## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

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IN THE MATTER OF:

: Docket No.

NEW PRIME, INC.,

: RCRA-08-2020-0007

:

Respondent.

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Volume IV

Thursday, October 27, 2022

United States Courthouse
Western District of Missouri
(Southern Division)
Bankruptcy Courtroom, Second Floor
222 N. John Q. Hammons Parkway
Springfield, Missouri 65806

The above-entitled matter came on for hearing, pursuant to notice, at 8:00 a.m. CDT

**BEFORE:** 

THE HONORABLE CHRISTINE COUGHLIN

Administrative Law Judge

## **APPEARANCES:**

On Behalf of New Prime, Inc.:

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of: Mark Ryan Law, PLLC

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On Behalf of the Environmental Protection Agency Region VIII:

LAURIANNE JACKSON, ESQ.

CHARLES FIGUR, ESQ.

Environmental Protection Agency

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1	P-R-O-C-E-E-D-I-N-G-S	1	of the exhibits it will be Respondent's
2	8:00 a.m.	2	Exhibit 14
3	JUDGE COUGHLIN: All right. Welcome	3	JUDGE COUGHLIN: Okay.
4	back, everybody. Good morning, again. We're on	4	MR. RYAN: which is an aerial
5	day four, and today is Thursday, October 27th,	5	photo, I would like to have the witness mark it
6	just at 8:00 according to my watch which I like	6	up just to show where things are.
7	better than that clock. So anything we need to	7	JUDGE COUGHLIN: Okay.
8	address before we get started with Respondent's	8	MR. RYAN: I think it will be helpful
9	next witness?	9	for the Court to understand where this is and
10	MR. McKAY: No, ma'am.	10	that is, and I propose we do it the old-fashioned
11	JUDGE COUGHLIN: Okay. No? No?	11	way with a sharpie and a picture
12	MS. JACKSON: No, we're good.	12	JUDGE COUGHLIN: Okay.
13	JUDGE COUGHLIN: Okay, wonderful. All	13	MR. RYAN: and then have the
14	right. Who would you like to call?	14	witness mark it up. You know, I'll make sure the
15	MR. RYAN: Your Honor, real quickly,	15	record's clear what he's marking.
16	before I call Mr. Singleton, may I approach?	16	JUDGE COUGHLIN: Okay.
17	JUDGE COUGHLIN: Sure sure.	17	MR. RYAN: And we can either give it
18	MR. RYAN: I have a minor housekeeping	18	to Your Honor or to the court reporter, and I
19	matter on the handling of evidence. I discussed	19	would suggest that opposing counsel and I take
20	this already with my opposing counsel.	20	pictures of it so we have we know what he's
21	JUDGE COUGHLIN: Okay.	21	done before it disappears.
22	MR. RYAN: We're going to have, on one	22	JUDGE COUGHLIN: Right.
		1	
	6		7
1	6 MR. RYAN: And then we just make it	1	7 JUDGE COUGHLIN: And then we'll hand
1 2	•	1 2	
	MR. RYAN: And then we just make it	_	JUDGE COUGHLIN: And then we'll hand
2	MR. RYAN: And then we just make it part of the record, and if we have this marked as	2	JUDGE COUGHLIN: And then we'll hand it over to the court reporter to take back and
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- 1 JUDGE COUGHLIN: Yes, absolutely.
- 2 Thank you.
- 3 MR. RYAN: With that, Your Honor, I'd
- 4 like to call Mr. Singleton to the stand.
- 5 JUDGE COUGHLIN: Okay. Good morning.
- 6 MR. SINGLETON: Good morning.
- 7 WHEREUPON,
- 8 BRIAN SINGLETON
- 9 was called as a witness by Counsel for the
- 10 Respondent and, after having been first duly
- 11 sworn, was examined and testified as follows:
- JUDGE COUGHLIN: All right. Thank
- 13 you. Please have a seat. The witness has been
- 14 sworn. Please, go ahead, Mr. Ryan.
- 15 DIRECT EXAMINATION
- 16 BY MR. RYAN:
- 17 Q Mr. Singleton, could you please state
- 18 and spell your name for the record?
- 19 A Yes. Brian Matthew Singleton,
- 20 Singleton, S-I-N-G-L-E-T-O-N.
- 21 Q And who are you employed by?
- 22 A Prime, Inc.

- 1 Q And give me your job title at Prime?
- 2 A I'm the terminal manager in Salt Lake
- 3 City.
- 4 Q And before we get into what you do as
- 5 the terminal manager, could you give us a quick
- 6 history of your work history?
- 7 A Yes. I started about 16-1/2 years
- 8 ago, started as a night fleet manager in -- here
- 9 in Springfield. Then I moved to a daytime fleet
- on manager role. And then in 2010, I moved to Salt
- .1 Lake and become an operations manager and
- terminal manager in the Salt Lake facility.
- 13 Q And what does a fleet manager do?
- 14 A A fleet manager manages a fleet of
- 15 trucks, you know, 60, 70, 80 trucks at a time;
- 16 you know, talk to the driver, gets freight for
- 17 the -- for the drive, etcetera.
- 18 Q And then why did you move to Salt Lake
- 19 City?

10

- A I moved there to become the operations
- 21 manager of our facility there.
- 22 Q And when did you move to Salt Lake

1 City?

- 2 A Two thousand -- September of 2010.
- 3 Q And what were your job duties at the
- 4 time?
- 5 A When I moved, I still had a few trucks
- 6 that I was running because our operation wasn't
- 7 big enough at the time to have a full-time
- 8 operations manager there, so I did a little
- 9 split, still was the fleet manager for a little
- 10 while, and then -- and the operations manager as
- 11 well.
- 12 Q And when did ultimately become the
- 13 manager of the Salt Lake City facility?
- 14 A Pretty much since I got there in 2010,
- 15 2011, somewhere around that -- that time.
- 16 Q So you were wearing two hats at the
- 17 time?
- 18 A Yes, sir.
- 19 Q Now as the terminal manager, what is
- 20 your job now?
- 21 A Basically, as terminal manager, I have
- 22 multiple departments, and those departments have

- 1 managers, and those managers report to me.
- 2 Q And has the Salt Lake City facility
- 3 grown over time?
- 4 A Absolutely. We had -- in 2010, we had
- 5 approximately probably 20 people there at the
- 6 time when I got there, and today I probably have
- 7 175.
- 8 Q And also in terms of area, have you
- 9 grown?
- 10 A Yes, sir.
- 11 Q And could you tell the Judge, you
- 12 know, what -- where this facility is located and
- 13 what it looks like?
- 14 A Yes. The facility that we're talking
- 15 about now we moved into in about 2015. It's
- 16 basically by the airport. It's an industrial
- 17 area of the city. You know, it's -- we have
- 18 about 34 plus or minus acres there. We bought an
- 19 existing trucking company at the time. We didn't
- 20 buy the company, I'm sorry. We bought their
- facility at the time and the land next to it and
- 22 then constructed a new shop and then eventually a

15

12

- 1 new amenities building for in-house associates 2 and our drivers.
  - Q Was -- that new shop and amenities
- 4 building, was that built -- when was that built?
  - A That would have been started
- 6 construction in probably fall of '15 or early '16
- 7 on the -- on the shop side, yes.
- 8 Q So going back to 2014-15, was the area
- 9 -- was your area 34 acres?
- 10 A It was two separate pieces of
- 11 property. The first set of property was the
- 12 existing trucking company that we bought their --
- 13 their facility. And then we bought the land next
- 14 door to it.

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- 15 Q Okay. So --
- 16 A So I would say -- I think the original
- was probably 18 acres and the other one was
- 18 probably 16 acres or so, the new.
- 19 Q So you're familiar with the trailer
- 20 that's at issue in this case, the one that held
- 21 the paint, correct?
- 22 A Yes, sir.

1

- 1 Q And was that paint -- was that trailer
  - 2 stored on the original property, the smaller
  - 3 property?
  - 4 A That's correct.
  - 5 Q So why is -- why does Prime have this
  - facility in Salt Lake City?
  - 7 A Well, you know, it's very important --
  - 8 you know, we have a facility for -- already we've
  - 9 had -- we have a facility in Pennsylvania, one
  - 10 here in Springfield, and one in the west, which
  - is Salt Lake. It's very important that we have
  - 12 something out west. We run a lot of freight out
  - 13 there. It's really important that we get our
  - eyes on our equipment, you know, from a shop
  - 15 standpoint. And then it's very important that
  - 16 our drivers have a place to -- to take a rest, to
  - 17 take a break, shower, food, everything you can
  - name. And Mr. Lowe (phonetic) is really good
  - 19 about taking care of the drivers when it comes to
  - 20 that type of thing.
  - 2.1 Q You talk about a shop. What does a
  - 22 shop do?

14

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- 2 Q And is that location, as you know it,
- of the Prime Salt Lake City terminal?
- 4 A That's correct, yes, sir.

A Yes, sir.

- Q And could you please for the -- tell
- the Court in the context of what you see in this
- 7 aerial photo what's around the Salt Lake City
- 8 facility?
- 9 A Just north of 80 right there, that's
- 10 the airport, the Salt Lake International Airport.
- 11 And then pretty much just west of, that's
- 12 Bangerter Highway, the 154 there. It -- all of
- 13 that's industrial. It's industrial pretty much
- you go all the way east of 215 over by Indiana

the whole entire map until you get probably --

- 16 Avenue. If you see that, it's --
- 17 Q On the far right side?
- 18 A Far right, that's correct. It --
- 19 that's your first probably residential area right
- 20 there. It's a couple miles away from the
- 21 facility.
- 22 Q Okay. And is this aerial a fair and

A Well, when -- you know, when a tractor 2 and trailer come through our inbound process, you

- 3 know, we give an inspection to the tractor and
- 4 the trailer. We -- you know, if there's any
- 5 repairs need to be made at that time, we do that
- 6 all inside right there.
- 7 Q So you have mechanics that --
- 8 A Absolutely, yes.
- 9 Q So the truck driver's out and he's got
- 10 a problem with his radiator, pulls into Salt Lake
- 11 City, he --
- 12 A Yes. We would -- we would prefer to
- do our work -- our own work if -- we try not to
- 14 do any outside work if that makes sense.
- 15 Q Could you pull up Respondent's Exhibit
- 16 13? So Mr. Singleton, could you please -- I'm
- 17 showing you what's been marked Respondent's
- 18 Exhibit 13 on your screen. It's a Google Earth
- 19 image with a red dot approximately upper third
- 20 middle of the -- of this image. And next to the 21 red marker, it says Prime, Inc. Salt Lake City,
- 22 UT terminal. Do you see that?

17 16 1 accurate representation of the neighborhood and 1 MS. JACKSON: For what time period? 2 2 MR. RYAN: Oh, it would have been where Prime is located? 3 3 whenever Google took this picture, around the A Yes, sir, it is. 4 4 MR. RYAN: Okay. Your Honor, I move time the prehearing exchange. So I -- I --5 5 MS. RODGERS: Thank you. to admit Respondent's Exhibit 15 -- excuse me, 6 6 JUDGE COUGHLIN: Okay. Do you have an 13. 7 JUDGE COUGHLIN: Okay. Any objection? 7 objection then? 8 8 MS. JACKSON: Well, I'd object -- I'm MS. JACKSON: I would guestion the 9 9 sorry. I'm fumbling through exhibits for a reliability of it. I don't -- I guess if we're 10 second because it's not dated. 10 able -- it's on the record so no. 11 11 MR. RYAN: This was -- I'll state for JUDGE COUGHLIN: Okay. All right. 12 the record I downloaded this from Google Earth --12 REX 13 is admitted. 13 13 MS. JACKSON: I don't mean -- I mean (Whereupon, the above-referred to 14 I don't need you to lay the foundation. 14 document was received into evidence as 15 15 MR. RYAN: Well, I'm just saying where Respondent's Exhibit 13.) 16 it came from. I -- for the record, this was put 16 MR. RYAN: Just to clear that up, Mr. 17 17 Singleton, is there -- has anything changed that prehearing exchange. I downloaded it from Google 18 Earth probably days before the prehearing 18 you can tell in this aerial photo, Exhibit 13, 19 exchange. I don't know what the date was that 19 from what you understand the neighborhood to be? 20 Google took this picture, but I believe that the THE WITNESS: Not to my knowledge. I 21 witness has testified it's a fair and accurate mean I don't know when it was taken, so it looks 22 representation. 22 the same. 18 19 1 JUDGE COUGHLIN: As like present day? 1 photo --2 2 THE WITNESS: Yes. THE WITNESS: Yes -- yes, sir. 3 3 MR. RYAN: -- on Exhibit 13? JUDGE COUGHLIN: Okay. 4 4 THE WITNESS: As far -- as far as I THE WITNESS: Yes, sir. 5 5 BY MR. RYAN: can tell, yes. 6 6 Q And west would be left? JUDGE COUGHLIN: And I -- not to 7 7 belabor, but when you're -- when you were A Yes, sir. 8 referencing north and west, I'm assuming there Q And east the right, and south would be 9 9 isn't like a legend or scale to identify? So I'm to the bottom? 10 10 A Yes, sir. assuming you're just referring to what a 11 11 traditional north, straight up; west, to the left MR. RYAN: Okay. Could you please 12 12 pull up Respondent's Exhibit 14? Mr. Singleton, as you're looking at the photo and so forth? 13 THE WITNESS: Yes, ma'am. I'm sorry. 13 you have in front of you what's been marked 14 14 Respondent's Exhibit 14. Do you recognize this JUDGE COUGHLIN: No. That's okay. 15 15 THE WITNESS: That map is -- I'm doing photo? 16 16 it by direction. THE WITNESS: I do, yes, sir.

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BY MR. RYAN:

back in approximately 2016.

Q And what is it showing?

A That is our facility, would have been

Q And how do you know this is 2016?

We just started construction in the

the record.

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JUDGE COUGHLIN: Okay.

THE WITNESS: Yes, sorry.

JUDGE COUGHLIN: Okay. That's all

MR. RYAN: So north is the top of the

right. I just wanted it to kind of be clear for

20 21 1 building, the shop building is -- is up it looks 1 document was received into evidence as 2 like, so that would have been at some point in Respondent's Exhibit 14.) 3 '16. 3 MR. RYAN: So if I may approach, Your 4 Q And when you say the shop building was Honor, with a Sharpie? This is -- you have 14. 5 up, which building are we talking about? I'm going to show him the same thing, REX. 6 6 A That be the large building on the JUDGE COUGHLIN: Thank you. 7 7 right side of the picture. MR. RYAN: Mr. Singleton, I just 8 Q And the -- is that the second piece of handed you a paper copy of the Respondent's 14 9 property you referred to earlier? and a Sharpie pen. And I'm going to ask you to 10 10 A Yes. sir. make a few markings on this so the record is --11 11 Q And is this a fair and accurate MS. JACKSON: I'm so sorry. I don't 12 representation of what the facility looked like 12 mean to interrupt, but I'm just curious, can you 13 in approximately 2016? 13 mark the screen and this at the same time so that 14 A That's correct, yes, sir. 14 we can see what he's marking? 15 MR. RYAN: Your Honor, I move to admit 15 JUDGE COUGHLIN: Oh --16 the Respondent's Exhibit 14. 16 MS. JACKSON: I didn't think about 17 JUDGE COUGHLIN: Okay. Any objection? 17 that earlier. 18 MS. JACKSON: No objection, Your 18 MR. RYAN: Is it -- if it's possible, 19 Honor. 19 I have no objection. 20 JUDGE COUGHLIN: Okay. REX 14 is 20 JUDGE COUGHLIN: Yes. Well, yes, 21 admitted. 21 unfortunately, I don't know the answer to the 22 (Whereupon, the above-referred to 22 technical question. Is there a capacity to do 22 23 1 1 that, to annotate on the screen? Q So using your Sharpie pen, referring 2 MS. JACKSON: We did it by mistake to in this aerial photo, REX 14, we just talked 3 earlier. about the new shop, and just for clarity's sake, 4 JUDGE COUGHLIN: Oh --I want to -- because I -- that right side of the 5 MS. JACKSON: I think -property was not where -- or excuse me -- let me 6 JUDGE COUGHLIN: -- okay. Do you know ask this question. Was -- where was the trailer 7 7 at issue in this case or roughly? Before you how to do that? 8 8 THE WITNESS: I do not, no, ma'am. mark it, tell me. 9 9 JUDGE COUGHLIN: Does anyone know how A It -- it's on the northeast corner of 10 to do that? 10 the original property, which would be -- you see 11 11 where it says Pedigree Truck and Trailer Sales, THE WITNESS: I just touch the screen 12 or --12 that building? 13 13 MS. JACKSON: He can just tap it and Q Yes. 14 see what happens in an innocuous place. 14 If you just went straight to the north 15 THE WITNESS: Nothing's happening. 15 of that and to the right just a little bit, up in 16 MS. JACKSON: Okay. Then -- that's --16 that corner. 17 17 don't worry about it. That's fine. Q Okay. Could you make a circle where 18 MR. RYAN: I'll try to be as clear as 18 the truck -- the trailer was stored, and then put 19 I can so there's no confusion and if necessary, 19 a T next to it?

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A Okay.

Q So let the record reflect the witness

22 has just marked the location of the trailer in

we can show you real quick.

BY MR. RYAN:

MS. JACKSON: Thank you.

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- 1 2014 -- excuse me -- 2015-16, correct?
- 2 A Yes, sir.
- 3 MS. JACKSON: Can I just see it
- 4 quickly?
- 5 THE WITNESS: Yes, ma'am.
- 6 JUDGE COUGHLIN: I want to make sure
- 7 I'm following this. Okay, I see. Counsel, can
- 8 you see this? Just come one up. I just want to
- 9 make sure we're all on the same page, cause it --
- 10 you know, it's important so just have a quick
- 11 look.
- 12 MS. JACKSON: Thank you.
- 13 JUDGE COUGHLIN: Okay. All right.
- 14 Yes. I think it was -- Mr. Ryan, I think you
- 15 were very clear for the record. I just -- you
- 16 know, I'm visual. I wanted to see it so thank
- 17 you.
- MR. RYAN: I'm going to do this two
- 19 more times, Your Honor, on this Exhibit. We're -
- 20 I'm going to try to make it simple as possible.
- JUDGE COUGHLIN: Okay.
- MR. RYAN: And so for the purposes of

- 1 looking at this REX 14, could you tell me -- or
- 2 in the 2014 time period -- excuse me -- 2015-16
- 3 time period, where was the shop located exactly
- 4 in the building we see to the south of the
- 5 storage site?
- 6 THE WITNESS: So the shop, going back
- 7 referencing the Pedigree Truck and Trailer Sales
- 8 note on the -- on the building back, like three-
- 9 fourths of that building was the shop.
- 10 BY MR. RYAN:
- 11 Q Okay. And then could you just write
- 12 shop, S-H-O-P on top of that area where the shop
- 13 was located?
- 14 A Yes, sir.
- 15 Q And then just so we're clear, we're
- 16 referring back to your earlier testimony. We
- 17 talked about the new construction, and you dated
- 18 this photo approximately 2016. Could you write
- 19 new building on top of the new construction?
- 20 A Yes, sir.
- 21 MR. RYAN: Okay. Now could we just
- 22 take a quick moment to show it to you and to

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- 1 opposing counsel --
- 2 JUDGE COUGHLIN: Yes.
- 3 MR. RYAN: -- so everyone's clear?
- 4 MS. JACKSON: Okay. Thanks.
- 5 JUDGE COUGHLIN: Here you go. Thank
- б you.
- 7 MR. RYAN: So Mr. Singleton, what
- 8 approximately is the distance from the back of
- 9 the shop, which we have identified now on REX 14,
- 10 to the area where the damaged trailer was stored?
- 11 THE WITNESS: Approximately 220 feet.
- 12 BY MR. RYAN:
- 13 Q And what -- let's step back a second.
- 14 What's the security situation at the Prime Salt
- 15 Lake City facility; can you describe it to me,
- 16 please?
- 17 A We have 24/7 security. The property
- 18 itself is surrounded by fence, barbed wire fence.
- 19 Q And can -- are there gates going in
- 20 and out of the facility?
- 21 A There is, yes.
- 22 Q And can anyone just driving by or

- 1 walking by in the street enter the facility?
  - A They cannot.
- 3 Q And what keeps people from entering
- 4 the facility?
- 5 A Well, the gates all have guards,
- 6 security guards are at the gates and other than
- 7 that would be fence.
- 8 Q Okay. And then in 2015-16, the time
- 9 the trailer was stored at the Salt Lake City
- 10 facility, was that -- what was the security
- 11 situation then?
- 12 A It's -- it was the same.
- Q And we can see here there was
- 4 construction going on. You did testify that the
- 15 new facility was being built, the one you
- 16 labeled, I think, new facility or new shop. The
- 17 -- what was the security situation with -- when
- 18 the construction was going on?
- 19 A The construction company put up a
- 20 fence around the construction site, and so they
- 21 handled anybody that came in and out of the
- 22 construction site.

