occur, we have the gen sets that can come out and be connected up. The disconnects and the connections for those gen sets are designed into the facility.

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Q. Again, referring to the fire protection assessment report, which was written in August 2015, it says, "At this time the applicant has no plans for the project to have a backup power system. As stated in the fire protection system review, Appendix A, some emergency power must be provided for control and operation in order to monitor and allow safe shutdown of all systems, such as valves, pumps, boilers, et cetera. Emergency power is also critical for critical lighting for safe personnel movement and egress."

Is it your testimony that we --

A. We do have emergency power on -- or DCS power for monitoring the systems, and that can run for up to -- I want to say it's 24 hours on backup. And with the valves being fail closed, the valves and the system shuts down. So we do have monitoring capability on the design. Did that answer your question?

Q. Perhaps. The boiler building or area 600 does not have any automatic fire suppression system, does it?

A. No, it does not.

Q. When the auxiliary pumps kick in and draw on the city water system supply, can that cause a drop in the pressure in the city's water system?

A. That would be a question I would ask Dan Shafar.

Q. Okay. Fair enough. You talked about a foam

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1 fire suppression system.
2 A. Yes.
3 **Q. Are you familiar with how foam suppression**
4 **systems work?**
5 A. Yes. They create a blanket and smother the
6 fire.
7 **Q. Do you know the difference between a**
8 **two-dimensional fire and a three-dimensional fire?**
9 A. No, I do not.
10 **Q. Okay. A pool fire is a fire of -- in one case**
11 **we'll say an oil pool and it catches on fire and it's**
12 **flat. That's a two-dimensional fire. A structure**
13 **that's vertical and is on fire, that's a**
14 **three-dimensional fire. How tall is a tank car?**
15 A. A tank car is ten feet.
16 **Q. From top to bottom?**
17 A. The actual car itself is ten feet. From the top
18 to the wheels --
19 **Q. How about to the ground? Is that what you --**
20 A. Wheels to the ground would be -- I would have to
21 get -- I'm estimating it. I think it's about 12 feet.
22 **Q. Do you know whether or not a foam suppression**
23 **system would be effective for suppressing a fire on a**
24 **tank car that is engulfing the entire tank car that's**
25 **12 feet tall?**

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1 A. Since we offload the cars at the bottom, you're
2 not going to have a fire starting at the top of that
3 tank car. It would be --
4 **Q. Do you know that?**
5 A. -- closer to the ground.
6 **Q. I'm sorry. Is that within your expertise as to**
7 **how a tanker might become fully enveloped in fire?**
8 **Isn't there a pressure relief valve at the top?**
9 A. There is a pressure relief valve at the top.
10 **Q. So when the tank car is on fire, the pressure**
11 **within the tank car builds as it heats up and the**
12 **pressure relief valve can release and that can cause**
13 **fire at the top of the tank cars; isn't that true?**
14 A. That is not true because the top of the car is
15 one of the areas that is -- has a zone for the -- per
16 the NFPA, and everything in that area is Class I, Div 2,
17 all the tools that are used are spark -- anti-spark
18 tools. So I wouldn't say that's an accurate statement.
19 **Q. Have you seen pictures of tank cars enveloped in**
20 **flame?**
21 A. Yes, I have.
22 **Q. Have you seen pictures of tank cars with their**
23 **hulls torn from the fire and the pressures caused by the**
24 **fire?**
25 A. From the thermal-induced tear, yes, I have.

1 **Q. And that can cause the entire tank car to be on**
2 **fire, can't it?**
3 A. Yes, it can. But in both cases, those were cars
4 in transit, not at a facility, not moving at the speeds
5 that we're moving at and --
6 **Q. But these are heat-induced tears.**
7 A. They were -- heat-induced tears were caused by
8 the pool fire that the cars were sitting in, which is
9 part of the reason for the design change on the rail
10 cars that Mr. Hack can speak to more of, is to prevent
11 that type of thing from happening.
12 JUDGE NOBLE: Mr. Potter?
13 MR. POTTER: Yes, ma'am.
14 JUDGE NOBLE: I don't mean to interrupt your
15 flow of thought, but we are going to have to stop for
16 today at 25 past because we have five minutes left of
17 record to make today, and I just wanted to let you know
18 that.
19 MR. POTTER: Actually, your timing is
20 perfect. I'm finished.
21 JUDGE NOBLE: All right, then. So that's
22 the plan.
23 MR. MOSS: I never did hear the answer to
24 your last question, which is if -- just assume
25 hypothetically that an entire tank car is engulfed, is a