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- 1 Q And was -- was there -- were the
- 2 people passing back and forth between the
- 3 construction site and your active yard?
- 4 A Oh, not to my knowledge, no.
- 5 Q You mentioned that you had in 2010
- twenty people there and 170 working today. What 6
- 7 is your policy on smoking for your employees?
- 8 A We do not hire in-house associates
- 9 that smoke.
- 10 Q Can you pull up Respondent's Exhibit
- 11 15, please? Mr. Singleton, do you recognize this
- 12 photograph?
- 13 A Yes, sir.
- 14 Q What is it?
- 15 A It's basically just a pan out of the
- 16 last, which would have been what, 14 -- 14.
- 17 Q And is it taken at the same time as
- 18 Exhibit 14?
- 19 A It looks similar, yes.
- 20 Q Approximately 2016?
- 21 A Yes, sir.
- 22 Q And can you tell me, what does this

- 1 picture show us?
  - A It just shows a little bit larger of
- an aerial view of the property at the same time
- that we were just looking at, shows the property
- as a whole, railroad tracks behind it. We have
- XBO that's next door to us so. And it show
- basically --
  - Q That's --
- 9 A -- everything around us is --
- 10 Q I'm sorry. You said XPO; can you tell
- 11 me --

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- 12 A I'm sorry. That's another trucking
- 13 company. I'm sorry. XBO Logistics.
- 14 Q Okay.
- 15 So another trucking company there and
- 16 then the industrial side pretty much all around
- 17 us, warehouses.
- 18 Q Is this a fair and accurate
- 19 representation of the neighborhood which the
- 20 Prime Salt Lake City facility is located?
- 21 A Yes, sir, it is.
- 22 MR. RYAN: Your Honor, I move to admit

- 1 Respondent's Exhibit 15.
- 2 JUDGE COUGHLIN: Any objection?
- 3 MS. JACKSON: I object, Your Honor.
- 4 Again, I don't know that we've established
- 5 exactly when this was -- this image is supposed
- 6 to reflect 2016? It's an entire year so I -- if
- 7 we're really looking at what's going on on the
- 8 property at the time, I don't feel like this is
- 9 an accurate reflection, and I object.
- 10 JUDGE COUGHLIN: Okay. I thought you
- 11 covered some timeframe in your questions. Do you
- 12 want to ask any -- do you want to tighten it up
- 13 at all to respond to this or I guess -- I think
- you testified that this is what it looked like in
- 15 2015 and 2016.
- 16 THE WITNESS: This is more of 2016
- 17 than the property was '15.
- 18 JUDGE COUGHLIN: Okay. All right.
- 19 Are you able to describe the differences between
- 20 2015 and 2016 based on your knowledge of the
- 21 property?
- 22 THE WITNESS: I couldn't know that

- 1 down to a date, no, ma'am.
- JUDGE COUGHLIN: Okay. All right.
- Well, I'm going to allow it to come in, but with
- that bit of additional explanation as to what
- year in which it represents.
- 6 MS. JACKSON: Thank you, Your Honor.
- 7 JUDGE COUGHLIN: Yes. So --
- 8 MR. RYAN: And for the record, Your
- Honor, this is not -- this particular exhibit is
- 10 not being offered to try and discern where the
- 11 truck was in relationship to fence or anything
- 12 like that. This is just simply to try and show
- 13 what the neighborhood looked like at the time.
- 14 JUDGE COUGHLIN: Okay.
- 15 MR. RYAN: That was -- that's the
- 16 purpose of this exhibit.
- 17 JUDGE COUGHLIN: All right. So REX 15
- 18 is admitted over objection.
- 19 (Whereupon, the above-referred to
- 20 document was received into evidence as
- 21 Respondent's Exhibit 15.)
- 22 MR. RYAN: Mr. Singleton, turning your

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- attention to the -- back to the trailer which is
   at issue in this case, can you tell us, you know,
   how that trailer ended up on your lot in Salt
- 4 Lake City?

THE WITNESS: Well, Lance Curtis is my
 shop manager. He was in charge of that or knew

- 7 that was coming. My knowledge of it is -- is
- 8 there was a fire in Idaho. Brett's Towing
- 9 (phonetic) brought it down to us and it was
- 10 immediately put on legal hold from Springfield.
- 11 BY MR. RYAN:
- 12 Q All right. And what do you mean by
- 13 legal hold?
- 14 A It means basically our in-house
- 15 counsel or adjusters will tell us, you know, this
- 16 is potential legal matter, which means we put it
- in a certain area. We don't touch it until
- 18 Springfield headquarters reaches back out and
- 19 tells us it's okay to put the truck back on the
- 20 road or the trailer, etcetera.
- 21 Q And when you say that we don't touch
- 22 it, what do you mean by that?

- 1 A Well, we put it in an area and we
- 2 literally don't touch it. It sits there.
- 3 Q And where did you put it when it
- 4 arrived?
- 5 A In that northeast corner just -- just
- 6 north of the current shop there.
- 7 Q Is that the area you marked on
- 8 Respondent's Exhibit --
- 9 A Yes, sir, it is?
- 10 Q -- 8:28:15. And Mr. Singleton, for
- 11 the record, we have a court reporter taking down
- 12 -
- 13 A Sure.
- 14 Q -- we talk -- we talk across each
- other, it gets a little tough for him so we can
- 16 just try and do that, that be great. The --
- 17 JUDGE COUGHLIN: And actually, that
- 18 was an important point, so I want to make sure --
- 19 Mr. Morris, did you get the prior question and
- answer fully on the record?
- 21 COURT REPORTER: It was maybe a little
- 22 bit of simultaneous speaking so maybe if he goes

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- 1 again --
- 2 JUDGE COUGHLIN: Yes. You might -- if
- 3 you would repeat that and you could repeat your
- 4 answer just so we know there's a clear
- 5 transcript?

- 6 MR. RYAN: Your Honor, now --
- 7 (Simultaneous speaking.)
  - JUDGE COUGHLIN: You were --
- 9 (Simultaneous speaking.)
- 10 JUDGE COUGHLIN: -- you were -- I
- 11 think you were asking about where the trailer was
- 12 located and whether the witness's prior marking
- 13 of the T reflected that location.
- MR. RYAN: So you testified earlier
- 15 that you made a small mark on the REX 14 and
- 16 marked it with a T. Is that where the trailer
- 17 was stored?
- 18 THE WITNESS: Yes, sir, it is.
- 19 BY MR. RYAN:
- Q And why was that location picked to
- 21 store it?
- A It -- it's just out of the way.

- 1 Q And what do you mean by out of the
  - 2 way? Just give us a -- some understanding what
  - 3 that means in the context of your operation
  - 4 there?
  - 5 A Well, it's in the northeast corner.
  - 6 There's no trucks that will drive by there.
  - 7 There's really no reason for anybody to be out
  - 8 there associate-wise or -- or driver-wise.
  - 9 Q And the -- where is the entrance to
  - 10 the facility; what side of the lot?
  - 11 A Well, you -- you access through the
  - 12 south side of the lot.
  - Q and when -- when the construction was
  - 14 going on in approximately the 2016 time period,
  - were there any trucks going back and forth
  - 16 between the construction site and the terminal?
  - 17 A No, not to my knowledge.
  - 18 Q And what -- Westinghouse at separated
  - 19 the construction site from your operating
  - 20 terminal?
  - 21 A Like I said before, they -- they built
  - 22 a -- a fence. They being the construction

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- company built a fence around the constructionsite itself.
- 3 Q So -- and that -- did that separate
- 4 the operating terminal from the construction
- 5 site?
- 6 A Yes, sir.
- 7 Q Now after the trailer arrived in
- 8 October -- I believe the date is October 1, 2016
- 9 -- what happened next?
- 10 A Well, the trailer -- to my knowledge,
- 11 the trailer was put there, like I said, from
- 12 Brett's Towing. And then it was put on legal
- 13 hold and after that, we didn't touch it.
- 14 Q Okay. And then -- but did your -- you
- 15 mentioned Mr. Curtis works for you?
- 16 A That is correct.
- 17 Q And did Mr. Curtis take any actions on
- 18 this?
- 19 A He did. He called an environmental --
- a local environmental company that come out and
- 21 disposed of the -- of the contents. He left them
- 22 a voicemail, and he -- and they never called

- 1 back, and he never followed up.
- 2 Q Was the legal hold ever lifted to your
- 3 knowledge?
- 4 A Not to my knowledge.
  - Q And would you have been able to
- 6 dispose of the trailer before the legal hold was
- 7 lifted?

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- 8 A Us personally, no. We wouldn't touch
- 9 it unless Springfield tells us to.
- 10 Q So Mr. Curtis called the environmental
- 11 company. Then what happened after that?
- 12 A Well, he never got a call back is my
- 13 understanding, and so -- and then he never
- 14 followed up with them after that.
- 15 Q And why didn't anyone follow-up on
- 16 this trailer sitting back in the corner?
- 17 A I have no idea. I can't answer that
- 18 question.
- 19 Q So from your perspective, what was --
- 20 what was that trailer doing back there.
- 21 A That trailer was just back there on
- legal hold with other things on legal hold.

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- 1 Q So what types of things go on legal
- 2 hold and are placed back in that area; what's it
- 3 -- what you guys call that area back there?
- 4 A At the time, it was called the
- 5 boneyard.
- 6 Q And why do you call it the boneyard?
- 7 A Just cause that's where things just go
- 8 to sit. They don't -- you know, we're not moving
- 9 in and out or anything like that, and it's out of
- 10 the way.
- 11 Q Did you -- was the trailer ever moved
- 12 during the time it sat there 2015-16?
- 13 A It was. It was moved once. Lance
- 14 Curtis and two other shop gentlemen moved that
- about probably 30 feet over from right to left in
- 16 the picture.
- 17 Q How did they move it?
- 18 A With forklifts.
- 19 Q So did they just pick it up and --
- 20 A That is correct.
- 21 Q -- drop and -- other than that, was it
- 22 ever --

- 1 A No. It was never touched other than
- 2 that.
- 3 Q And how long did that operation take?
- 4 A I'm not real sure. I wasn't there,
- 5 sorry.
- 6 Q Was it a multi-day operation?
- 7 A Oh, no -- no. I mean just a few
- 8 minutes is what it would take, yes.
- 9 JUDGE COUGHLIN: And do you know how
- 10 far it was moved.
- 11 THE WITNESS: It's approximately about
- 12 30 feet.

- 13 JUDGE COUGHLIN: Okay. Thank you.
  - MR. RYAN: And why was it moved?
- 15 THE WITNESS: For the construction.
- 16 Construction asked us to move it, I think, to
- 17 pour more concrete over by there so.
- MR. RYAN: Could you please pull up
- 19 Respondent's -- excuse me -- Complainant's
- 20 Exhibit 10 and page 5? So Mr. Singleton, while
- we're waiting for that to come up, let me ask you
- 22 other questions. Do you recall the EPA CID

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- 1 coming in to do an inspection of your site?
- 2 THE WITNESS: Yes.
- 3 BY MR. RYAN:
- 4 Q And do you recall how many times were
- 5 they there?
- 6 A I think they were there twice.
- 7 Q Do you recall the dates?
- 8 A I think it was August 2nd first time
- 9 and then August 24th the second time. That would
- 10 have been of 2016.
- 11 Q And when EPA CID showed up, what
- 12 happened; did you let them in?
- 13 A Oh, yes -- yes, sir.
- Q Did you -- were you -- did you
- 15 cooperate with EPA CID?
- 16 A Fully, yes, sir.
- Q Did you assist them in any way?
- 18 A Yes, sir.
- 19 Q How did you do that?
- 20 A I got a gentleman, an associate of
- 21 ours to go out and uncover the -- the trailer
- 22 with them, for them I guess.

- 1 Q And during the August 2nd visit by EPA
- 2 CID, did they take samples?
- 3 A I don't recall. I don't -- I don't
- 4 think so, no.
- 5 Q And -- but they came back, you said,
- 6 on the 24th?

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- 7 A That is correct.
  - Q And on the 24th, did they collect
- 9 samples then?
- 10 A Yes, sir.
- 11 Q And did you assist them on the 24th?
- 12 A Yes, sir.
- 13 Q Referring you to Complainant's Exhibit
- 14 10, page 5, which should be in front of you now,
- 15 do you recognize that photograph?
- 16 A I do, yes, sir.
- 17 Q And who are those gentlemen in the
- 18 photograph?
- 19 A On the left in the blue shirt, that
- 20 would be me. The gentleman on the top of the
- 21 trailer moving the tarps, that would be
- 22 Christopher Scoggins (phonetic), an associate of

- 1 ours, and then on the right, I think that is
- 2 Peter Christensen, our counsel at the time.
- a constant of the constant of
- Q Okay. And is this a fair and accurate representation of what the storage site looked
- 5 like at the time, August 24, 2016?
- 6 A Yes, sir.
- 7 Q Is -- and that -- you see -- what is
- 8 that piece of machinery we see on the right?
- 9 A That's a forklift.
- 10 Q And who does that belong to?
- 11 A Prime.
- 12 Q And did you use that forklift to
- 13 assist in the inspection on the 24th?
- 14 A I'm not sure when we -- what forklift
- 15 we used, but I would assume that that's the
- 16 forklift we used.
- Q And -- but you used a forklift?
- 18 A Yes, sir.
- 19 Q And what did you use the forklift for
- 20 on the 24th?
- 21 A They removed barrels, took the barrels
- 22 off the trailer.

- 1 Q And that was at the request of EPA?
- 2 A Yes, sir.
- 3 Q And prior to this August 24, 2016
- 4 date, had you ever removed any of the barrels
- 5 from the trailer?
- 6 A Not to my -- I did not, no.
- 7 Q Or any of your staff?
- 8 A Not to my knowledge at all.
- 9 Q Now were -- you said you were in this
- 10 photograph. Were you or any of your employees
- 11 involved on this day, on the 24th, wearing
- 12 personal protective equipment?
- 13 A We were not, no.
- Q Did EPA recommend to you that you wear
- 15 --
- 16 A They did not recommend it.
- Q Could you pull up the next page of
- 18 this Exhibit, CEX10 at page 6? Do you see this
- 19 photograph in front of you now, Mr. Singleton?
- 20 A Yes. sir.
- 21 Q And is that a Prime employee we see
- 22 there in the upper left-hand corner of this

44 45 1 photograph? 1 Q -- or what's depicted in this 2 A It is, yes, sir. 2 photograph? 3 3 Q And is -- again, is he assisting EPA A It's the same trailer. 4 4 here with removing the tarps? Q It looks like it's taken from a 5 A That is correct. different angle as the prior one? б 6 Q And I think we'll move on to CEX10 at A Yes, sir. 7 7 page 29. So this is a -- can you tell me what Q Do you see a fence in the background? 8 you see in this photograph, Mr. Singleton? 9 9 A This is the trailer in question today, Q Is that the fence you referred to 10 10 earlier? ves. 11 11 A Yes. That would be the construction Q It was -- were the tarps all removed 12 12 at this point? fence, yes, sir. 13 13 Q And did that construction fence extend A Yes, sir. 14 14 from the front to the back of the lot? Q Is that a fair and accurate 15 A It did, yes, sir. 15 representation of the -- what the trailer looked 16 like when it was stored on the site in 2015 to 16 Q Could you please go to Complainant's 17 2016? 17 Exhibit 10 at page 47? Do you see Exhibit 10 at 18 page 47 in front of you, Mr. Singleton? 18 Yes, sir. 19 19 Q Go to Respondent's -- excuse me --A Yes, sir. 20 Q And you recognize what's in that Complainant's Exhibit CEX10 at 31. You recognize 21 21 photograph? this photograph, Mr. Singleton --22 22 A Yes. It was the paint barrels after A Yes, sir. 47 46 1 1 they were removed. JUDGE COUGHLIN: Okay. All right. 2 Q And these are the ones I believe you Thank you. 3 testified that Prime removed at EPA's request? 3 MR. RYAN: And what was the surface 4 A That is correct. that the -- was underneath the trailer at the 5 Q And so where those barrels are sitting time it was stored? 6 6 now, that's not where the trailer was, is it? THE WITNESS: It was concrete. 7 7 A Yes. I mean that's -- it's just in BY MR. RYAN: 8 front of where the trailer was at. 8 Q And there was a fence behind the 9 Q Okay. That's my point. It's not the trailer -- in looking in this photograph, on the 10 trailer was elsewhere and then they moved them in far side of the photograph, we see some blue 11 front of -boxes that say APL on them; what is that we're 11 12 A Correct. 12 seeing up there? 13 13 (Simultaneous speaking.) A That's the railroad behind -- behind 14 Q And is this where EPA collected the 14 our property. 15 15 samples? Q Is that a train passing? It's not --16 A That is correct. 16 A Yes. I mean depicts, yes -- yes. 17 JUDGE COUGHLIN: So is the trailer 17 Q So between the -- between where the 18 what you can kind of see behind there --18 trailer was stored and the train, was there a 19 THE WITNESS: Yes. 19 fence? 20 JUDGE COUGHLIN: -- behind the 20 A Yes. sir. 21 barrels? 21 Q And then on the other side of the 22 22 fence was the railroad tracks THE WITNESS: Yes, ma'am.

48 49 1 1 Prime saying don't touch the trailer; do you That is correct. 2 Q And then on the other side of the recall that? 3 3 railroad tracks was? A I do, yes. 4 4 A I'm not sure. Q And did you comply with that? 5 5 Q Now when EPA was visiting your site Yes, sir. 6 and taking these samples, did they ever tell you 6 Q And then at some point, they said that 7 these drums were dangerous? 7 it's okay now to dispose of it, and what happened 8 8 A No, sir. next? 9 9 Q No. Did they ever warn you to stay I wasn't involved in that process at Α 10 away from them? 10 all. 11 11 A No, sir. Q Was it --12 Q Did they ever ask you to -- after they 12 A It was disposed -- to -- it was 13 left, did they ever ask you to plate -- either on 13 disposed of, yes, sir. August or on August 24th, did they ask you to 14 Q And that was handled by Springfield? 15 cordon off the area in any way? 15 A Yes, sir. 16 A No, sir. 16 Q Were you ever told by Prime to hide 17 Q Did they ask you to alert local 17 this in any way? 18 authorities to the possibility of a dangerous 18 No, sir. 19 situation? 19 Q Were you ever told by Springfield that 20 A No, sir. we're going to save some money by not storing, 21 Q So after August -- the first visit in 21 getting rid of this right away? 22 early August by CID, the EPA issued a letter to 22 A No, sir. 50 51 1 Q Did anyone ever tell you to hide its 1 and we just didn't. And today, you know, those 2 silos are not there. existence from anyone? 3 A No, sir. Q So would you describe communication 4 4 today as better than in -- within the company, Q How would you describe how this thing 5 came to be sitting there for so long? better than in 2015? 6 A Well, I mean looking back, we made a 6 A Yes, it's better. We're far from 7 mistake. perfect still but it is definitely better. 8 8 Q And if you -- if this thing -- if Q And you mentioned doing the right today a truck like -- a trailer like this showed 9 thing. Is that part of the company motto? 10 A Yes, sir. Do your best, do what's 10 up with hazardous waste or materials on it, how 11 would you handle it? 11 right. Treat others the way you want to be 12 12 treated. A Well, would be more people involved.

13 13 You know -- you know, we really -- this isn't -we made a mistake, you know, and today, you know, 15 like Mr. Field's testimony, you know, we were 16 very siloed back then I feel. And I mean -- by 17 that I mean that we -- you know, we had a road 18 assist department doing one thing and our safety 19 department doing another, and Lance Curtis, my 20 shop manager doing something else and, you know,

21 we all thought we were doing the right thing in

22 theory, but we should have been communicating,

14 believe? 15 It's how I raise my family, sir. 16 MR. RYAN: May I have just a moment, 17 Your Honor? 18 JUDGE COUGHLIN: Sure. 19 MR. RYAN: Your Honor, we have no 20 markings for Exhibit 14. 21 JUDGE COUGHLIN: Okay. 22 MR. RYAN: So consistent with my

Q Is that something you actually

52 53 1 earlier discussion, I'd like to have the witness for identification and received into evidence.) 2 maybe write 14A in the bottom right-hand corner -2 MEMBER LEWIS: Good morning, Mr. 3 3 Singleton. 4 4 JUDGE COUGHLIN: Okay. THE WITNESS: Good morning. 5 5 JUDGE COUGHLIN: (Audio interference) MR. RYAN: -- or REX14A. In the bottom right-hand, just write REX14A, and that picture. Thanks. 7 7 will become that unique exhibit. And then MS. JACKSON: I actually --8 perhaps after cross-examination is done -- and (Simultaneous speaking.) 9 I'd be happy to provide that copy to opposing 9 JUDGE COUGHLIN: Ms. Jackson, would 10 counsel to use during cross, and then we can take 10 you like 14A in front of you as you question? 11 11 our pictures and then provide to the Court. Does MS. JACKSON: Yes. 12 12 that work for you? JUDGE COUGHLIN: Okay. 13 13 JUDGE COUGHLIN: Sure. That's fine. MS. JACKSON: I need this. Well, no, 14 14 MR. RYAN: Thank you very much. I actually, I'm sorry. Mr. Singleton, you can 15 15 keep. have no further questions. 16 JUDGE COUGHLIN: So you wanted to move 16 THE WITNESS: I will be referring to 17 that in. Was there any objection to it? it but I've got my copy. Okay. Before we get to 18 18 MS. JACKSON: No objection. that particular image, though, you heard 19 19 JUDGE COUGHLIN: Okay. REX14A will be testimony about roadside assist for Prime, and 20 20 would you agree that roadside assist arranged -admitted into evidence. 21 and I believe you testified again this morning (Whereupon, the above-referred to 22 document was marked as Respondent's Exhibit 14A that roadside assist arranged for the transport 55 54 1 1 of the drums and the trailer from Idaho to Salt Q And Prime is a national freight 2 2 Lake City; is that correct? trucking company? 3 THE WITNESS: I don't know who called 3 A Yes, ma'am. 4 the towing company. Is that -- is that the 4 Q And they're a logistics business 5 5 question? moving freight? 6 6 **CROSS-EXAMINATION** A Absolutely. 7 7 Q So Prime -- and I think you talked BY MS. JACKSON: 8 about kind of tracking and managing -- Prime Q Oh, okay -- okay. Were you here 9 yesterday for the testimony? tracks and manages its fleet through an 10 10 electronics system? A I was. 11 11 A Yes. Q Would you agree that roadside assist 12 called the transport --12 Okay. And part of fleet management is 13 13 A To my -- to my knowledge, yes. knowing where your materials are, your freight is 14 14 at any given time? Q And roadside assist is located in 15 15 Springfield; is that correct? A That is correct. 16 16 A At the -- I have people on site as Q Okay. And then another general well now but at the time, it was all in 17 question. Back to your -- well, we're going to 18 Springfield, yes. turn directly to Salt Lake City now. You're 19 Q Thank you. And you testified that you 19 familiar with all aspects of the Salt Lake City 20 were a facility manager at Prime, right, before 20 facility? 21 21 this -- your current role? A Yes.

22

A Yes, ma'am.

22

Okay. And Prime's website for the

56 57 1 Salt Lake City facility says that over 500 1 says don't touch until Springfield says so; is 2 drivers visit Prime's Salt Lake City facility that correct? 3 every week; is that -- does that sound right? 3 A That is correct. 4 A That's correct. Q But Mr. Curtis moved the trailer at 5 Q And about how many drivers would you one point, correct? say visited Salt Lake City's facility in the A That's correct. 7 7 2015-2016 timeframe on a weekly basis? Q And then back to the legal hold. Are 8 A I mean it'd be -- it'd be a guess. Is you aware of any emails by prime personnel 9 9 that what you prefer me to do? requesting permission to dispose? 10 10 Q Well, I mean you are the facility A I'm not aware of any emails. 11 11 Q Okay. Then Prime has provided no manager, right? 12 12 A Right. But I can't go back seven documentation of a legal hold so was it 13 years and tell you how many trucks passed through 13 documented anywhere? 14 14 A Not to my knowledge, no, ma'am. 15 15 Q Okay. How about five years ago? Q Okay. And who issued that legal hold? 16 16 A I don't know an individual person. I A I have no idea. 17 17 just know that it came from Springfield. Q Okay. Apologies. And you testified 18 18 that the trailer of drums were at the facility Q And how did you receive the 19 because they were placed on legal hold; is that information? 20 20 correct? A I never received the information 21 21 personally. A Yes, ma'am. 22 22 Q But you operate the facility that the Q And I believe you said Springfield

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1 -- where the drums were that were under legal 2 hold? 3 A Yes, ma'am. 4 Q Okay. Let's move to REX -- what's

5 been marked now as REX14A. You were referencing

6 that before. At the time of the EPA criminal

7 inspection, you knew -- you were aware that there

were 32 drums on the trailer, is that right?

9 A I didn't know how many drums but, yes,

10 knew there was drums on the trailer.

11 Q Okay. If you could pull up CX10 at

12 page 2? Go to the narrative, please? Just to

13 help orient you, this is a investigative activity

14 report written by Darren Levelston (phonetic) on

15 behalf of EPA on the day of the CID inspection on

16 August -- if you could go all the way to the top,

17 please -- sorry -- on August 2nd. If you could

18 back down to page two. I apologize.

19 A Sorry, I don't have anything on my

20 screen.

2.1 Q Oh. Four days in and we're still

22 making the same mistakes, apologies.

1 JUDGE COUGHLIN: There seems to be a delay in times.

3 THE WITNESS: Yes. I was waiting and

it never came so. Okay. We're good.

MS. JACKSON: And you were present at

6 this inspection; is that correct?

7 THE WITNESS: Yes, ma'am.

8 BY MS. JACKSON:

9 Q And if you could read that seventh

10 line on the -- they're kind of like paragraphs

11 but also just seventh sentence --

12 Where it starts with Singleton?

13

14 A Singleton said there were 32 drums on

the trailer. Singleton didn't know if the drums

16 contained any material.

17 Q Okay. Were you aware of 32 drums on

18 the trailer?

19 A I guess I was aware of 32 drums on the

20 trailer.

21 Q Okay. But you didn't know what was in

22 the drums?

60 61 1 That's correct. Q And I'm sorry. I had a little bit of 2 Q Or whether they had any material? a hard time keeping track. Is this you think 3 Yes, ma'am. representative of both 2015 and 2016? 4 4 Q Okay. A I think this is 2016. 5 5 That's correct. 2016, okay. Do you know if this in 6 Q Thank you. Let's turn to -- now let's August 2016? 7 7 turn to REX14A, please? Oh, I'm so sorry. A I'm so sorry, I can't tell you. 8 8 You're right. If you could pull up 14 on the Q How about July 2016? 9 9 screen and then I think -- I have this copy and A I can't tell you, I'm sorry. 10 please remind me, Your Honor, if I forget to have 10 Q Okay. The drums aren't shown in this 11 11 him show you after I have him mark things. image, are they? 12 JUDGE COUGHLIN: So we're on REX14A? 12 A I do not see them, no. 13 13 MS. JACKSON: A, yes. Q Okay. And for purposes of this case, 14 JUDGE COUGHLIN: Okay. You testified 14 the drums were stored in Salt Lake City between 15 15 about the Prime Salt Lake City facility using October 2015 and August 2016; is that correct? this exhibit, correct? 16 A That's correct. 17 A Yes, ma'am. 17 Q And there was construction going on 18 18 Q And this is a Google image of the during this time; is that right? 19 19 Prime facility; is that right? A Yes, ma'am. 20 2.0 A Yes -- yes, ma'am. Before I have you mark this, I'm going 21 Q Okay. And this image is undated? 21 to flip back to CX10 at page 17. Again, just to 22 Yes. I don't see a date. orient you, this is from the inspection of the 62 63 1 1 facility. You see the construction activity over JUDGE COUGHLIN: Okay. 2 in what would be consider the left top right 2 MR. RYAN: I was going to say, Your 3 corner over there? Honor, if I may, maybe we can have a 14B, and 14B 4 A That's correct. would be your markings? 5 5 MS. JACKSON: Sure. Q And is this the portion of the lot 6 where -- the northeast portion of the lot where 6 JUDGE COUGHLIN: That's another way to 7 7 the drums were stored? do it. Just to --8 8 A And you said the construction company MR. RYAN: That way we --9 9 put up a fence; is that correct? JUDGE COUGHLIN: -- otherwise, I'd 10 Q They did. 10 shoot a color shot so I can keep track of --11 11 A Do you see a fence in this picture? MR. RYAN: Counsel, I gave you my 12 12 Q I do not. second copy if you -- it's identical if you want 13 MS. JACKSON: Let's look at -- before 13 to use that to hand to him. you leave, one minute -- okay, let's go back to 14 MS. JACKSON: I wrote on it. 15 REX14A. And, Ms. Tribbett, if you could display 15 MR. RYAN: Oh, I'm sorry -- I'm sorry. 16 REX14 just so I have it in front of me? Thank 16 MS. JACKSON: No. 1 apologize. I 17 you. Can you mark on here where the construction 17 didn't think that through. 18 18 fence is? JUDGE COUGHLIN: Oh, no -- no -- no. 19 19 JUDGE COUGHLIN: One -- just one MR. RYAN: Here we go. And his 20 second, quickly. It's probably too Type A but is 20 Sharpie is up there. 21 21 there a different color Sharpie that anybody has? MS. JACKSON: Oh.

22

MS. JACKSON: I do.

22

JUDGE COUGHLIN: So we're going to --

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okay, just -- so let me make this clear for the record. So we're not going to have two different colors on one exhibit. We're going to have a separate 14B that's the subject of cross that the

5 witness will mark --6 MR. RYAN: Okay.

7 JUDGE COUGHLIN: -- right? Is this

8 what we're doing?

9 MS. JACKSON: Potentially -10 MR. RYAN: It works --

MR. RYAN: It works --MS. JACKSON: -- yes, Your Honor.

MR. RYAN: -- it works for me, Your

13 Honor, if it's --

14 MS. JACKSON: Okay.

MR. RYAN: -- okay with counsel.

16 JUDGE COUGHLIN: Okay. All right,

17 great.

18 MS. JACKSON: Okay.

19 THE WITNESS: Do you want me to write

20 REX14B in the corner?

21 MS. JACKSON: Yes, please. Okay, yes.

22 So we just looked at CEX10, and you saw that

1 picture where there was no fence there. Is it

2 your contention that in this picture, there's a

3 fence completely blocking the construction

4 activity?

7

5 THE WITNESS: I can't see a picture --

6 I can't see a fence on this picture

MS. JACKSON: Okay.

8 JUDGE COUGHLIN: I think you left off

9 with -- and I'm sorry if that derails the other

10 color Sharpie - I think you were asking him a

11 question about marking something to do with

12 construction.

MS. JACKSON: It was. It was about

14 the fence but then he just answered it and said

15 he can't see it so.

16 JUDGE COUGHLIN: Okay.

MS. JACKSON: I think we're okay.

18 JUDGE COUGHLIN: Okay.

MS. JACKSON: And you -- oh, but I

20 would like you, while we're on this exhibit --

21 you know, you described a fence with barbed wire

22 kind of protecting. Can you show us where that

66

1 is between the -- you know, with regards to the

2 REX14?

3 THE WITNESS: Do you want me to mark

4 it?

5 MS. JACKSON: Yes.

6 THE WITNESS: Well, the fence runs all

7 along the north side of the property.

8 BY MS. JACKSON:

9 Q Okay. But is there fencing along

10 either side of the property?

A On the east and west side?

12 Q Yes.

13 A There is, yes.

14 Q Okay. And does it go -- I guess -- I

15 guess my question is, is that fencing all the way

16 across where the ongoing construction was, too?

17 A Correct.

18 Q So this entire --

19 A This entire length.

20 Q -- trapezoidal shape, both lots --

21 A Yes, ma'am.

22 Q -- has a fence with barbed wire all

1 the way around it?

2 A All along the north side it does and

3 the west side, the south side up until the gate.

4 Q Okay. Where is -- can you mark the

5 gate for me?

6 A On -- yes.

7 Q On 14, what will be 14B.

A I'll draw a circle around. There's

9 two gates. There's one for the drivers and then

10 there's one for in-house associates.

11 Q Okay.

8

A Do you want me to do both?

13 Q Yes, please.

14 A Okay.

15 JUDGE COUGHLIN: And how do you want

16 him to mark it, like G1 --

17 MS. JACKSON: I thought --

JUDGE COUGHLIN: -- and G2 or?

MS. JACKSON: Yes. That would be

great. Thank you. And if it's okay, I'm going

21 to approach the witness. I actually don't know

22 what he's marking, so I'm going to go take a look

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- $1 \hspace{0.1in}$  and then I'll try to describe it for the record.
- 2 Okay.
- 3 JUDGE COUGHLIN: Okay. Trying to
- 4 describe that for the record. I mean the, you
- 5 know, that can come in but it's just for the
- 6 transcript and to sort of orient whoever's
- 7 reading the transcript, it might help if you can
- 8 describe that a little bit.
- 9 BY MS. JACKSON:
- 10 Q And, Mr. Singleton, I'm going to try
- 11 to describe it for the record. If I'm getting
- 12 anything wrong, please correct me.
- 13 A Yes, ma'am.
- 14 Q It looks like on here you're marked
- 15 kind of -- it's in the bottom third of the
- 16 photograph, moving up kind of towards the parking
- 17 lot. You would enter in at the cul-de-sac. And
- 18 then there's a driveway there where you'd enter
- 19 into what -- where we can see where cars are
- 20 parked. That's a parking lot.
- 21 And then if you were to travel up to
- 22 the center from the cul-de-sac, there is another

- 1 building almost directly center of the page, the
- 2 left of the Pedigree truck and trailer sales
- 3 building.
- 4 Is that accurate?
  - A Yes, ma'am.
  - Q Okay. I'm going to hand this back to
- 7 you. I'm still confused.
- 8 I would like you to mark exactly where
- 9 the barbed wire fence fencing is around the
- 10 property.
- 11 A So, you want me to draw a circle
- 12 around?
- 13 Q Just lines that would reflect the
- 14 fence.
- A So, there's fence with barbed wire,
- 16 and then there's not, there's fence without
- 17 barbed wire. I don't -- that's why I just want
- 18 to make sure we're on the same page.
- 19 Q Okay. Thank you for the
- 20 clarification.
- Just mark the fencing that's
- 22 surrounding the property.

- 1 A Yes, ma'am.
- 2 JUDGE COUGHLIN: Is the barbed wire
- 3 going to be of any significance that it should be
- 4 denoted? No?
- 5 MS. JACKSON: Yes. Yes, that's true.
- 6 You might as well mark where that is.
- 7 JUDGE COUGHLIN: And, I mean, just for
- 8 the sake of the witness, would some slashes over
- 9 the top be good to identify the barbed nature of
- 10 it as opposed to the unbarbed nature of it?
- 11 MS. JACKSON: Yes, Your Honor. Thank 12 you again.
- JUDGE COUGHLIN: Is that clear, Mr.
- 14 Singleton?
- 15 THE WITNESS: I think so.
- 16 JUDGE COUGHLIN: Okay.
- 17 THE WITNESS: I guess there's some
- 18 parts in here, though, that I'm not real sure if
- 19 were barbed or not barbed.
- 20 BY MS. JACKSON:
- 21 Q You can err on the side of barbed if
- 22 you want. I, you know --

- A Okay. I just didn't know the significance of what you wanted.
- 3 Q The importance here is we are trying
- 4 to get at the security of the facility, and
- 5 trying to understand just the overall context.
- 6 So, there's -- this is a little more information
- 7 gathering for -- on our part.
- 8 A Okay. So, I've done that. I don't
- 9 recall the date of this picture so, therefore,
- 10 I'm not real sure in front of the construction
- 11 site exactly what they had out there.
- 12 Q Okay.
- 13 A If that makes sense.
- MR. RYAN: Excuse me. May I see real
- 15 quick?
- MS. JACKSON: Oh, absolutely.
- 17 BY MS. JACKSON:
- 18 Q Thank you, Mr. Singleton.
- Okay, just to reflect for the record,
- 20 it looks like you've drawn pretty much some
- fencing around the exterior, with the exception
- of where the gate would be, you know, to access

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- $1 \hspace{0.1in}$  that middle. It sounds like that's a security
- 2 building?
- 3 What is that in the middle of the
- $4 \hspace{0.1in}$  drive from the cul-de-sac, squarely in the middle
- 5 of the picture?
- 6 A That is where the trucks -- it's
- 7 inbound/outbound for the tractors and trailers.
- 8 Q Okay. And then there is fencing, it
- 9 looks like very clear fencing on the far north
- 10 side. There's fencing. That looks barbed where
- 11 the railroad tracks are?
- 12 A Yes, ma'am.
- Q And then there is unbarbed fencing on
- 14 the far west side, here?
- 15 A I'm sorry. That, that is barbed as
- 16 well. I'm sorry.
- 17 Q Okay. That's okay.
- A And I'm not sure about the, the south
- 19 side, if it's barbed or not.
- Q But there's, so there's, and then
- 21 there's fencing on the south side up to the cul-
- de-sac, after the cul-de-sac. And on the other

- 1 side of the cul-de-sac is, there is fencing. And
- 2 then it looks like potentially, based on your
- 3 recollection it stopped at the construction area?
- 4 A Yes. Because I can't -- I know what's
- 5 there today but I can't tell you 6 years ago.
- б I'm sorry.

7

- Q Okay.
- 8 JUDGE COUGHLIN: And I'm sorry to
- 9 interject, but while we're on this topic, was
- there a separate entrance for the construction
- 11 site and the construction work, or did they go
- 12 through the main entrance of the property and?
- 13 THE WITNESS: There was, there was a
- 14 separate entrance for them.
- 15 JUDGE COUGHLIN: Okay.
- 16 THE WITNESS: Yes, ma'am. On the
- 17 right side, on the south side of the road, on 800
- 18 South going in.
- 19 JUDGE COUGHLIN: Okay.
- THE WITNESS: You can see the vehicles
- 21 parked there, the construction vehicles.
- JUDGE COUGHLIN: Okay.

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- 1 THE WITNESS: That's construction
- 2 workers. And they accessed it through that side.

THE WITNESS: Where you see the Salt

- 3 JUDGE COUGHLIN: Okay. And so, the
- 4 entry there is, it's somewhere near where that
- 5 parking area is then for the construction area?
- 7 Lake City inbound.
- 8 JUDGE COUGHLIN: Yes.
- 9 THE WITNESS: That, that is the area
- 10 that they, they would normally access from, the
- 11 construction folks would normally access the
- 12 property.
- 13 JUDGE COUGHLIN: Okay, great. Thank
- 14 you.

6

- 15 BY MS. JACKSON:
- 16 Q Okay. And earlier you testified that
- 17 the construction activity -- All right, let me
- 18 check my notes so that I get this right.
- Where you were asked about whether or
- 20 not the construction, there was access between
- 21 the construction property and the paved part of
- 22 the facility. And I believe your response was

- 1 not to my knowledge, no.
- 2 Is that right? Was there ever any
- 3 traffic from the construction side through the
- 4 Prime facility?