1 foam suppression system adequate to -- or capable of
2 extinguishing that fire? I don't know. I would like to
3 hear the answer to that.
4 THE WITNESS: To my knowledge, it is. And
5 one of the reasons the foam was not effective in Mosier,
6 is because it wasn't applied as soon as the fire
7 occurred. With this system, it would occur almost
8 immediately and it should knock out that fire. In most
9 cases, the design in a fire event, the fire is put out
10 in under five minutes and before first responders get to
11 the site.
12 MR. POTTER: There will be additional
13 testimony regarding the effectiveness of foam on
14 three-dimensional fires.
15 MR. MOSS: I'll look forward to that.
16 JUDGE NOBLE: Are you still finished,
17 Mr. Potter?
18 MR. POTTER: I'm still finished.
19 JUDGE NOBLE: All right. What we have to do
20 for the remainder of today is simply make a record of
21 who will be testifying tomorrow and let the public know
22 what sorts of subjects will be covered tomorrow.
23 MR. JOHNSON: All right. Your Honor,
24 presumably there's some additional cross-examination of
25 Mr. Corpron. And then we have a number of other

1 witnesses who we hope to have testify, including Mr. Dan
2 Shafar, who filed prefiled testimony in this matter, who
3 will testify about civil engineering issues and again
4 will be rebutting primarily the testimony of Mr. Tyler
5 Clary.
6 Marc Bayer, who also filed prefiled
7 testimony, will be discussing -- or testifying regarding
8 marine navigation issues. And, again, he will be
9 rebutting primarily the testimony of Ms. Susan Harvey
10 and Mr. Blaine Parker.
11 Eric Hansen will be testifying primarily
12 related to air emissions issues. Mr. Hansen filed
13 prefiled testimony and will be primarily rebutting
14 Mr. Ranajit Sahu, and her name escapes me, but
15 Ms. Elinor Fanning.
16 And then if we could -- can get there, we'll
17 have Mr. John Hack, who also filed prefiled testimony,
18 provide testimony regarding rail operations and he'll be
19 primarily rebutting Mr. Millar and Mr. Chipkevich.
20 JUDGE NOBLE: Mr. Johnson, are you thinking
21 tomorrow is going to be longer than most days?
22 MR. JOHNSON: We thought you could extend
23 this out until 8:30 or 9 tomorrow evening. I just want
24 to put those on the -- you know, we're obviously
25 bunching up. And because of commitments to witnesses

1 and whatnot, that, you know, we may take some of those
2 in a different order.
3 JUDGE NOBLE: All right. That gives
4 everybody an idea. Thank you.
5 MR. JOHNSON: And one other matter, Your
6 Honor. In response to your ruling with regard to the
7 tank car models, we have been able to obtain a witness
8 who is prepared -- from a tank car manufacturer who is
9 prepared to lay the proper foundation for those models
10 and can be available tomorrow at 8:30. His name is
11 Randy McDougal, and we would propose that we make a
12 proffer at that time to lay the foundation for those
13 models. And I don't know if you need to do that in the
14 presence of the council or if we could do it just
15 attorneys and yourself.
16 JUDGE NOBLE: I think I would like the
17 council to hear his qualifications.
18 MR. JOHNSON: Okay. We could do that right
19 at 9, and then bring Mr. Corpron back up for
20 cross-examination. That just makes it easier to
21 schedule the telephone call.
22 JUDGE NOBLE: Right. Well, is he going to
23 be available at 9:00 or just --
24 MR. JOHNSON: Yes, we can make him available
25 at 9.

JUDGE NOBLE: Fine. Then we will start again laying that foundation at 9:00 and then we'll continue on with this witness. So we are adjourned until 9:00 tomorrow morning.

MR. JOHNSON: Thank you.

(Hearing adjourned at 5:28 p.m.)

C E R T I F I C A T E

STATE OF WASHINGTON)
) SS.
COUNTY OF CLARK)

I, Micheal A. Johnson, Registered Diplomate Reporter and Certified Realtime Reporter, do hereby certify that the foregoing transcript is true and accurate to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 10th day of July, 2016.

MICHEAL A. JOHNSON, RDR, CRR