5

- A Not to my knowledge. I don't know.
- 6 Well, I mean, I have no -- I couldn't tell you if
- 7 they accessed it or not.
  - Q Okay. I want to show you a Google
- 9 image, so via Google. It's not admitting this
- 10 into evidence. It's CX-74 at page 13.
- MR. RYAN: Objection, Your Honor.
- 12 We've already gone over these exhibits. They're
- 13 not -- they were -- Your Honor already ruled that
- 14 they do not come in.
- MS. JACKSON: Can I respond?
- 16 JUDGE COUGHLIN: Yes.
- MS. JACKSON: I'm not admitting them
- 18 into evidence. We are not trying to bring them
- 19 in through this witness. This speaks to the
- 20 credibility of the witness.
- You know, he's testified that there,
- 22 there was a fence, there was no construction

76 77 1 Okay. Okay, I, because I was looking 1 activity. And I'm just trying -- this image is 2 dated for the time of the storage impact. So, 2 at a 2015 date, and I was concerned that we were 3 comparing something from 2015 to 2016. But page more reliable than an open time frame. 4 And I just wanted to ask this witness 13 appears to be the image is dated July 8th, 5 about this reflection. 2016? 6 6 MS. JACKSON: Uh-huh. Yes, Your JUDGE COUGHLIN: Okay. But I guess, 7 7 Honor. I mean, I'll allow questioning for credibility 8 8 JUDGE COUGHLIN: And that's what issues. 9 9 MS. JACKSON: Yes. you're comparing to RX-14? 10 10 JUDGE COUGHLIN: But I just want to be MS. JACKSON: Yes, Your Honor. 11 11 very clear about the date the images reflect. JUDGE COUGHLIN: Which, Mr. Singleton, 12 MS. JACKSON: Yes. 12 I believe you said is representative of sometime 13 JUDGE COUGHLIN: Because I think we 13 in 2016? 14 14 were --THE WITNESS: I would think, yes. 15 MS. JACKSON: I will --15 JUDGE COUGHLIN: Okay. All right. 16 JUDGE COUGHLIN: -- I think we were 16 Mr. Ryan, do you wish to be heard? 17 17 looking at, so if you're comparing the CX-74 at, MR. RYAN: I think we need to lay a 18 you're at page 2 or? 18 foundation here that this witness is competent to 19 MS. JACKSON: Yes. Right. 19 talk about what counsel has represented to him as 20 JUDGE COUGHLIN: Okay. 20 a particular date. 21 21 MS. JACKSON: Oh, sorry. Thirteen. If he, if he knows this is from that 22 JUDGE COUGHLIN: Oh, okay. 22 date, he can, he can talk about it. But if he 79 78 1 doesn't, I would suggest that it suffers from the 1 MS. JACKSON: Oh, I'm sorry. 2 2 same problems that Your Honor has already ruled Can you scroll up? I'm having a hard 3 3 time. 4 4 JUDGE COUGHLIN: Yes, I agree. JUDGE COUGHLIN: I just, you know, 5 5 Go ahead. because we --6 6 MS. JACKSON: Okay. MS. JACKSON: Yes. 7 7 JUDGE COUGHLIN: You can ask some JUDGE COUGHLIN: -- we've got two 8 different pictures. I want to make sure. Okay. questions to lay a foundation. 8 9 9 BY MS. JACKSON: MR. RYAN: And so we're clear, are we 10 Q Well, the other picture we kind of 10 saying any date for 2016? 11 11 talked about the general time frame; correct? MS. JACKSON: Yes. 12 The RX-14? 12 THE WITNESS: I, I don't know what 13 13 A Yes. I would say it's 2016 or so. date. This is our facility, yes. 14 Q Okay. And you're the facility 14 BY MS. JACKSON: 15 15 manager; is that correct? Q Okay. 16 16 A Yes, ma'am. A I can't give you a date. I can't give 17 Q And you're familiar with all the 17 you a date on any picture you show me. 18 18 aspects of the facility. My question to you Q Okay. But do you see a fence there? 19 19 regarding this picture, is this a fair and MR. RYAN: Your Honor, I believe --20 accurate representation of your facility in 2016? 20 THE WITNESS: By there do you mean --21 JUDGE COUGHLIN: And we're looking at 21 MR. RYAN: -- the witness has just 22 CX-74 page? 22 testified --

80 81 1 BY MS. JACKSON: 1 that the image on our Google Earth image is 2 Q In the picture. actually reflected at the bottom of the page. 3 3 MR. RYAN: -- that he cannot establish JUDGE COUGHLIN: Yeah, the image date 4 when this picture was taken. If the offer of I see as that. But I think what Mr. Ryan is 5 proof -saying is with regard to the witness' 6 MS. JACKSON: In 2016. recollection of it. 7 7 MR. RYAN: May I, please? It's being So, I'm going to allow you to ask the 8 8 offered to show a temporal time significant, for question. 9 9 a time significant reason, he's testified he But, Mr. Singleton, I want you to feel 10 doesn't know. He can't testify based on what he 10 free, while cross is typically limited to yes or 11 sees when it was taken. no, I want you to feel free to fully explain your 12 12 MS. JACKSON: Okay. answer and provide context for it. And if you 13 MR. RYAN: Therefore, I would object 13 don't know, just say you don't know. 14 14 to any further questioning on this exhibit. THE WITNESS: Yes, ma'am. 15 15 JUDGE COUGHLIN: Okay. JUDGE COUGHLIN: Go ahead. 16 MS. JACKSON: Oh. And, sorry, Your 16 MS. JACKSON: Thank you, Your Honor. 17 17 BY MS. JACKSON: Honor, --18 18 JUDGE COUGHLIN: Hold on just a sec. Q Do you see the drum in the trailer in 19 19 I'm thinking. I need to rule. this photo? 20 20 But did you need to say something A Yes. 21 else? 2.1 Q And is it covered by a tarp? 22 22 MS. JACKSON: I just wanted to reflect A I can't tell. It doesn't look like it 82 83 1 to me in this. 1 points, is there? 2 2 Q Okay. And do you see it looks like A There looks like there's two access 3 there's a sort of barrier there in the middle of points. I, I don't know if that's a fence that 4 4 the picture, but it's, it's open and there's, you runs. 5 5 know, there's access between the construction Q Okay, thank you. 6 side and the paved facility side. 6 MS. JACKSON: Just a couple of quick 7 7 JUDGE COUGHLIN: Mr. Ryan? questions, then I think we're finished. If you 8 8 MR. RYAN: I believe -- I withdraw the could just give me one sec to look at my notes. 9 9 guestion. Never mind. I'll withdraw. (Pause.) 10 10 BY MS. JACKSON: MS. JACKSON: One moment, Your Honor. 11 11 Q Do you see those access points between JUDGE COUGHLIN: Okay. 12 12 the construction and the facility? MS. JACKSON: No further questions. 13 13 A Yes. Yes, ma'am. JUDGE COUGHLIN: All right, thank you. 14 Q Okay. And you'd agreed those -- Okay. 14 MS. JACKSON: Thank you, Mr. 15 15 Nope, withdrawn. Singleton. 16 16 And can you see the dirt that's kind THE WITNESS: Thank you, ma'am. 17 of around? You said that you see the drum's 17 MS. JACKSON: Oh. Actually, I 18 there, do you see the dirt around the drum in the 18 apologize. I should give you that exhibit. 19 19 photo? MR. RYAN: The witness I think, the 20 A Yes, ma'am. 20 witness should have it. 21 THE WITNESS: I just have 14A. You Q Thank you. So, in fact, there's no 22 fence blocking access between the two, those two 22 took 14B, I think.

85 84 1 1 MR. RYAN: Okay. May I approach, Your A It's temporary. 2 2 Honor? And was it put up -- why was it put up 3 3 there? JUDGE COUGHLIN: Yes. 4 4 MR. RYAN: Now, on the fencing, can A You know, construction companies put 5 you pull up the Complainant's Exhibit 10 at 48? them up, you know, whenever they do construction 6 REDIRECT EXAMINATION a lot of times, is my --7 7 Q And when EPA -- did that fence remain BY MR. RYAN: 8 Q Mr. Singleton, we looked at this there during the course of the construction? 9 9 picture earlier. Do you recall this? A I don't know if they took it up and 10 10 A I don't have anything just yet. down, changed it, moved it back and forth. I 11 don't know exactly. Best of my knowledge there Q Oh, I'm sorry. Let me get a copy of 12 it. 12 was a fence there. 13 13 Q And did it, did it go from the front Do you see anything yet, Mr. 14 Singleton? 14 to the back of the construction site?

15

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15 A I do. Yes, sir. Got it. Sorry.

16 Q Now, we're looking at Complainant's

17 Exhibit 10 at page 48. And we talked about that

fence we see in the back. Is that what was known 18

19 as a construction fence?

20 A Yes, sir.

21 Q Is that a permanent fence or a

22 temporary fence?

86 87

you see some fencing on the ground?

Q Can we turn to Complainant's Exhibit

And you see in the bottom left-hand

corner of Complainant's Exhibit 10 at page 14, do

Q Is that the construction fencing we

1 were looking at in the prior photo?

2 A That's what it would be, yes.

3 Q Okay. And these photos, again, were

4 taken by EPA during their August 24th inspection.

5 Is it, is it safe to say that that fencing was

6 taken down to assist EPA?

7 A I can't say that, sir. I'm sorry.

Q The temporary construction fencing

like this can be broken down fairly quickly,

can't it?

8

11 A It can, yes.

12 Q And be put back up?

13

14 Now, on the -- there was testimony on

15 cross-examination regarding the number of drivers

16

17 On your website which you use, I

18 believe there's currently 500 drivers per week.

19 How many of those drivers at the time, in the

20 2015-16 time frame went back to what you called

21 the boneyard?

22 A I wouldn't know a number. I would say 1 that it could be zero.

Yes.

10 at page 14, please?

A Oh, yes, sir.

Q Is there any reason, would there be

any reason for a driver to go back to the

boneyard?

5 A That's just it, there would be no rea

-- I mean, there's no reason for a driver to go

7 back there.

8 Q I'm sorry, could we go back to CX-10

at 48, please.

10 Again this is a photograph from the,

11 CX-10 at 48 is a photograph from the August 24th

12 EPA inspection. There's a person in the upper

right-hand corner of the photograph. Do you know 13

14 who that is?

15 A I do not.

Q Is he an EPA person or is he a, a 16

17 Prime person, do you know?

18 A I, I don't know.

19 MR. RYAN: I have no further

questions, Your Honor.

21 JUDGE COUGHLIN: Okay.

22 MS. JACKSON: No further questions,

88 89 1 Your Honor. 1 (Whereupon, the above-referred to 2 2 document was received into evidence as JUDGE COUGHLIN: All right. So --3 MR. RYAN: I'm sorry. Please. Complainant's Exhibit 14B.) 4 4 JUDGE COUGHLIN: Go ahead. JUDGE COUGHLIN: And what I'll do is 5 MR. RYAN: I was going to suggest now take them. Well, do you want to nab folders 6 6 first? would be the time I would suggest to take care of 7 7 14A and B. MR. RYAN: Yes. Can we just nab the 8 JUDGE COUGHLIN: Yes. So 14A was 8 folders real quick, Your Honor? 9 9 admitted already. Were you -- you were moving JUDGE COUGHLIN: Sure. Yeah. 10 10 MR. RYAN: And then we will provide 11 11 MS. JACKSON: Yes, Your Honor. them. 12 JUDGE COUGHLIN: Okay. 12 JUDGE COUGHLIN: Yes. And then I, you 13 MS. JACKSON: I can make a formal 13 know, during a break I'll do a quick scan. And 14 motion to -- Complainant's request that we move then when we're back I'm going to state on the 15 14B from witness Singleton's testimony into 15 record that I handed them to the court reporter. 16 16 MR. RYAN: Your Honor, may the witness JUDGE COUGHLIN: Okay. And was there 17 17 be excused? 18 any objection to that? 18 JUDGE COUGHLIN: Oh yes. Yes. I'm 19 MR. RYAN: No, Your Honor. 19 sorry, Mr. Singleton. Thank you for your 20 JUDGE COUGHLIN: Okay. So, sure, so 20 testimony. 21 14A and B, I'm repeating myself with regard to A, 21 So I was just chatting with Michael. 22 but they're both admitted into evidence. 22 So he and I both have scanner apps on our phone. 90 91 1 1 So, as I mentioned, I'm going to scan these and MR. RYAN: Thank you. 2 2 create a PDF and circulate it. JUDGE COUGHLIN: Okay. See you then. 3 3 (Whereupon, the above-entitled matter I'm not going to email the parties 4 directly with it. But Michael and/or Alissa will went off the record at 9:23 a.m. and resumed at 5 5 so that you have the PDF I've created. And then 9:35 a.m.) 6 6 JUDGE COUGHLIN: We are on the record. we'll hand the originals to the court reporter. 7 7 Just backup measures to preserve it. We've got great scans of these two 8 MR. RYAN: That works fine for me, documents, thanks to Michael Wright, who has 9 Your Honor. better technology than I do. So, he's going to 10 JUDGE COUGHLIN: Okay. 10 send the parties copies of 14A and 14B. 11 11 I'm inclined to hand them to the court MS. JACKSON: Thank you. 12 JUDGE COUGHLIN: You bet. 12 reporter now, unless you think you might need to 13 All right. So, I believe up next is 13 refer to them during the course of the hearing. 14 Dr. Walker? 14 If you're done, I'll pass them over. 15 15 MR. RYAN: That's correct, Your Honor. MR. RYAN: That works for me, Your Honor. 16 16 JUDGE COUGHLIN: Okay. Would you all 17 17 like a brief break before we begin with Dr. JUDGE COUGHLIN: Okay. 18 18 Walker? MS. JACKSON: Fine for me. 19 19 MR. RYAN: Yes. A short break would JUDGE COUGHLIN: Okay. So, we're 20 be nice, Your Honor. giving them to Mr. Morris now to make a part of 21 21 the record, the official record of the hearing. JUDGE COUGHLIN: Okay. Okay, great. 22 Why don't we come back in 10? 22 Thank you.

92 93 1 the screen? All right. So, are we ready to 2 2 proceed? Do you see that in front of you, Dr. 3 3 Walker? MR. RYAN: I am, Your Honor. 4 4 JUDGE COUGHLIN: All right, please go (Whereupon, the above-referred to 5 ahead. document was marked as Respondent's Exhibit No. 6 MR. RYAN: I'd like to call Dr. 18 for identification.) 7 7 A Ido. Elizabeth Walker to the stand, Your Honor. 8 8 JUDGE COUGHLIN: All right. Okay. Is this a fair and accurate 9 WHEREUPON, 9 representation of your resume, your CV? 10 ELIZABETH G. WALKER 10 A Yes. it is. 11 11 was called for examination by Counsel for the MR. RYAN: Your Honor, I move 12 12 Respondent and, after having been first duly Respondent's Exhibit 18 into the record. 13 sworn, was examined, and testified as follows: 13 JUDGE COUGHLIN: Okay. Is there any 14 JUDGE COUGHLIN: Thank you, please be 14 objection? 15 seated. Dr. Walker's been sworn. 15 MS. JACKSON: No objection, Your 16 DIRECT EXAMINATION 16 Honor. 17 BY MR. RYAN: 17 JUDGE COUGHLIN: All right, RX-18 is 18 Q Dr. Walker, could you please state and 18 admitted. 19 spell your name for the record? 19 (Whereupon, the above-referred to 20 A Elizabeth Gerbel (phonetic) Walker, Wdocument was received into evidence as 21 A-L-K-E-R. 21 Respondent's Exhibit No. 18.) 22 Q And if you could please put RX-18 on 22 BY MR. RYAN: 94 95 1 Q Is this version of your CV, which was Specifically, I looked at the cellular signaling 2 provided in the context of a prehearing exchange pathways that were impacted by what were 3 about two years ago; has there been any changes environmentally relevant dietary exposure levels to your CV since this was submitted? of methylmercury in households during the 5 A I have a few additional publications neurodevelopmental process might be influenced by 6 and presentations that I've made. But otherwise that chemical stressor. 7 7 this is still representative. Yes, that's right. So those same signaling pathways that 8 Q Who are you currently employed by? control cellular proliferation and 9 A I'm self-employed. I have my own differentiation in specialized hexacells 10 consulting firm, Elizabeth Walker Consulting. 10 (phonetic) in the brain, like neurons, taking 11 Q Could you please summarize your them from some kind of stem cell or pluripotent 12 education for the Judge, please? 12 cell into neurons of astrocytes or glia or 13 A Certainly. I have a B.S. in cellular otherwise. The same signaling pathways that 14 biology and a Ph.D. in toxicology from the control that are also responsible for responding 15 University of Washington's Department of 15 to environmental stressors. 16 Environmental and Occupational Health Sciences. 16 And so I looked at how those exposures 17 I also have a specialized certificate 17 to methylmercury at very low doses might impact 18 of environmental health risk assessment as well. 18 the developing brain by impacting those cellular 19 Q And as part of your Ph.D. work, what 19 signaling pathways. 20 was your dissertation on? 20 Q And since your Ph.D. dissertation work 21 A I studied the effects of low dose 21 have you developed any specializations? 22 methylmercury on the developing brain. 22 A I would say that my specializations as

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- 1 a toxicologist are in risk assessment, risk
- 2 communication, risk perception as well. I've
- 3 worked extensively with biomarkers and
- characterization of measurement methodologies,
- and also air quality, specifically rural air
- quality issues and wildfire smoke.
- 7 Q Can you describe to the Judge what a
- 8 toxicologist does?
- 9 A Sure. So the science of toxicology,
- 10 I like to impress small children by saying it's
- 11 the science of poison. That now it gets an eye
- 12 roll from my 13 -- 12-year-old daughter. But
- 13 generally a toxicologist deals with understanding
- 14 how chemical exposures occur, what the pathways
- 15 of exposure are, and then characterizing how
- 16 those exposures to toxins can cause harm or
- 17 contribute to disease.
- 18 So it starts with understanding how a
- 19 potential human or ecological organism could be
- 20 exposed. How that, if we're speaking about
- 21 humans, how that chemical might enter the body,
- 22 through what route, whether it's inhalation or

1 at potential molecules that would be used as

medicines, but prior to those molecules ever

- ingestion.
- 2 Once a chemical enters the body, what
- happens to it? Is it made more toxic by some
- kind of activation process? Is it detoxified by
- many of the processes we have in our body to
- protect us? How is it distributed throughout the
- body? Are there particular target organs that
- might be susceptible? And then, ultimately, how
- is that chemical eliminated or excreted from the
- 10 body?
- 11 So generally speaking then,
- 12 toxicological risk assessment is kind of the
- 13 entirety of that process, thinking about under
- 14 specific exposure scenarios, how a chemical,
- 15 characterizing how a chemical might cause some
- 16 kind of harm.

19

- 17 Q Could you summarize your work
- 18 experience for us?
  - A I can, sure. So I began my career
- 20 while I was still in my Ph.D. at a biotechnology,
- 21 biopharmaceutical company. And I worked in the
- safety assessment group there, so mainly looking

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- 3
- Following that, I spent about a decade
- 5 at a nonprofit organization. That nonprofit

being used in humans for the first time.

- 6 brought together scientists from academia, from
- 7 government, from industry to think about how we
- 8 could develop and what kinds of evidence and data
- 9 was necessary to develop more sensitive
- 10 biomarkers or indicators that drug -- drug
- 11 toxicity was occurring. So those were things
- 12 like biomarkers of kidney toxicity, liver --
- 13 muscle, et cetera.

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- 14 That process in that 10 years at that
- 15 organization, the ultimate goal of those
- 16 interdisciplinary collaborations was to develop
- 17 an evidence package that would ultimately be
- 18 given to regulators, in this case FDA, the
- 19 European Medicines Agency, or the PMDA, which is
- the Japanese FDA basically, summarizing the
- science so that those regulators could then make
- 22 decisions about the benefits and risks of how to

- incorporate those new biomarkers or novel
- technologies into clinical trials for safety
- assessment purposes.
- 4 And then, sorry, most recently I've
- been working in environmental health more
- directly. I work on a number of different
- efforts at the local, state, and federal level to
- 8 think about the health risks from climate change,
- and help develop effective adaptation and
- mitigation strategies, specifically focusing on
- 11 vulnerable populations. Those are things like
- 12 extreme weather, heat, wildfire smoke, et cetera.
- 13 Q Who do you currently do most of your
- 14 work for?
- 15 A I have a few different clients right
- 16 now. The predominant bulk of my work right now
- 17 if for the Methow Valley Citizens' Council. They
- 18 --

- Q Is that an environmental group?
- 20 A They are a conservation-focused
- nonprofit. They are focused on clean air, clean
- 22 water, good, responsible land use and climate

100 101 1 change. 1 added since this. 2 2 I also currently work for a Native Q And are those publications all peer 3 3 American tribe in the area where I live in reviewed? 4 4 Central Washington. And I'm also the community-That's correct. 5 5 Are you a member of any professional based organizational lead for two University of societies? Washington research studies. 7 7 A I am. I'm a member of the Society of Q And I see on your resume you have a 8 Toxicology as well as the National Environmental number of publications. Can you briefly 9 9 summarize your publication history for me? Health Association and the Washington 10 A Sure. So most of the publications are 10 Environmental Health Association. 11 11 in the fields of toxicology or risk assessment. MR. RYAN: Your Honor, I'd move to 12 have Dr. Walker qualified as an expert in 12 A number of them are related to biomarkers and 13 measurement methodologies. There are several 13 toxicology and risk assessment. 14 JUDGE COUGHLIN: Any objection? 14 related to the value of collaboration, especially 15 MS. JACKSON: No objection, Your 15 in the interdisciplinary environment where I've 16 16 Honor. been helping facilitate work for a long time. 17 17 JUDGE COUGHLIN: All right. So And there are others as well focusing 18 18 deemed. on risk of wildfire smoke. 19 19 Q I show 19 publications on your, on BY MR. RYAN: 20 Q Dr. Walker, have you ever testified 20 your resume. You have other additional 21 before in court? 21 publications, or have you added more? 22 22 A I have not. A I believe there's one more that's been 102 103 1 Q And are you being paid for your time 1 provided, you prepared in the context of this 2 2 working on this case? case? 3 3 Α A I am. It is. 4 Q And how much is that? 4 MR. RYAN: Move to admit RX-20, Your 5 5 A \$250 an hour. Honor. 6 Q Is that your typical rate you charge? 6 JUDGE COUGHLIN: Any objection? 7 7 A It is my typical rate. Although, for MS. JACKSON: No objection. 8 8 the opportunity to work for small nonprofit JUDGE COUGHLIN: All right. RX-20 is 9 organizations I sometimes charge a lower rate. 9 admitted into evidence. 10 Q Did you prepare an expert report in 10 (Whereupon, the above-referred to 11 this case? 11 document was received into evidence as 12 A I did. 12 Respondent's Exhibit No. 20.) 13 13 Q Could you please pull up RX-20? BY MR. RYAN: 14 (Whereupon, the above-referred to 14 Q Since you prepared this report, have 15 document was marked as Respondent's Exhibit No. you learned any new facts that you did not know, 16 20 for identification.) 16 that were relevant at the time you wrote this 17 Q Do you have RX-20 in front of you, Dr. 17 report? 18 18 Walker? A Yes, I have. 19 19 I do. Q And what were those? 20 Q Do you recognize this report? 20 A At the time of writing the report I 21 A I do. 21 understood that trailer was part or the entirety 22 22 of the time it was stored at the Prime facility. Q Is this the expert report you

1 And I now understand that not to be the case.

2 I've also come to understand the

- 3 location of the trailer relative to the entire
- 4 facility in a more precise manner.
- 5 And I also when I wrote the report did
- 6 not recognize that there have been estimates of
- 7 the total volume of material contained within the
- 8 drums. I thought that that was unknown at the
- 9 time.
- 10 Q Now, as you considered that new
- 11 information, has it changed your summary
- 12 conclusions in any way?
- 13 A It does not change my summary
- 14 conclusions.
- 15 Q What documents did you rely on in
- 16 other evidence in preparing your testimony?
- 17 A I looked at the NDIC report.
- 18 I looked at the EPA's proposed
- 19 explanation of the penalty.
- 20 I looked at the SDS and product
- 21 description for the paint involved.
- 22 I looked at many different photos of

- the site itself as well as aerial photos.
- 2 I did have time to speak with Mr.
- Singleton.
- 4 I don't know if that's everything I
- looked at in the entirety but --
- Q Did you do any --
- 7 A -- but looked at the expert reports,
- of course, of Dr. Keteles and Dr. Mueller.
- 9 Q And did you do any independent
- 10 research in preparation for this report?
- 11 A I did.
- 12 Q Can you briefly summarize that?
- 13 Certainly.
- 14 I looked at literature related to the
- 15 chemical compounds found in the pain that were
- 16 listed in the SDS summary.
- 17 Q So, what was the starting point for
- 18 you providing an opinion in this case?
- 19 A I was asked to estimate or
- 20 characterize the probability of harm from paint
- waste stored in an industrial facility in Salt
- Lake City. And so, I began by looking at the

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- 1 EPA's proposed explanation of the penalty and the
- language contained therein about the potential
- 2
- 3 for harm.
- 4 I think the whole of that document.
- 5 the precision of that language is important.
- 6 Q CX-4, could you pull that up?
- 7 Do you see on the screen in front of
- you a document that's denoted CX-4, page 1 of 20?
- 9 Do you see that in front of you?
- 10 A Ido.
- 11 Q And is this the document you were
- 12 referring to?
- 13 A It is.
- 14 Q And if we could highlight the last
- 15 full paragraph, please?
- A May I go ahead and read from there? 16
- 17 Q Yes.
- 18 So, this was where I began.
- 19 So, definitions there are obviously
- 20 very important, and precision of language. And
- so, I utilized the EPA's definitions based on the
- 22 RCRA penalty assessment policy.

- 1 And so, potential for harm -- and I'll
- 2 just go ahead and read.
- 3 MS. JACKSON: Your Honor, if I could,
- sorry, if I could object. I'm sorry to interrupt
- your testimony. I wasn't quite sure where she
- was going to go.
- 7 Ms. Walker, sorry, Dr. Walker has not
- been qualified as an expert on EPA's penalty
- policy, the laws and regulations, or anything of
- the sort. She's here to talk about risk. That's
- fine. But I don't know that she's been qualified
- 12 to interpret the agency's policies.
- 13 JUDGE COUGHLIN: Okay. I, I wasn't
- 14 interpreting the testimony in that way.
- 15 Mr. Ryan, do you wish to respond?
- 16 MR. RYAN: Your Honor, the sentence
- 17 which we're looking at there talks about the
- 18 potential for harm based on the risk of exposure
- 19 and the EPA basis for their penalty calculation
- 20 in this case.
- 21 So, we have asked Dr. Walker to assess
- 22 EPA's methodology for assessing the environmental

108 109 1 and human health harm. 1 JUDGE COUGHLIN: Okay. All right, 2 2 JUDGE COUGHLIN: Okay. So, you're please go ahead. 3 3 asking the witness to testify as to the THE WITNESS: Sure. Thank you. 4 4 methodology EPA uses to make, to make that So, potential for environmental fines 5 evaluation, or tying those factors into her in EPA's penalty assessment policy here, based on 6 the risk of exposure and harm to the RCRA analysis? 7 7 MR. RYAN: The latter, Your Honor. regulatory program. 8 8 JUDGE COUGHLIN: Okay. BY MR. RYAN: 9 9 MR. RYAN: They, in this document of Q Okay. Just stop right there. 10 theirs they argue the risk of exposure as a 10 Does in your opinion in any way relate 11 11 factor they considered. to that last part here, harm to the RCRA 12 12 She's going to testify about what that regulatory program? 13 term means and how it, how it could be applied in 13 A It does not, no. I'm just going to 14 the real world. 14 speak to risk of exposure, and that's the scope 15 15 JUDGE COUGHLIN: Okay. of the expert report. 16 MS. JACKSON: Okay. I just wanted to 16 Q So, you're not here to testify about 17 clarify. So, you're saying she's testifying to 17 the RCRA program? 18 18 risk assessment and environmental exposure, and A I am not. 19 that's the scope here? 19 Q I'm sorry. Please go on. 20 20 MR. RYAN: In the context of the facts A Continuing then, the second sentence 21 of the case. 21 says EPA measures the risk of exposure by 22 MS. JACKSON: Okay. Withdrawn. evaluating the probability of exposure and the 110 111 1 potential seriousness of contamination. 1 potential organism that might come into contact 2 And so, your question was to where I with the contaminant concerned, the paint in this 3 3 case. started in approaching my expert report. And it 4 4 was thinking about those two things, so the So, there's probability of exposure. 5 And then there's inherent hazard of 5 probability of exposure, and the potential 6 6 seriousness of contamination. the toxin itself, so, the paint. 7 7 So, the simple way to understand that Q And you did that in the context of the 8 trailer with drums on it stored at the Salt Lake 8 then is that toxins have an inherent hazard, and 9 City facility for Prime? that's independent of the exposure. If you're 10 A That's correct. 10 not exposed to that hazard, the risk is zero. 11 11 There's no way that you can have a risk for So, how does your, how does the 12 probability of exposure play a role in your 12 something that you're never exposed to. 13 13 The example I use in my report is a 14 A So, the basis of sort of understanding 14 rattlesnake bite and the potential harm: 15 risk or approaching risk, the risk calculation, difficulty breathing, tissue swelling, et cetera, 16 16 that can come from a rattlesnake bite. So, a is we have really two main factors. 17 17 And so, one is related to the rattlesnake is inherently dangerous or a hazard 18 18 probability of exposure and relating into all of to any one of us sitting in this room. 19 19 the toxins or, you know, potential organisms But unless you actually are bit by 20 20 that rattlesnake, your risk of experiencing those stored in the receptors, either genes or 21 21 ecological receptors. It's a little jargony, but adverse effects is zero. 22 22 that means that they used the term receptors, a Q So, can you summarize your findings of

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when you analyzed the drums on the trailers inSalt Lake City, could you summarize your findings

3 regarding that trailer storage for the Judge?

4 A I can.

In looking through the evidence I
 determined that there was no evidence that any

7 harm had occurred to humans or any other

 $^{\mbox{\footnotesize 8}}$   $\,$  ecological receptors during that period of

9 storage.

10 I determined that the risk of exposure

11 was low.

12 I determined that the probability of13 a fire occurring was also low.

And that, thus, the potential for harm to was also low.

16 Q And what was in the drums that were

17 being stored in Salt Lake City?

18 A I understand that it was paint waste.

19 Q And what were the toxicants of concern

 $20\ \ \mbox{ -- or toxic substances of concern in the, in the}$ 

21 paint?

22

1

2

A Uh-huh. In the NDIC's report they

1 sampled the drums and found that 20 of them

2 contained strontium chromate, which is consistent

 $^{3}$  with it being a chromate-based primer.

4 Strontium chromate is a known human

5 carcinogen. It's also a naturally occurring

6 element that's found in the Earth's crust. It's

7 characterized as a human carcinogen by the

8 International Agency for the Research on Cancer,

9 that's under WHO's supervision. IARC is the

10 global authority in determining and

 $^{
m L1}$  characterizing whether agents cause cancer or

12 not.

For context, IARC has classified 122

14 agents total as known human carcinogens. These

15 include things like particulate matter and air

16 pollution, UV radiation, alcoholic beverages,

17 processed meat, with hepatitis B, C, and human

18 papillomavirus. So, a number of different other

19 agents as well.

20 And I name these just because they're

21 likely more familiar to all us, not to minimize

22 the seriousness of the fact that there was an

114

known human carcinogen in this paint.

I do think, though, for context it's

3 important to note that our environment is full of

4 carcinogens. We live in a very chemical world.

5 And that we manage our risk of those carcinogens

6 by managing our exposure, or not managing our

7 exposure.

<sup>9</sup> what else was in the paint that you looked at?

10 A The SDS lists a total of 12 chemical

components as potential hazards.

The other 11 were predominan

12 The other 11 were predominantly

13 solvents that were also components in the paint.

14 The solvents themselves carry

15 additional risks. These are the types of risks

16 or hazards. There are known probable human

17 carcinogens. A known human carcinogen is IARC's

18 most severe categorization of carcinogens.

19 There were others in the paint that

are probable, classified as probable human

21 carcinogens.

There were also solvents that were

1 known to have acute toxicity upon a single

2 exposure. So that would be where you had a large

3 one-time exposure to the chemical component of

4 the paint.

5 And in that instance CNS depression

6 was the toxicity of concern there, so this is

7 you'd experience dizziness, headache at high

8 enough and severe concentrations and

9 consciousness.

And then they also carried, some of

11 the chemicals carrier hazard of exposures,

12 longer-term exposures equally at lower doses over

13 time. Those kind of exposures included

14 reproductive toxicity potentially. Those would

15 be on the basis of animal studies carried out on

16 rabbits about potential reproductive harm, as

well as acute eye irritation in an acute, in an

18 setting as well.

So, there were a number of chemicals

20 in the paint that were certainly very

21 toxicological hazards.

Q To put these things in context,

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- $1 \hspace{0.1in}$  looking at this SDS that you looked at, are there
- 2 -- we're talking about paint here, that's the
- 3 case here at issue, and I believe the testimony
- 4 earlier from Mr. O'Neil was it had an intended
- 5 industrial application for coating metal parts.
- 6 Are there any more everyday products
- 7 that we encounter that have SDSes that look
- 8 similar to this?
- 9 A Yes. And, again, this is for context,
- $10\ \ \,$  not to any way minimize the hazards contained in
- 11 the chemicals.
- But, you know, an SDS is a very
- 13 functional and important communication tool for
- 14 potential hazard and instruction tool, whether
- 15 it's a consumer product or used in an
- 16 occupational setting, how that, warning against
- 17 how that chemical should be treated with caution.
- 18 So, there's some both signal hazard warnings as
- 19 well as descriptions that you'll find commonly on
- these SDSes for, for any product, or any product
- 21 that assesses one.
- So, I was here yesterday for Mr.

- 1 O'Neil's testimony where he talked about getting
- 2 up and kind of walking around his house and
- 3 looking for other things that he might look up
- 4 the SDS for. And I actually did the same
- 5 exercise.
- So, I went and gathered some nail
- 7 polish remover, and WD-40, and a couple of paint
- 8 products that I had used for home improvement
- 9 projects, refinishing my daughter's stand
- 10 recently.

16

- And I found that on this SDS there
- 12 were a lot of the same signal kind of warnings as
- 13 we find in this case, including that all of them
- 14 were marked as highly flammable. All of them
- 15 recommended storing them under locked conditions.
  - They were all acute eye, eye
- 17 irritations as well, could cause acute eye
- 18 irritation. And one of the finishes of the paint
- 19 was also a reproductive hazard as well.
- So, again, in summary I think it's
- 21 just, it's for, for context only. These SDS
- 22 statements that are quoted in the Dr. Keteles'

- report are quite alarming. And they should be.
   They're meant to direct how we handle hazardous
- 3 chemicals with care to minimize exposure. That
- 4 exposure has to occur at appropriate levels,
- 5 significant enough levels for any adverse effects
- 6 or health effects to occur. So, the exposure is
- 7 really two parts.
- 8 Q Just so we're clear here, you're not
- 9 comparing nail polish and a spray can of paint in
- 10 your garage to --
- 11 A Yeah.
- 12 Q -- these barrels of paint stored here,
- 13 are you?
- A No, I'm not. But, you know, the
- 15 amounts are obviously significantly different.
- But I also just want to indicate, you
- 17 know, besides the fact that they, that barrels of
- 18 paint had been through a fire, and they were
- 19 indeed in drums that were sitting open to the
- 20 environment, they were contained in drums.
- 21 They re also not sort of exposed out,
- 22 poured out into, you know, like a kiddy pool full

- 1 of paints that people are kind of actively
- 2 walking over and breathing in deep inhalations.
- 3 They're still contained to some extent.
- 4 Q So, you, you look at three scenarios
- in your expert report. Could you describe the
- 6 three scenarios for me, please?
- 7 A Okay. So, you know, talked about the
- 8 importance of exposure pathways and exposure
- 9 scenarios. And so, what I did was first I looked
- 10 at the actual facts and events related to the
- 11 exposure scenario of the actual conditions under
- 12 which the paint was stored.
- 13 I also looked at the theme where what
- $14 \quad \hbox{potential exposures might occur if a theoretical} \\$
- 15 leak occurred.
- And then I also looked at what I would
- 17 consider a worst case scenario for potential
- 18 exposure, which was a fire event.
- Q Now, so let's take those one at a
  - time. Could you explain what your understanding
- of where the paint was stored and how that
- 22 affected your opinion?

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1 Yes.

2 So, as I understand it, the paint was

3 stored in a rather remote corner of an industrial

- 4 facility, a large, open, flat yard in the middle
- 5 of a very large, open, flat area in Salt Lake
- 6 City that was full of industrial -- zoned
- 7 industrial around the airport. It was open.

8 And I looked on a map. You know,

- 9 EPA's environmental justice screening tool. Used
- 10 their screen and determined that the nearest
- 11 neighborhood was about 2 miles away, residential
- 12

neighborhood.

- 13 I also understood that the facility
- 14 is, is fenced, and that the location of where the
- 15 trailer was stored in that yard was not a place
- 16 where any workers spent any time. They didn't
- 17 congregate there. They didn't walk by. It was
- 18 not accessed on a routine basis for any period of
- 19

2 away.

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- 20 I was able to review the aerial
- 21 photographs of the site. And so, I used a
- 22 tractor trailer, which I understand were an

1 So, we have people coming in and out 200 feet

That's still a very long distance.

4 You know, it's about two-thirds of a football or

a soccer field. And, again, these are drums of

the bungholes for these. And we probably are

likely having a slow evaporation of solvents and

paint that are open to the environment, you know,

- 1 average length of 48 to 53 feet. So, I used 50
- feet as an approximate yardstick, if you will.
- And so I looked at the length of the tractor
- trailer on the map, and then I measured from the
- corner of the nearest building to where the
- trailer was set, using that yardstick.
- 7 And I did that at a few different
- 8 magnifications, and estimated that the corner of
- 9 the nearest building in Prime's facility was 200
- 10 to 250 feet, approximately, to the nearest corner
- of where the trailer was stored.
- 12 And so, again, that, that affected
- 13 what I'm thinking about with regards to potential
- 14 exposures to workers onsite.
- 15 Q Let's elaborate on that just a little
- 16 bit. The distance, what does the distance tell
- 17 you terms of probability of exposure?
- 18 A Yeah. I mean, so, if it -- even if,
- 19 so, the building is, you know, 200 to 250 feet
- 20 away. I don't actually know where the entrance
- to that building is, but let's say, again
- conservatively, it's quite near to that corner.

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1 may be having some vapors coming off of it. But

- at a distance that is such that, you know, it's
- 3 hard to imagine toxicological harm occurring from
- that level of exposure to the paint.
- Q So, if there were a leak from one of
- these drums -- First of all, are you aware of any
- 7 leaks from any of the drums?
  - A I am not.
- 9 Q And just hypothetically, if there were
- 10 a leak, did you look at that, what would happen?
- 11 A Yes.

8

- 12 So, when I think about a leak
- 13 occurring from one of these drums I imagine a
- 14 small crack or a hole occurring that compromises
- the integrity. And that's in the sense I looked
- 16 at the, the composition of the paint. So, the
- 17 paint was characterized in the NDIC report as a
- 18 semi-solid or a sludge. It was alternatively
- 19 characterized as viscous.
- 20 And so what that says to me is that
- this paint is not going anywhere fast. It's a
- 22 thick substance that were there to be a leak in

The paint on the SDS does state that it has a very slow evaporation rate.

12 And so the potential for someone

other chemicals coming off those.

13 getting a significant enough exposure to cause 14 any kind of toxicological harm is extremely low.

15 And just for reference, I think we've

16 all probably been in a room whether it's either

- 17 being painted or been in a room where something
- 18 was recently painted and you might catch a whiff 19
- 20 This is really different. I'm

of something.

- 21 imagining standing in an open yard, open to the
- 22 environment, 200 feet away from something that

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- the drums it might ooze out of it. It's rate oftransport is likely to be very slow.
  - Q Was this paint water-soluble?
- 4 A It was not. And that's another
- 5 important point to make.

3

- 6 So, if, you know, it's a leak that
- 7 occurred, the trailer is sitting on a concrete
- 8 pad. That concrete pad is impermeable. Even if
- 9 the paint were to ooze down onto the pad, it's
- 10 still some distance from the edge of the pad and
- 11 it's going to move, if at all, very slowly,
- 12 probably in all directions.
- And if it were to rain, the paint is
- 14 water-insoluble, so the rain would not be
- 15 expected to significantly accelerate the movement
- 16 of that or the transport of chemicals into the
- 17 environment or enter the soil.
- 18 I also understand there were not any
- 19 water wastes nearby. But, again, I don't see
- 20 this paint moving anywhere very rapidly.
- 21 Q The lack of water waste nearby, where
- 22 did you get that information from?

- 1 A I believe that was in EPA's report.
- 2 Q Now, did you look at the -- what would
- 3 happen if it did reach the dirt or soaked into
- 4 the dirt?
- 5 A Again, it not being water soluble, I
- 6 don't think we're going anywhere very quickly,
- 7 so
- 8 Q Okay. Now, let's turn to your
- 9 scenario under which you analyze the possibility
- 10 for fire. Could you talk about that?
- 11 A Certainly.
- 12 Q Let's start with the flash point.
- 13 There's been a lot of discussion as to that.
- What is, please describe, explain to
- 15 the Judge what flash point means, what it is, and
- 16 how it's relevant?
- 17 A Okay. So, flash point is a
- 18 characteristic of a organic compound or any
- 19 compound whereby vapors can accumulate off of the
- 20 substance in a substantial fashion such that if
- 21 an ignition source is present it's possible for
- 22 them to ignite.

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- Flash point is typically measured
  either via a closed cup or an open cup method.
- 3 Closed cup is more standardized, with fewer
- 4 variables, and so it's the more commonly used
- 5 method. EPA in this case used a closed cup
- 6 method called Setaflash.
- 7 So, the closed cup method for
- 8 measuring flash point basically you have a closed
- 9 system with an ignition source inside that closed
- 10 system, as well as your material of interest.
- 11 And you begin to raise the temperature in the
- 12 presence of an ignition source. And at the
- 13 temperature where that material catches on fire,
- 14 that's determined to be the flash point.
- So, the flash point reported on the
- 16 SDS for the paint here is 112 degrees Fahrenheit.
- 17 And so, in using that closed cup
- 18 method it's, it's great because it gives you a
- 19 way to control variables and then be able to have
- 20 a more standardized comparison, whether I'm
- 21 conducting that flash point measurement, you
- know, here in the U.S., or someone's standing in

- 1 a laboratory in Japan, or Germany, or anywhere in2 the world.
- 3 However, it doesn't really very
- 4 accurately represent most real world conditions.
- 5 And it certainly doesn't represent the real world
- 6 conditions of how the paint was stored here. So,
- 7 we don't have a closed system. We have the paint
- 8 is stored in barrels and they're open to the
- 9 environment through that bunghole.
- We also don't have an ignition source.
- And so those, including also, I
- 12 mentioned earlier, the SDS list says the paint
- 13 has a low evaporation rate. That's for the paint
- 14 substance overall.
- Again, we're all probably familiar
- 16 with the fact that paints quickly separate when
- 17 it's been sitting for a long time. And it
- 18 appears that that was the case with this paint.
- And looking at NDIC's report, there
- 20 were two different layers. One was a more clear
- layer on top of it. And one was sort of a yellow
- 22 layer down below. So, the clear layer can be

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- 1 presumed to probably be the more volatile 2 chemicals in the paint substance that had
- 3 separated out.
- 4 Q Were they the solvents?
- 5 Those would the solvents, yep, that we talked about earlier.
- 7 Q And the part down below that was 8 described as semi-solid, viscous, would that be 9 the strontium chromate and other chemicals?
- 10 A I don't believe that the two lavers 11 were separately described with regards to their 12 physical characteristics. It was just for the 13 sample overall. But, presumably, yes, the layers 14 down below would be more of the semi-solid 15 sludge.
- 16 And I think we can also show that the 17 strontium chromate is going to stay chemically 18 bonded in that semi-solid sludge yellow layer 19 that's down below. We know that.
- 20 So, the strontium chromate under these 21 conditions is not, it's not bio-available is what 22 we say. It doesn't, it's not going to come off

- 129
- 1 the substance, it's not going to be present in any of the vapors that are lifting off under
- 3 environmental conditions and then potentially
- inhaled.
- 5 Q So, going back to the closed cup test
- and the flash point, I think you just testified
- that you wouldn't expect to see environmental
- conditions at the site to match those used in the
- closed up test; is that correct?
- 10 A Yeah. So, you know, my understanding
- 11 was the paint sat onsite for approximately a
- year. And there would be the temperatures, the
- daily temperatures for Salt Lake City during the
- time that it sat there. Salt Lake City has
- fairly cold winters. But during summer the
- 16 temperatures, ambient temperatures did exceed 90,
- 17 and even 95 degrees, the daily highs at some
- 18 points.
- 19 Under those conditions one could
- imagine that the paint did heat up to some
- extent. But, again, that 112 degree closed cup
- 22 flash point measurement is, is not necessarily

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- 1 the temperature, even if the paint reached that
  - temperature, is not necessarily the temperature
- 3 at which the paint would ignite, even if an
- ignition force was present.
- 5 So, you know, the biggest point here
- 6 for me about probability of fire is the ignition
- 7 point itself. As I understand the location of
- 8 the trailer and the drums, again they're in a
- drum with a small hole at the top, off in a
- 10 remote corner of the year. The facility is
- 11 mostly fenced, there aren't workers nearby,
- 12 there's no activity taking place nearby.
- 13 And, so, I think it's a very low
- 14 probability that we could have that paint, even
- 15 if it was at the sufficient temperature for there
- 16 to be accumulated vapors that could ignite,
- 17 because of the lack of ignition source I just
- 18 believe that the probability of fire is low.
- 19 Q Could we pull up a Respondent's
- 20 exhibit now?
- 21 So, Dr. Walker, you have in front of
- 22 you a document marked RX-19, page 1 of 15.

- 1 MR. RYAN: Your Honor, this has been
  - stipulated to so, therefore, already moved into
- 3 evidence.

- 4 BY MR. RYAN:
  - Q At the top left corner it says Salt
- Lake City, Utah, weather history. Just down
- 7 below there's an October 2015.
- 8 Is this the weather data you reviewed?
- 9 Α It is.
- 10 Q Uh-huh. And there are 15 pages in
- 11 this. And I don't think we have to go through
- 12 all 15 pages, at least not now.
- 13 Can we go to page 2 of, of this
- 14 document, please?
- 15 So, this would be for November. The
- 16 fire was October.
- 17 A Uh-huh.
- 18 Q And they run through December 2016.
- 19 So, is this your understanding that these, this
- weather data you looked at was the actual data
- from the approximate time the trailer was stored
- 22 in Salt Lake City?

1 It is.

2 Yeah, and again, just what I observed 3 in looking at this data is that approximately, you know, October through April ambient 5 temperatures are pretty low.

6 And then during the three summer 7 months that the trailer was there is the only 8 period of time where temperatures approached 90 9 or 95 degrees. And even then that's, you know,

10 that's a few days at a time, and the air cooling 11 off in the nighttime, et cetera.

12 Q So, is it safe to summarize that in 13 terms of probability of exposure the number of

days a year that were warm enough to approach the

15 112 degree flash point were fairly small?

16 A They were. I think we're only talking 17 about maybe a couple of weeks.

18 And the other important piece about 19 temperature, too, is that temperature also 20 impacts the volatility of the point, so the

ability for vapors to come off of those drums

22 and, you know, and create some kind of

1 concentration that people might be exposed to.

So, the warmer months are going to be a potential

for that -- or that evaporation or volatilization

to increase a little bit.

But, again, so I think it's important to note that that's only part of the year that 7 we're talking about. The rest of the time it's rather cold there. And so, we'll have less

9 evaporation occurring.

10 The other bit, again, I just want to 11 also make a point about this also, that even when 12 we do have some of the solvents causing vapors to 13 rise off of that layer of the paint, there's

still a very, very low concentration. So, and also, you know, again, off in the corner of the

16 yard. So, I don't think that that's anything

17 that we're concerned about for our workers.

18 Q Now, have you looked at the photos

19 from the night of the fire?

20 A I have.

21 Q And there was a rather large fire, if

22 you recall?

134 135

1 Yes.

2

And to your knowledge did it explode?

3 A No. My, yeah, my understanding is

4 that the bung holes vented. So, they did come

off of there but the paint did not explode. And

6 the material is not listed as explosive. Of the

7 characteristics that one would find on an SDS, in

8 this case it was not listed as explosive, it's

9 actually listed as stable.

10 Q So, if the worst happened and these 11 paint drums did catch fire in Salt Lake City, when you expect them to explode, what kind of 13

14 A No, I wouldn't expect them to explode.

15 And, in fact, they had already been

16 through a fire where they were exposed to upwards

17 of potentially 1,000 degrees up to 1,500 degrees

18 was the number that I quoted in my report from, I

19 believe, the Highway Transportation Association,

20 as potential temperatures typical of a car fire.

21 They had already been exposed to that

22 level of temperatures and they didn't explode.

1 We don't actually know whether or not in the

paint in the ones stored at the Salt Lake City

facility did burn or not. We don't actually know

what happened to the contents of it. It was

certainly baked to some degree.

But they were in the presence of, you

know, high, high temperatures, certainly in the

presence of an ignition source. They were

engulfed in flames. And we still have, you know,

10 almost full drums of these paints.

11 So, you know, if I compare what

12 happened to the drums, or what we know happened

to the drums while they were sitting in a trailer

fire with the environmental conditions that they

were exposed to in the yard in Salt Lake City,

16 and it just has a much lower probability of a

17 fire occurring in that yard in Salt Lake City.

18 Q Can you pull up Complainant's Exhibit

19 4? And turn to page 13, please.

20 Dr. Walker, do you see that exhibit in

21 front of you, corrected, CX-4 corrected at 13?

22 A I do.

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1 Q And could you please highlight the 2 first full paragraph there, yeah, underneath the 3 chart.

4 This paragraph from the EPA penalty 5 policy calculation for the proposed penalty in 6 this case is labeled potential for harm. And 7 could you read the first sentence of that,

A The violation poses or may pose a

8 please? 9

10 significant risk of exposure of humans or other environmental receptors to hazardous waste or 12 constituents; and or the actions may, the actions 13 have or may have a significant adverse effect on 14 statutory or regulatory purposes or procedures 15 for implementing the RCRA program. 16 Q Okay. So, I'm not going to ask your 17 opinion on anything after the semicolon because, 18 as you testified earlier, that's beyond the scope 19 of your, your expert opinion today. 20 So, focusing on the first clause of

that sentence, do you agree or disagree?

A I disagree about the significant risk

1 of exposure. Again, as we started with, significant risk of exposure is comprised of the

probability of exposure, as well as the

seriousness of contamination.

5 And I just think that probability of exposure under the conditions described is low.

7 MS. JACKSON: Your Honor.

8 JUDGE COUGHLIN: Yes.

9 MS. JACKSON: I kind of renew my 10 objection from earlier. I feel like Dr. Walker

is testifying to the penalty policy and not risk

12 assessment generally.

13 JUDGE COUGHLIN: I'm going to overrule 14 that objection. I don't know if you wanted to --

15 THE WITNESS: Independent of the

16 language here, I don't believe that this poses a

17 significant risk of exposure. I can just use

18 that statement more generally, not attached to

19 the penalty policy.

20 BY MR. RYAN:

21 Q If it's not significant, how would you

22 characterize it?

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A I think there's a low probability of 2 harm occurring. Again, you know, just thinking

3 about the actual exposure scenario that we have

4 whereby anything vaporizing or coming off of this

5 paint is going to readily dissipate into the

6 surrounding environment. I just don't see that

7 there's any significant risk to workers or anyone

8 otherwise who may or may not be near this. And I

9 understand that there were not workers nearby,

10 and the probability of them being there is low,

11 as well.

21

22

1

12 Q Would you expect to the storage of 13 these paint drums in Salt Lake City to pose a 14 significant risk to any nearby homeowners?

15 A The map that I reviewed shows the 16 residential neighborhoods are over two miles

17 away, so I don't believe, you know, for the same

18 things we're talking about with regards to the

19 ability to generate any significant concentration

or otherwise, that's a significant distance away 21 from where the paint was stored.

22 Q So thank you very much, Dr. Walker. 1 Let's turn to your review of the report prepared

2 by Dr. Keteles in this case. Have you reviewed

3 that report?

4 A I have.

Q For the record, that's been marked,

that's the Complainant's Exhibit 66. And have

you drawn any conclusions based on your review of

that report? And if you need to see her report,

9 I'd be happy to pull it up.

10 A You can go ahead and pull it up.

11 MR. RYAN: Yes, can we pull up CM-66,

12 please? This has not been admitted yet, Your

13 Honor.

14 JUDGE COUGHLIN: Correct. Pages have.

15 This is the one where --

16 MR. RYAN: Yes, this is the drum logs

17 ---

18 JUDGE COUGHLIN: Yes, yes.

19 MR. RYAN: That's correct, Your Honor.

20 JUDGE COUGHLIN: Can I just ask one

21 question?

22 MR. RYAN: Yes, yes, please.

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1	JUDGE COUGHLIN: When you mentioned
2	that the residential neighborhoods are over two
3	miles away

4 THE WITNESS: Yes. 5 JUDGE COUGHLIN: And I understand your testimony with regard to the consistency of the 7 material and the likelihood of it really moving 8 anywhere too quickly, but with regard to the 9 potential for vapors to release from the open 10 bung covers, the open bungholes --THE WITNESS: Yes. That's an awkward

11 12 word.

13 JUDGE COUGHLIN: Yes. What about, did 14 you draw any conclusions about whether it could 15 affect air quality with respect to those 16 residential neighborhoods two miles away or maybe 17 that was part of your analysis, but I just wanted 18 to ask about emissions into the air that could 19 impact populations in addition to what might move 20 on the ground.

21 THE WITNESS: Yes, that's a good 22 question. In looking through the evaporation

1 have of her opinions of your work?

1 rate of the paint and considering the

- environmental conditions, I don't believe that
- we're going to have any kind of significant
- contribution to air pollution or air quality or
- otherwise that could impact neighborhoods two
- miles away. We're just not talking about that
- amount or level of chemical that's going to be
- volatilizing and entering into the environment.

9 That said, I did not go through the

10 calculations to actually do that. And those are

possible; they're just quite complex with regards

12 to involving molar fractions and atmospheric

13 pressure, et cetera, so --

14 JUDGE COUGHLIN: Okay. Thank you.

15 THE WITNESS: Yes.

16 BY MR. RYAN:

17 Q We just pulled up on the screen in

18 front of you, Dr. Walker, Complainant's Exhibit

19 66. Is this the report of Dr. Keteles that you

20 reviewed?

21

1

22 Q And can you tell us what opinions you

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bring her back after Dr. Keteles testifies.

A I agree with much of what's contained JUDGE COUGHLIN: Right. I was going

to -- I appreciate the point. I suppose if

you're planning to call Dr. Keteles and want me

to consider it --

6 MS. JACKSON: I understand.

7 JUDGE COUGHLIN: You know, I mean, if not, then I might take a different tack. But if

you're planning to call her, it might just save a

10 little bit of time while Dr. Walker is on the

11 stand to address it and alleviate the need to

12 recall. But if that interferes with your

13 presentation, then let me know.

14 MS. JACKSON: No, Your Honor. I think

15 efficiency is good. So thank you.

16 JUDGE COUGHLIN: Okay, all right.

17 Okay. Please go ahead.

18 MR. RYAN: Thank you, Your Honor.

19 You were saying that you disagreed

20 with Dr. Keteles on a certain point.

21 Could we please pull this up, Exhibit

22 66, page eight, please? And could you please

3 in Dr. Keteles's report. She accurately lists 4 the hazard as reported in the SDS related to the paint and its chemical constituents. Where I 6 disagree is the probability is exposure, and 7 that's reviewed extensively, and I think perhaps 8 we could take a look at the conceptual site model 9 that she drew because it's a nice diagram sort of

explaining the potential exposure pathways that

11 she described.

2

12 MS. JACKSON: Your Honor, I object.

13 This hasn't been entered into evidence, and she's

14 going to walk through Dr. Keteles's analysis

15 before we've even heard from Dr. Keteles and use

16 her conceptual site model for her analysis. Is

17 that what's going on here? I feel like it's not

18 -- well, while I acknowledge the field log isn't

19 evidence, this exhibit is not yet. I'm happy if

20 she speaks generally to Dr. Keteles's --

21 MR. RYAN: Your Honor, we would be 22 more than happy to take her off the stand now and

144 145

1 highlight the paragraph of page eight of 66?

- 2 BY MR. RYAN:
  - Q And this paragraph starts with risk
- 4 assessors identifying pathways or mechanisms.
- Now, Dr. Walker, are you familiar with this
- paragraph of Dr. Keteles's report?
  - A Iam.

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- And could you discuss what you see
- 9 there and what your opinions are about --
- 10 A Sure. So this paragraph deals with
- 11 the fact that risk assessment or when conducting
- 12 a risk assessment, a risk assessor needs to think
- 13 through all the potential exposure pathways that
- 14 could occur. In this case, the historic paint
- 15 waste.

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mind?

- 16 So, you know, we can think about known
- 17 exposure pathways under the actual scenario
- 18 itself, and then it's critical to think about
- 19 potential exposure pathways, who else you might
- 20 be concerned about, what other theoretical
- 21 scenarios could be imagined for other people or
- 22 ecological receptors to come into contact with

1 And then it continues, potential exposure

could have occurred in the past, could be

5 future. So when we look at the conceptual site

little bit of overlap, and I want to make sure

11 response was heard. Can you finish, repeat the

10 her -- it's okay. I just want to make sure the

12 last part of what you just said, if you don't

model, Dr. Keteles has a few exposure pathways --

Q Can we go to the next page, please?

JUDGE COUGHLIN: Yes, there was a

THE WITNESS: Sure. And I think we

15 now have the contextual site model up in front of

all of us, so I can just refer to it there. So

17 you'll see here in red Dr. Keteles has several

18 different ways that a responder, worker, or

probability of these receptors coming into

22 disagree that we have a complete pathway here.

19 visitor, that there's evidence of or strong

21 contact with the waste, and that's where I

4 occurring currently, or could occur in the

2 pathways indicate that exposure to a contaminant

- 1 that paint waste --
- 2 Q So when you say ecological receptors
- 3 --

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- A Just organisms.
- 5 -- like a lizard walking on the ground
- would be an ecological receptor?
- 7 A Yes, yes. And so this paragraph in
- 8 her report talks about that. And so the
- conceptual site model that we'll look at in just
- a minute kind of lays out some of those exposure
- pathways that we both considered.
- 12 What is of note to me in this
- 13 paragraph is a statement that cites a few
- 14 different EPA publications as its sources. A
- completed exposure pathway exists when there's
- evidence of or using best professional judgment a
- 17 strong likelihood of human or ecological
- 18 receptors coming in contact with site-related
- 19 contaminants.
- 20 Q And just for the record, you just
- 21 quoted from her report.
- 22 A I did. I just read from the report.

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1 And so I think, just briefly, for

- potentially, you know, your understanding, Your
- 3 Honor --
- 4 JUDGE COUGHLIN: Please. From all of
- you, please, go ahead.
- 6 THE WITNESS: So just really briefly,
- 7 and I'm sure Dr. Keteles will explain this later
- 8 it sounds like, but, basically, what this
- represents is we have, you know, the drum sitting
- and then we have the different ways that the
- 11 paint waste could potentially come into contact
- with a responder, worker, or visitor either
- 13 through a process of volatilization directly from
- 14 the drum through a leak and then its
- transportation in the environment and then the
- 16 way it enters the body.
- 17 BY MR. RYAN:
- 18 Q So where she has red squares,
- 19 according to her legend in the upper left-hand
- corner, what we're looking at here on Exhibit 66,
- she says the pathway is complete. You said, you
- 22 testified earlier you didn't think the pathway

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- 1 was complete, so could you walk us through, like,
- 2 for air inhalation, there are three red squares,
- 3 could you tell us why it's inappropriate from
- 4 your opinion to have those red?
- 5 A Sure. So we've already discussed that
- 6 the Prime site was not open to visitors, so it's
- 7 highly unlikely that there are going to be
- 8 visitors that are exposed to this waste. With
- 9 regards to workers, the workers are rarely in the
- 10 area of this paint waste either. And then with
- 11 regards to responders, presumably this refers to
- 12 emergency responders who would come and be
- 13 summoned in case of a fire, they would be wearing
- 14 personal protective equipment, and so it's
- 15 unlikely that they would also have a significant
- 16 inhalation exposure to the paint waste.
- 17 Q And if you were to adopt this
- 18 methodology, this graphic here, what color would
- 19 you paint those three squares for air inhalation?
- 20 A I think that, certainly, it's
- 21 something less than red, so the pathway may be
- 22 complete, so orange or something less than

- $1 \hspace{0.1in}$  orange. There's nothing between white and
- 2 orange.
- 3 Q You testified earlier that you
- 4 considered the probability of exposure here, and
- 5 correct me if I'm mischaracterizing your
- 6 testimony in any way, as relatively low.
  - A Yes.
  - Q And how would you fit that
- 9 characterization using Dr. Keteles's graphic
- 10 here

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- 11 A Relatively low is not one of the
- 12 categories that I can choose here so --
- Q Well, if you were to modify this
- 14 slightly, how would you do that?
- 15 A These red would go to orange.
- Q Okay. So on leaks, she has two red
- 17 and one orange. Could you tell us how you
- 18 interpret that?
- A So what we're showing them is that, if
- 20 material were to leak from the drum, potential
- 21 exposure pathways of concern are through a dermal
- 22 route of exposure, through the skin. And so,

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- 1 similarly, you know, we don't have visitors on
- 2 site; and then, for responders, they would,
- 3 again, be wearing personal protective equipment.
- 4 And for workers, I just think it's, again, highly
- 5 unlikely for all the reasons discussed that
- 6 they're coming into contact with the paint.
- 7 Q So would you agree that, for dermal,
- 8 it should not be red, those two, first two
- 9 squares?

- A I do.
- 11 Q And on the third category on this
- 12 graphic, figure three, on Complainant's Exhibit
- 13 66, the last category at the bottom is soil, and
- 14 it shows both dermal and ingestion. Could you
- describe your analysis of that, please?
- 16 A Same thing we've already talked about.
- 17 The paint waste was unlikely to reach the soil,
- 18 but, if it was, the responders would be wearing
- 19 personal protective equipment if they were
- 20 dealing with it. The workers are unlikely to be
- 21 there. Ingestion, I believe, was described as
- 22 accidental ingestion from dust that may be

- 1 contaminated and then got onto the skin of
- 2 workers, and so, again, a low probability of them
- 3 being there.
- 4 Q Is there any evidence of this paint
- contaminating any dirt in the area?
- 6 A Not that I'm aware of.
- 7 MR. RYAN: May I just this moment,
- 8 Your Honor?
- 9 JUDGE COUGHLIN: Yes. And if you
- 10 don't mind, I just, I think it's clear, but I
- 11 just want to make sure. So with regard to this
- 12 conceptual model that we've been looking at, is
- 13 it your opinion and where you differ from that of
- 14 Dr. Keteles when she presumably testifies about
- 15 this that the red in each of these categories
- 16 would be, at best, orange, if not less, as
- 17 depicted in this legend?
- 18 THE WITNESS: Yes.
- 19 JUDGE COUGHLIN: Okay.
- THE WITNESS: And I'm using this as an
- 21 example. There are also several paragraphs in
- 22 her report where she describes variously high

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- 1 probabilities of exposure or significant risks,
- 2 and, generally, I disagree with that
- 3 characterization of risk for any of these
- 4 exposure pathways.
- 5 JUDGE COUGHLIN: Okay. Thank you.
- 6 MR. RYAN: I have no further
- 7 questions. Thank you, Dr. Walker.
- 8 **CROSS-EXAMINATION**
- 9 BY MS. JACKSON:
- 10 Q Good morning, Dr. Keteles. I'm sorry.
- 11 Dr. Walker.
- 12 A Good morning.
- 13 Q Just because of Dr. Keteles's report.
- 14 Tapologize. Just on my mind. Let's start
- 15 again. Good morning.
- 16 A Good morning.
- 17 Q Let's talk generally about your
- 18 assessment regarding the potential for exposure
- 19 based on the storage conditions. And you
- 20 referred to the SDS, and you referred to the
- 21 hazard statements. I'd like to take a look at

1 vapors, correct? I'll be happy to pull it up if

A My understanding is that, because this

4 was not locked away entirely, there is potential

5 for some workers to come by and be exposed to

Q And you testified as to potential

8 health effects from the concentration of the

vapors, not necessarily to describe the low

10 concentrations but just concentrations generally

A That's what the SDS contains. It says

15 some of the symptoms that could be experienced.

A Those are symptoms, yes. And as I

understand it, no one who has been around this

Q And those are potential adverse health

11 being irritation and dizziness and headaches; is

14 that, at higher concentrations, those would be

very, very low levels of vapors, yes.

22 those real quick.

2 you'd like.

12 that correct?

17 effects, correct?

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- 1 Okay.
  - Q If you could pull up CX-32 at page 32.
- 3 And this is the SDS for the Universal Urethane
- 4 yellow primer.
  - A That's correct.
- Q And those hazard statements are up
- 7 there at the top. If you could read those real
- 8 quick.
- 9 A This signal word hazard statements?
- 10 Q
- 11 Okay. Flammable liquid and vapor.
- 12 Harmful if swallowed or if inhaled. Causes
- 13 serious eye irritation. Causes skin irritation.
- 14 May cause an allergic skin reaction. May cause
- cancer. May damage fertility or the unborn
- 16 child. My cause respiratory irritation. May
- 17 cause damage to organs through prolonged or
- 18 repeated exposure.
- 19 Q Thank you. And, in fact, in your
- 20 expert report that's been admitted at RX-3, you
- acknowledge that some workers may have passed by
- 22 the drums and could have been exposed to solvent

- 1 talking about potential effects here, not actual.
  - A Sorry. Can you restate the question?
  - 3 Q I was asking you about potential
  - health effects.
  - 5 A Can you restate the entirety of the
  - 6 question? Sorry.
  - 7 Q Okay. I asked about potential adverse
  - health effects, I did not ask about whether or
  - not anybody at the facility experienced those
  - 10 health effects.
  - 11 A So the SDS does report on the
  - 12 potential health effects that could be
  - 13 experienced by high enough exposures, yes.
  - 14 Q And would you agree with the SDS?
  - 15 Α Yes.
  - 16 Q Okay. And in this case, at the Prime
  - 17 facility, you discussed the storage location and
  - 18 that kind of thing. The drums were stored
  - 19 outside, correct?
  - 20 A Yes.
  - 21 Q For over 300 days.
  - 22 A That's my understanding, yes.

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- 1 Q And that included the summer months.
- 2 A Yes.
- 3 Q And some of those days in Salt Lake
- 4 City exceeded 95 degrees; is that correct?
- 5 A Yes.
- 6 Q And some even exceeded even a hundred
- 7 degrees, correct?
- 8 A I would have to look at the
- 9 temperature data again. I didn't see any days
- 10 that went over a hundred degrees for that actual
- 11 year.
- MS. JACKSON: Can you pull up RX-19?
- 13 BY MS. JACKSON:
- 14 Q And, admittedly, this is kind of
- 15 grass. It's not actual temperature data. It's
- 16 just kind of a representation. But if you, I
- mean, if you see that line, it certainly looks at
- 18 a hundred, doesn't it?
- 19 A Squinting at this, I can actually see
- 20 the line at a hundred.
- 21 Q Sorry. I was trying to help.
- 22 A Sorry. It just changed.

- $1 \hspace{1.5cm} \hbox{JUDGE COUGHLIN: I just want to make} \\$
- 2 sure I'm on the right page. What page are you
- 3 on, Ms. Jackson?
- 4 MS. JACKSON: RX-11 at page 15, August
- 5 of 2016.
- 6 MR. RYAN: Is it 11 or 19?
- 7 MS. JACKSON: Oh, my apologies.
- 8 Where's the page. Oh, 11. Sorry.
- 9 JUDGE COUGHLIN: Okay. So RX-19, page
- 10 11?

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- MS. JACKSON: Yes, Your Honor.
- 12 JUDGE COUGHLIN: Okay.
- 13 BY MS. JACKSON:
- 14 Q We're looking at August of 2016, and
- 15 it appears that it's up at a hundred.
  - A I can see the line being listed out
- 17 from a hundred, and it looks like, I think that
- would be August 2nd, the temperature may have
- 19 reached 100 degrees. Otherwise, the rest of the
- 20 line is below a hundred degrees, although close.
- ${\tt 21} \qquad {\tt Q} \quad {\tt Okay.} \,\, {\tt And then, presumably, there are}$
- 22 some other dates in August that were at least

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1 over 95 degrees, correct?

- 2 A We're looking at the data, and it does
- 3 appear that there were some days in August that
- 4 were over 95 degrees, correct.
  - MS. JACKSON: Can you go to page ten?
- 6 BY MS. JACKSON:
- 7 Q And here, again, there appears to at
- 8 least be a couple of days in this exhibit, RX-19
- 9 at page ten, reflecting over a hundred degrees?
- 10 A Yes.

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- 11 Q Okay. And during these times, you
- 12 agree that the bunghole covers were missing on
- 13 the drums?
- 14 A Yes, that's my understanding.
- 15 Q And the instructions in the SDS are
- 16 intended to prevent exposure, correct?
- 17 A That's correct.
- 18 Q In your opinion, you testified that
- 19 there wouldn't have been any individuals in the
- 20 proximity of the drums for an extensive enough
- 21 period to create an exposure; is that correct?
- A To create an exposure of any

- 1 significance, that's my understanding from my
- 2 conversations with Mr. Singleton, as well as
- 3 reviewing the rest of the evidence.
- 4 Q Okay. But I didn't hear you mention
- 5 anything about the construction activity going on
- 6 on the property.
- 7 A I did not.
  - Q Okay. So you didn't consider the
- 9 construction activity in making your assessment?
- 10 A The construction activity is something
- 11 I learned about subsequent to writing the report.
- 12 Q Okay. And it doesn't change your
- 13 opinion?

- 14 A It does not change my significant
- 15 conclusions.
- Q Okay. What about, so earlier this
- 17 morning, we heard Mr. Singleton talk about the
- 18 maintenance shop at the Prime facility, and I
- 19 believe that's in the pictures. If you want, we
- 20 can pull them up. But when you were looking at
- 21 that facility in proximity to the drums --
- 22 actually, let's pull it up. I think it will be -

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- 1 CX-10 at page 16. When you were evaluating the
- 2 distance from any structures, I believe you were
- 3 looking at this. This is a maintenance facility
- 4 at the site, according to Mr. Singleton; is that
- your understanding, as well?
- A That is my understanding.
- 7 Q And we heard Mr. Singleton talk about
- 8 how maintenance, Prime does its own maintenance
- on shop, so, presumably, there would be traffic
- 10 kind of moving to and from the maintenance shop,
- wouldn't there?
- 12 A Yes.
- 13 Q Okay.
- 14 JUDGE COUGHLIN: Was this the building
- 15 from which you measured the 200 to 250?
- 16 THE WITNESS: Yes, I believe so. So
- 17 it's about 200 to 250 feet away from where the
- 18 trailer is stored.
- 19 JUDGE COUGHLIN: Okay. Thank you.
- 20 MS. JACKSON: One moment, please.

A So what I'm saying is low is the vapor

Q Thank you. And that vapor pressure,

A I actually don't know the answer to

Q Okay. We can go to your report first

and then also the SDS, but in your report at RX-

20 at two. Now, if I can find -- I might be able

her report, will you just pull up CX-32 at 39?

Q Right there, it's indicated, it's also

indicated in your report, but do you see that on

Q But the drums were stored outside,

the SDS where it's indicated at room temperature?

BY MS. JACKSON:

A The vapor pressure, yes.

MS. JACKSON: Actually, rather than

pressure of the paint as reported on the SDS.

as reported by the SDS, is based on room

temperature; isn't that right?

21 BY MS. JACKSON:

1 should say, yes.

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8 that.

12 to find it better.

15 Scroll down, please.

22 Q And just to clarify, you didn't

- 1 actually visit the Prime facility when the drums
- were stored there.
- 3 A I did not.
- 4 Q Okay. Have you visited since?
- 5 A I have not.
- 6 Q Okay. I want to turn for just a
- 7 second to your discussion of volatilization from
- the drums and the evaporation rate, and you can
- correct me if I misstate. I am no chemist or
- 10 toxicologist. The evaporation rate of the
- strontium chromate primer is slow; is that
- 12 correct?
- 13 A That's correct.
- 14 Q And the evaporation rate is a measure
- 15 of how fast liquid changes into a vapor form?
- 16 A That's correct.
- 17 Q And the vapor pressure of the
- 18 hazardous waste is also low, right?
- 19 A The vapor pressure of the paint?
- 20 Q Of the -- yes.
- 21 A Is what we're talking about.
- 22 Q Of the drums based on the SDS, I

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- They were.
- And the temperature impacts
- 3 evaporation?

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- 4 A It does.
- 5 Q And in warmer temperatures,
- 6 evaporation rate increases; isn't that right?
- 7 A It does.
- 8 Q And in warmer temperatures, the vapor
- 9 pressure can also increase, correct?
- 10 A Yes. So then I would also direct you
- 11 to go look at the boiling point so --
- 12 Q No, you've answered my question.
- 13 Thank you. They can ask you about that in a
- 14 minute.
- 15 Okay.
- 16 Q And the paint is generally intended to
- 17 evaporate quickly, isn't that right? Just paint
- 18 generally. You've talked about household
- products and, in particular, this product, which
- you've evaluated, it's intended to evaporate
- 21 quickly as part of being paint. You wouldn't
- 22 agree with that?

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Neal R. Gross and Co., Inc. Washington DC

22 correct?

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- 1 A I'm not sure that makes sense that a 2 paint is intended to evaporate.
- 3 Q It's intended to dry quickly.
- 4 A Paint needs to dry. Lagree.
- 5 MS. JACKSON: Go ahead.
- 6 JUDGE COUGHLIN: Well, so does that
- 7 have an impact on evaporation considerations, the
- 8 fact that its intended purpose is ultimately to
- 9 dry?
- 10 THE WITNESS: I don't believe that
- 11 there's necessarily a connection there. The
- 12 chemicals inside the paint that evaporate more
- 13 rapidly than some of the others, like the
- 14 strontium chromate, my understanding is they're
- 15 predominantly used as solvents or rather
- 16 materials that are necessary to bring everything
- 17 into, you know, one cohesive solution, not
- 18 necessarily related to the function of the paint
- 19 drying.

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- 20 JUDGE COUGHLIN: Okay.
- 21 THE WITNESS: And, again, looking at
- 22 the SDS in front of me, the evaporation rate of

- 1 the paint is 0.21. The standard of reference is
- 2 butyl acetate, which equals one, and the
- 3 categorization of anything that is a slow
- 4 evaporation rate is anything under 0.8. So we're
- 5 four-fold below the cutoff for what would be
- 6 considered as slow evaporation rate.
  - BY MS. JACKSON:

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- Q Okay. And we talked about how the
- 9 evaporation rate is slow, but it's dependent on
- 10 temperature, correct?
- 11 A That's correct. So if we want to go
- 12 back to the boiling point, the boiling point is
- 13 greater than a hundred degrees Fahrenheit, so the
- 14 boiling point is a reference and we don't know
- 15 how much higher than that it is. But, again,
- 16 yes, I will agree with you on principle that, as
- 17 ambient temperatures increase, we will have an
- 18 increase in evaporation of vapors.
- 19 Q Okay. And according to the SDS, the
- 20 vapor pressure is pretty close to the flashpoint,
- 21 isn't it?
- A Could we look at that again?

- Q Sure. CX-32 at 39.
- A Can you repeat your question, please?
- 3 Q Sure. According to the SDS, the
- 4 primer's vapor pressure is very close to the
- 5 flashpoint, isn't it?
- 6 A The primer's vapor pressure is given
- 7 in kilopascals. I'm not sure how you want me to
- $8 \hspace{0.1in}$  compare those things. The units are not the
- 9 same.
- 10 Q But you can do a comparison if you
- 11 were a chemist, correct?
- 12 A That's beyond my mental math capacity,
- 13 ves.
- 14 Q But you're not a chemist, correct?
- 15 A I'm a toxicologist, correct.
- 16 Q Okay. And does the flashpoint in the
- 17 chemical indicate a high volatility?
- 18 A A high volatility. Not necessarily.
- 19 Q It's flammable, isn't it?
- 20 A It is listed as flammable; that's
- 21 correct.
- 22 Q And if there were, based on the

- 1 flashpoint data from NEIC and the flashpoint data
- 2 reflected here in the SDS, if there were
- 3 temperatures that caused the drums to exceed that
- 4 flashpoint of 111 degrees Fahrenheit -- sorry. I
- 5 may be summarizing incorrectly. I want to make
- 6 sure I'm right.
- 7 What was the flashpoint in the drums?
- 8 A It's 112 degrees Fahrenheit.
- 9 Q Sorry. Yes, I realized I was using
- 10 the NEIC data. If the drums were to exceed this
- 11 temperature, there could be enough vapor to
- 12 ignite, correct?
- A So the closed-cup methodology, as we
- 14 talked about earlier, is not necessarily
- 15 indicative of real world conditions. What I
- 16 understand about the difference between the
- 17 closed-cup and the open-cup methodology, so,
- 18 again, the open cup is where you have, it's not a
- 19 sealed environment, which more accurately
- 20 represents the drums. Here we have the bungholes
- 21 that are open, and so any vapors as the paint is
- heated are going to come out of there and not

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- 1 contribute to the accumulation of vapors that are
- 2 potentially at a concentration which can be
- 3 ignitable. Does that make sense? We have a
- 4 release valve, basically.
- 5 So my understanding is that the
- difference typically in measured flashpoint
- 7 between an open and closed-cup system is
- 8 approximately 10 to 20 degrees Fahrenheit, so
- 9 we'd need another 10 to 20 degrees to reach a
- 10 flashpoint most likely under these real world
- 11 conditions.
- 12 Q Okay. But you didn't take
- 13 measurements at the site in terms of the
- 14 volatiles or volatility.
- 15 A No, I didn't visit the site.
- 16 Q My next question really has to deal
- 17 with -- there is flashpoint data. We have that
- 18 from NEIC. And you, I believe, testified earlier
- 19 about a lack of an ignition source, correct?
- 20 A That's correct.
- 21 Q And you also said that you haven't
- 22 visited the site. So my question to you is --

- 1 let's just talk about some potential ignition
- sources. Would static electricity be an ignition
- 3 source?

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- 4 Α Theoretically, yes.
  - Or a spark from metal hitting
- concrete?
- 7 A Theoretically, yes.
  - Or drums hitting each other when
- 9 they're moved?
- 10 A If a spark was generated through that
- 11 process, yes.
- 12 Q Okay. And what about construction
- 13 equipment? Could it create an ignition source,
- 14 like backfiring or something like that?
- 15 A Theoretically, that could be an
- 16 ignition source.
- 17 Q Okay.
- 18 A I think it's important --
- 19 Q Nope, you've answered my question.
- 20 Thank you. They can handle it on redirect.
- 21 MR. RYAN: Your Honor, I think she's
- entitled to answer --

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1 anyway at some point.

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2 BY MS. JACKSON:

- 3 Q Okay. And you learned about the
- construction after you wrote your report, right?
  - A That's correct.
- 6 Q And could the distance from the
- 7 construction affect your conclusions? I mean,
- did you consider that when you -- because I
- believe you testified earlier that, you know,
- none of your opinions have changed based on the
- 11 information that you've learned.
- 12 A Yes, my significant conclusions had
- 13 not changed. When I wrote my report, I was not
  - aware that there was construction, and my
- understanding of the construction does not change
- 16 my conclusion significantly regarding the low
- 17 probability of a fire occurring.
- 18 Q I think we're almost done. I just
- 19 want to talk to you a little bit more about the
- 20 risk of fire. You talked about if the drums were
- to catch on fire, aerosolization of the chromium
- 22 could occur; is that correct? Or at least it's

1 MS. JACKSON: I mean, she answered my 2 question.

3 MR. RYAN: I mean she's entitled to

4 finish her sentence.

5 JUDGE COUGHLIN: Go ahead and --

6 THE WITNESS: Thank you.

7 JUDGE COUGHLIN: And I appreciate it's 8 cross. It really should just be yes or no, but

9 I'll let -- it's only going to get covered on

10 redirect anyway, so just go ahead and --

11 THE WITNESS: Thanks. So I just

12 wanted to point out that that ignition source

13 needs to be directly at the level of the paint, 14 so we need to have it inside the actual barrel at

- 15 the surface of the paint to be considered at the
- 16 flashpoint. So if something sparks, but it's 20
- 17 yards away, that's not likely to be something
- 18 that's going to cause a fire.
- 19 JUDGE COUGHLIN: Actually, I didn't
- 20 want to interrupt you again, but that is a
- 21 question I was thinking about. So thank you for

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- 1 in your report.
- 2 A Yes. So chromium fumes, and I'm
- 3 relying upon occupational studies related to the
- 4 potential carcinogenicity of this product, but
- 5 there are descriptions that chromium fumes can
- 6 come off under industrial settings where they're
- 7 being heated to hundreds of thousands of degrees.
- 8 So either electroplating or welding or other
- 9 scenarios like that, there's the potential for
- 10 chromium fumes, yes.
- 11 Q And those could be ingested, correct?
- 12 A I'm sorry?
- 13 Q Those could be ingested, the chromium
- 14 fumes? If a worker were nearby, chromium fumes
- 15 could be ingested.
- 16 A No.
- 17 Q No?
- 18 A Technically, ingested means that
- 19 you're swallowing a substance.
- Q Okay. For the layperson, it could be
- 21 taken into the body.
- A They could be inhaled, yes.

- 1 Q Okay. And in the event of a fire, the
- 2 SDS indicates that the primer could product
- 3 decomposing byproducts; is that correct?
- 4 A It does.
  - Q Like carbon monoxide, phosphorus,
- 6 halogenated compounds; is that right?
  - A That's what's listed, yes.
  - Q And in the event of a fire, first
- 9 responders or employees could be exposed to these
- decomposition products, couldn't they?
- 11 A First responders would be wearing
- 12 personal protective equipment, as we discussed,
- 13 yes.
- 14 Q Would they be wearing PPE if they
- 15 didn't know what was in the drums?
- 16 A I can't attest to that.
- 17 Q And, in fact, in your report, you said
- 18 something about that the potential exposure for
- 19 fire could be reduced if the fire, because the
- 20 fire might have been rapidly discovered and
- 21 extinguished at the facility. Do you recall
- 22 that?

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- 1 A I do.
- 2 Q And to your knowledge, before EPA
- 3 arrived, Prime had not conducted any waste
- 4 characterization, had it?
  - A I don't know the answer to that.
- 6 Q Okay. Well, the drums that were
- 7 stored at the facility weren't labeled, were
- 8 they?

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- 9 A I do not believe that they were.
- 10 Q And without a label, it's likely that
- 11 Prime or the first responders wouldn't know what
- 12 was in the drums; isn't that right?
  - A I'm not certain about that.
- 14 Q I think I just have -- oh, if we could
- 15 look quickly at CX-10, page 16. You testified
- 16 about your understanding of the proximity, and
- 17 then you also talked about the materials being
- 18 stored on a concrete pad. I just wanted to
- 19 better understand what you mean or your
- 20 understanding of a concrete pad. Is this what
- 21 you're referring to?
- 22 A The trailer appears to be on a

- 1 concrete surface here. My understanding was,
- 2 from my discussions with Mr. Singleton, as well
- 3 as looking at a variety of aerial photos, that
- 4 the trailer was on a concrete pad in every
- 5 scenario that I looked at.
- 6 Q Okay. Would you consider this a pad
- 7 or just a paved parking lot?
- 8 A I don't have the expertise to
- 9 distinguish that, especially when it has, you
- 10 know, some gravel and rocks on top of it.
- 11 Q And some dirt?
- 12 A Sure.
- Q Okay. And you're not aware of any air
- .4 monitoring conducted by Prime at the facility,
- 15 are you?
- 16 A I'm not.
- 17 Q And you're not a materials expert,
- 18 materials management expert, I should say?
- 19 A I am not a materials management
- 20 expert, no.
- 21 Q I had one more question, and now I
- 22 can't find it. So give me one second, please.

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1 JUDGE COUGHLIN: Take your time.

2 BY MS. JACKSON:

- 3 A That's correct. Q Today, you looked at Dr. Keteles's --
- 4 I can't find, but I'm just going to look for it. 4
  - Today, you looked at Dr. Keteles's expert report
- 6 and her conceptual site model; is that right?
  - A Yes.
- 8 Q Did you perform a conceptual site
- 9 model for this, for your analysis in this case?
- 10 A I did not draw out a formal conceptual
- 11 site model, no.
- 12 Q Okay. Thank you. No further 13 questions.
- 14 REDIRECT EXAMINATION
- 15 BY MR. RYAN:

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- 16 Q Dr. Walker, on cross-examination, were
- 17 there any answers you wanted to give that you
- 18 were not allowed to give?
- 19 A I had that impression, but I don't
- 20 recall what they specifically were anymore.
- 21 Q And regarding the people having
- 22 theoretical access to the site, do you recall Mr.

- 1 Singleton, you were in the courtroom this morning
- when Mr. Singleton testified?
  - Q And you said you talked to Mr.
- Singleton on your own in the past?
- A I did.
- 7 Q And what's your understanding of how
- many people went by that area they call the
- 9 boneyard?
- 10 A My understanding is that very few did,
- and it was, again, sort of a remote location
- 12 where things were put intentionally to just be
- 13 out of the way. Accordingly, they weren't
- accessed regularly, and no one walked by or stood
- 15 there or congregated.
- 16 MR. RYAN: I have no further
- 17 questions. Thank you, Your Honor.
- 18 JUDGE COUGHLIN: Okay. I wanted to
- 19 just follow-up on the ignition source because I
- think you had responded, but, in your opinion,
- how close would it -- I know you had said
- 22 something from 20 yards away wouldn't impact and

- 1 you discussed it needing to be at the same level.
- 2 Can you offer an opinion as to how far away it
- would need to be in order to impact the material
- as an ignition source?
- 5 THE WITNESS: Yes, I can offer an
- 6 opinion, but it's going to be sort of
- 7 frustrating. It depends because it's highly
- 8 reliant upon the environmental conditions. So if
- 9 we're talking about, so we've already discussed
- 10 that the concentration of how much potentially
- 11 ignitable vapor is coming off is temperature
- 12 dependent and that there's a higher probability
- 13 that some vapors would come off on a hot day. If
- 14 that was a hot windy or breezy day, that's going
- 15 to increase the movement of those and dispersion
- 16 of those up into the environment. So in that
- 17 case, it's also hard to image that an ignition
- 18 source from, you know, some 10, 20, 30 feet away
- 19 could have any impact on the ability of those
- 20 vapors to ignite.
- 21 I think, you know, to your point, with
- 22 regards to the closed-cup methodology or the

- 1 open-cup methodology that's actually used to
- generate that 112-degree flashpoint, the ignition
- source is passed right at the surface of the
- material being tested, so there's no distance
- 5 basically.
- 6 JUDGE COUGHLIN: Okay.
- 7 THE WITNESS: And a closed
- 8 environment.
- 9 JUDGE COUGHLIN: Okay.
- 10 THE WITNESS: I remembered one thing.
- 11 Could I respond to counsel's question about --
- 12 JUDGE COUGHLIN: Yes.
- 13 THE WITNESS: So the one thing I also
- 14 just wanted to mention with regards to thinking
- 15 about temperature and ambient temperature is that
- 16 we're talking about fluctuating daytime highs and
- 17 lows, and so, when we talk about a day that
- 18 reaches a hundred degrees, that's the high point
- 19 for that day. The number of hours that day might
- 20 reasonably be at a hundred degrees is something
- 21 less than 24 hours, we can say with confidence,
- 22 maybe six hours or something like that.

180 181 1 And so, similarly, for paint to, the

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2 entirety of the barrel of paint to heat up to 3

that temperature, you just think about baking 4 something, right? You need to put your material

5 into that oven and then expose it to that higher

6 temperature for some period of time for it to

7 rise up to that temperature.

8 So, again, you know, it's a little bit 9 misleading to think about, you know, it's sitting

10 out in a hundred degrees and so we have the

11 instantaneous potential to reach the flashpoint.

12 That's not actually the case in a real world

13 scenario. Does that make sense?

14 JUDGE COUGHLIN: Okay. Is there an 15 indicator as to over what period of time or how 16 sustained a temperature needs to be in order to 17 have an impact?

18 THE WITNESS: I don't know that, but, 19 you know, it's dependent on volume. We have 20 large barrels of paint here.

21 JUDGE COUGHLIN: Okay. I had a 22 question before I give the chance for questions 1 by you, Ms. Jackson, but before I ask it I want

to make sure that there's actually something in

evidence representative of it. And I wasn't sure

if there was a depiction in some of these photos

of some of the product being on the outside of

the drum and dried. Am I hallucinating, or does

that exist; do you know?

MS. JACKSON: That definitely exists.

9 MR. RYAN: Yes, it does exist, Your

10 Honor. They're in the August 24th inspection.

11 JUDGE COUGHLIN: Okay.

12 MR. RYAN: And it appears that they

13 are coming from the top of the barrel. The

14 barrels were moved for the EPA so they could

15 sample them, and you can see that there's fresh 16 paint coming down the side and on the ground.

17 JUDGE COUGHLIN: Okay.

18 MS. JACKSON: I believe there's some

19 reflected even in pictures in the drums, but I

20 can try to find those and show them to you later,

21 if that helps.

22 JUDGE COUGHLIN: Well, I had a

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1 question for Dr. Walker about it. Do you all

2 happen to know which exhibit page number that may

3 be could get pulled up so she could look --

4 MS. JACKSON: Well, we have some up

5 already from the NEIC inspection. That is

6 Exhibit --

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7 JUDGE COUGHLIN: CX-10 maybe or --

MR. RYAN: Yes, Your Honor.

9 MS. JACKSON: CX-10 at page 56.

10 JUDGE COUGHLIN: Okay. Let me just go

11 there. And I guess, Dr. Walker, let me know if

12 you actually need to see it. It's more of a

general question. I just wanted to make sure I

14 wasn't referring to something that didn't

15 actually exist here.

16 But if there's some of this paint on

17 the outside of the drum, it's been spilled,

18 whether it's remnants from the fire or moving or

19 whatever, but it's on the outside of the drum and

20 it's dried. What impact does that pose? What

21 risk comes from that environment? Does it matter

22 at all?

1 THE WITNESS: Yes, that's a good

question. Yes, so, once the paint has dried,

what can be said about it is that those volatile

chemicals that we're talking about of being

inhalation concern have evaporated, so they're no

longer a concern. The strontium chromate, for

example, is also still chemically bonded into

8 that paint and can no longer be released or can't

be released from that paint unless it was ground

up into some kind of dust or otherwise made

11 bioavailable to be inhaled.

12 JUDGE COUGHLIN: Okay. Thank you.

13 Mr. Ryan, was there anything else you needed to

14 cover?

15 MR. RYAN: No, Your Honor.

16 JUDGE COUGHLIN: Okay. And any

17 questions, Ms. Jackson?

18 MS. JACKSON: No further questions.

19 JUDGE COUGHLIN: Okay. Thank you very

20 much, Dr. Walker.

21 THE WITNESS: Thank you.

22 MR. RYAN: I'm ready to proceed, Your

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- 1 Honor. I think we have one more witness, as I 2 understand it, for rebuttal.
- 3 JUDGE COUGHLIN: Right. Not anything
- 4 else from respondent?
- 5 MR. RYAN: Oh, I'm sorry. Yes, Your
- 6 Honor.
- 7 JUDGE COUGHLIN: Okay, all right.
- 8 And, complainant, I'm assuming you're planning to
- 9 call at least Dr. Keteles, right?
- 10 MS. JACKSON: Yes, Your Honor.
- 11 JUDGE COUGHLIN: Okay. Would you all
- 12 like a brief break before we get to that point?
- 13 MS. JACKSON: I could use even just
- 14 five minutes, but just go to the restroom would
- 15 be great.
- 16 JUDGE COUGHLIN: Sure.
- 17 MS. JACKSON: Or we could do lunch,
- 18 actually, if you prefer, and then come back after
- 19 lunch. It's up to you. I will not be able to
- 20 complete my examination before lunch, if that
- 21 makes a difference.
- 22 JUDGE COUGHLIN: Well, then why don't

- 1 we do that? Why don't we take an earlier break
- for lunch just so that it might, I'm assuming it
- would be helpful to all of you to be able to
- cover it all in one span of time. So it's about
- almost 11:15. We're going to come back at 11:45,
- and we'll pick up. Is that -- well, all right.
- 7 MS. JACKSON: This is the last
- 8 witness, if that helps.
- 9 JUDGE COUGHLIN: Okay.
- 10 MS. JACKSON: We are not concerned
- 11 about the time for today from our perspective, if
- 12 you want to allow a little more time for lunch.
- 13 But we'll defer to you.
- 14 JUDGE COUGHLIN: Okay. How are you
- 15 all feeling in terms of any potential rebuttal?
- 16 I mean, basically, give me a sense, can we wrap
- 17 it up by tomorrow at the latest?
- 18 MR. RYAN: I suspect we can wrap it up
- 19 today.
- 20 JUDGE COUGHLIN: Okay. Even with an
- 21 hour break?
- 22 MR. MCKAY: Well, I would ask that of

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- 1 in a half an hour. An hour would be nice. And I
- believe we'll be done today.
- 3 MS. JACKSON: Yes.
- 4 JUDGE COUGHLIN: Okay, great. So,
- respondent, let me just check in with you, too,
- because I don't know to what extent you might
- anticipate any rebuttal. Are you all fairly
- comfortable with the notion that we would be
- concluding the hearing entirely today such that
- 10 we should look into arranging travel? It's no
- 11 pressure. We have until tomorrow, but I'm just
- 12 trying to get a sense.
- 13 MR. RYAN: I think it's highly likely.
- If the EPA said they expect about an hour for Dr.
- 15 Keteles, I do not expect lengthy cross-
- 16 examination. Unless they're going to put another
- 17 witness on and that would go on forever, I would
- 18 suspect that we'll finish today.
- 19 JUDGE COUGHLIN: Okay, all right. So
- 20 let's do that. Let's take an hour. Let's come
- back at 12:20, and we'll go from there. Okay,
- 22 great. Thank you.

- 2 JUDGE COUGHLIN: Okay.
- 3 MS. JACKSON: Just full disclosure,
- 4 we're going to come back with Dr. Keteles. I
- 5 can't specifically say how long, an hour at most
- 6 probably, and then potentially Ms. McNeill. I
- 7 haven't deferred with counsel so --
- 8 MR. FIGUR: We will be done today.
- 9 MS. JACKSON: Yes, we will be done 10
- today, though.
- 11 MR. RYAN: With an hour break for
- 12 lunch?

1 EPA.

- 13 MS. JACKSON: Yes.
- 14 MR. FIGUR: Yes, especially
- 15 considering the building is opened until six. We
- 16 won't get close to six, if you ask me personally,
- 17 but there's four of us here today.
- 18 MS. JACKSON: Part of it is 11 hours
- 19 so that we can change our flights.
- 20 MR. FIGUR: Well, and also our lunch
- 21 is across the street, so we literally run across

22 the street, eat, and come back and try to make it

- (Whereupon, the above-entitled matter 2 went off the record at 11:17 a.m. and resumed at 3 12:29 p.m.)
- 4 JUDGE COUGHLIN: Thanks for your 5 patience. I'm the one who was tardy trying to
- 6 change air travel. It's not fun with the federal
- 7 government, I'll just say that on the record
- 8 plain as day. For anyone listening, adjustments
- 9 are needed, from this humble ALJ's opinion.
- 10 MR. RYAN: Govtrip is your friend.
- 11 JUDGE COUGHLIN: What's that?
- 12 MR. RYAN: Govtrip is your friend.
- 13 JUDGE COUGHLIN: Oh, yes, yes. Okay.
- 14 But, anyway, thank you for waiting. I know I
- 15 kept you all waiting a little bit, so I'm sorry.
- 16 Are we ready to get started with your rebuttal
- 17 witness?
- 18 MS. JACKSON: Yes, Your Honor.
- 19 JUDGE COUGHLIN: Okay. Please go
- 20 ahead.

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11 that?

16 to the harm.

5 toxicology?

- 21 MS. JACKSON: The EPA would like to
- 22 call Dr. Kristin Keteles to the stand.

1 State University with an emphasis in

Q And what did you have to do to earn a

A I had to take a comprehensive list of

 $7 \quad \text{courses in toxicology, as well as chemistry and}$ 

biology. And then I had to complete original

Q And was there training involved in

A Yes. So as part of my training, I was

harm that could be caused from chemicals and to

15 look at exposures and how those exposures relate

Q And while you were working towards

18 your Ph.D., what kind of chemical agents did you

A I studied a wide variety. In my

21 dissertation, I looked at trace metals, such as

22 copper, cadmium, and zinc. I also looked at a

13 trained to evaluate the toxicity or potential

research and public that research.

4 Ph.D. with a specialization in environmental

- 1 JUDGE COUGHLIN: The witness is sworn.
- 2 Please go ahead.
- 3 WHEREUPON,
- 4 KRISTIN KETELES
- was called as a witness by Counsel for the
- Complainant and, after having first been duly
- 7 sworn, was examined and testified as follows:
  - **DIRECT EXAMINATION**
- 9 BY MS. JACKSON:
  - Q Good afternoon, Dr. Keteles.
- 11 Α Hello.
- 12 Q Can you please state your name for the
- 13 record?

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- 14 A Yes. My name is Kristin Keteles.
- 15 Keteles is spelled K-E-T-E-L-E-S.
- 16 Q Okay. I'd like to begin with some
- 17 questions about your educational background. Can
- 18 you please give us a summary of your education?
- 19 A So I have a Bachelor's of Science in
- 20 marine science from Coastal Carolina University
- with an emphasis in biology and chemistry, and
- 22 then I have a Ph.D. in zoology from Louisiana

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- benzo(a)pyrene. And then in my course work, I environmental toxicology.

  - - 5 toxin.
  - 6 Q Okay. Let's turn to your employment.
  - 7 Where are you currently employed?
  - 8 A I currently work for EPA's National
  - Enforcement Investigation Center, NEIC.
  - 10
  - 11 at EPA?
  - 12 A As a toxicologist.
  - 13 Q And how long have you worked for the
  - EPA as a toxicologist?
  - 15 A Fourteen years.
  - 16 Q And have you just been assigned to
  - 17 work in any other capacity for the EPA?
  - 18 A Yes, I was recently promoted to a
  - 20 Q And what does a science advisor
  - toxicologist do?

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1 variety of petrochemicals, such as phenanthrene,

studied a variety of chemicals, PCBs, fibers like

asbestos, and even biologicals, such as botulinum

- 19 science advisor toxicologist.
- 21
- 22 A So I'm considered an international

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- expert in the field of toxicology, and I provide 2 expert advice to EPA's senior leadership on
- 3 matters involving toxicology and risk assessment.
- 4 Q And what kind of work do you do 5 generally as an environmental toxicologist at the 6 FPA?
- 7 A So I've been a risk assessor for 14 8 years. I've worked in the regional pesticides
- program as a pesticides toxicologist. I was an
- 10 air toxics risk assessor. I was a toxicologist
- 11 for the Children's environmental health program,
- 12 and I also worked as a risk assessor in the
- 13 Superfund program assessing risk at hazardous
- 14 waste sites. And now, at NEIC, I primarily
- 15 assist the criminal program by, again, assessing
- 16 risk from the release of chemicals in criminal
- 17 cases, and then I synthesize information
- 18 regarding those releases to write expert opinion
- 19 reports on the potential for harm. And then I
- 20 often testify in court about that potential for
- 21
- 22 Q And you mentioned expert opinion

- reports. Are those reviewed by your peers?
  - A Yes. Per NEIC's accreditation, we are
- required to get our reports peer reviewed.
- 4 Q Okay. And what do you generally do to prepare reports and/or testimony for trial?
- 6 A Well, I look at the facts of the case,
- such as any environmental data, any information
- on exposure. I also research the inherent
- 9 toxicity chemical and use that information to
- 10 characterize risk or draw conclusions about risk
- or the potential for harm.
- 12 Q Okay. And, Dr. Keteles, what's
- 13 involved in performing or conducting risk
- 14 assessments?
- 15 So risk assessment is the process that
- 16 EPA uses in order to determine the nature and
- magnitude of effects from contaminants in the 17
- environment, whether it's a chemical or mineral
- 19 fiber, such as asbestos, or a biological. And
- 20 there's really two pieces of information that I
- 21 need to assess risk. One is I need to know the
- 22 inherent toxicity of the chemical, and the second

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- 2 the level that people would be exposed to, as

1 piece of information I need is exposure, which is

- 3 well as how long they might be exposed.
- 4 Q And have you done any work involving 5 the assessment of risk associated with the
- 6 potential exposure to hazardous substances?
- 7 A Yes, routinely, in my job. When I was
- 8 in the pesticide program, I would assess risk
- 9 from pesticide releases, spills, pesticide
- 10 misuses. Also, working as a Superfund risk
- 11 assessor, I routinely assess risk at hazardous
- 12 waste sites.
- 13 Q And can you provide an example of the
- 14 types of risk and adverse health effects
- 15 associated with hazardous substances that you've
- 16 analyzed?
- 17 A Yes. So for pesticides, I've assessed
- 18 risk from pesticide spills, like some of the
- 19 pesticides cause nervous system effects. And
- 20 then, at Superfund sites, I've looked at
- 21 petrochemical releases. I've also looked at
- 22 metals and assess risk from metals and some of

- 1 the adverse health effects, like, so for example,
- lead would be neurological effects. Arsenic is a
- 3 carcinogen, so I've looked at the risk of cancer.
- So a variety of different contaminants.
- 5 Q And have you published any scientific
- 6 articles?
- 7 A Yes, quite a few. My most recent work
- 8 has really been focused on new approach methods
- in toxicology. Those are methods like looking at
- cell-based tests in order to assess the toxicity,
- 11 particularly for chemicals which we don't have a
- 12 lot of data. So most of my more recent
- 13 publications have been, you know, focused on
- 14 these new approach methods.
- 15 Q And have you given professional
- 16 presentations on toxicology?
- 17 A Yes, quite a few. Recently, I had
- 18 presented about a pesticide exposure incident
- 19 where bison were potentially exposed to a
- 20 rodenticide, which put humans that might consume
- those bison at risk. I've also presented on
- 22 worker lead exposure scenario and potential risk

196 197 1 and harm to those workers. 1 Toxicology, similar to Dr. Walker. 2 2 Q Thank you. Dr. Keteles, do you serve Q And what is required to become a 3 on any committees or groups for EPA? member of the Society of Toxicology? 4 4 A Yes. I've served on EPA's Risk A The requirement is to have work 5 Assessment Forum. I was actually a chair of the experience in the field of toxicology, as well as 6 Human Health Oversight Committee, HHOC. And what there's an education requirement. And then you 7 the HHOC does is we provide oversight to the also have to get a recommendation from a current 8 member. 8 development of guidance on risk assessment, so 9 9 the HHOC oversees technical panels that actually Q Okay. And, Dr. Keteles, do you have 10 write risk assessment guidance that's used by the 10 a curriculum vitae? 11 agency across programs. A Ido. 12 12 Q Okay. And how about the Science MS. JACKSON: Ms. Tribbett, if you 13 Support Panel? 13 could pull up CX-63. Can you just scroll to the 14 A Yes. So the Science Support Panel is 14 bottom, please? 15 under the agency's Science Technology Policy 15 (Whereupon, the above-referred to 16 Council, the STPC, and we serve as senior 16 document was marked as Complainant's Exhibit No. 17 advisors to agency leadership, the career 17 63 for identification.) 18 leaders. 18 BY MS. JACKSON: 19 Q Okay. And, Dr. Keteles, are you 19 Q Can you see that on your screen, Dr. 20 affiliated with any professional organizations in 20 Keteles? 21 the field of toxicology? 21 A I don't. I see it now. 22 A Yes, I am a member of the Society of 22 Q Okay. Then just -- yes, thank you. 198 199 1 1 Do you recognize this? BY MS. JACKSON: 2 2 A Yes, I do. Q Dr. Keteles, is working on cases 3 similar to this case at issue today part of your Q And what is it? 4 normal duties at NEIC? It's my CV. 5 5 A Yes, it is. Q Okay. And did you prepare this? 6 6 Α I did. Q Are you being compensated anything 7 Q Is this a true and accurate extra for your work on this case?

- 8 representation of your CV?
- 9 A It is, although I would note that the
- 10 date is from January 2021, so I have recent
- 11 activities that may not be captured here.
- 12 Q Okay. Thank you.
- 13 MS. JACKSON: Your Honor, the EPA
- 14 offers to enter Dr. Keteles's CV identified as
- 15 CX-63 into evidence.
- 16 JUDGE COUGHLIN: Any objection?
- 17 MR. RYAN: No objections, Your Honor.
- 18 JUDGE COUGHLIN: Okay. CX-63 is
- 19 admitted.
- 20 (Whereupon, the above-referred to
- 21 document was received into evidence as
- 22 Complainant's Exhibit No. 63.)

- 8 A No, I only receive my normal
- government salary.
- 10 Q Okay. Dr. Keteles, you mentioned that
- 11 you have served as an expert witness. Can you
- 12 share some background on the types of cases where
- you provided expert testimony to a court?
- 14 A Yes. I testified in some pesticide
- 15 cases, such as exposure from strychnine that
- 16 resulted in the deaths of some dogs. I've
- 17 testified in a bioterrorism incident that
- 18 involved a select agent called ricin. I've
- 19 testified in a couple of pediatric lead poisoning
- 20 cases and then testified in an illegal hazardous
- waste disposal case involving a petrochemical
- 22 called naphthalene, as well as corrosive waste

200 201 1 that had a very high pH. 1 JUDGE COUGHLIN: Any objection? 2 2 Q And, Dr. Keteles, about how many times MR. RYAN: No objections, Your Honor. 3 3 have you provided expert testimony in court? JUDGE COUGHLIN: Okay. So deemed. 4 4 A I've testified in court eight times. BY MS. JACKSON: 5 5 Q And did the court qualify you as an Q Okay. Dr. Keteles, as an expert in expert in each of those cases? this case, let's talk about what you did and how 7 A Yes. 7 you did it. What were you asked to do in this 8 8 case? Q Dr. Keteles, when conducting your work 9 for this matter, did you rely on specific 9 A I was asked to review and evaluate a 10 scientific principles or methods that are widely 10 report written by Dr. Elizabeth Walker. I was 11 used in the field of toxicology? also asked to review the facts of the case and 12 A Yes, I relied on EPA's Risk Assessment 12 determine if there was the potential for harm 13 Guidance, including the principles of hazard 13 from the improper storage of waste at the Prime 14 identification and exposure assessment. 14 site. 15 Q And do you believe that your testimony 15 Q And did you prepare a report to assist 16 today will be useful in assisting the tribunal in 16 you in demonstrating your analysis and your 17 understanding certain facts of this case? 17 opinion to the tribunal? 18 Yes. 18 A I did. 19 MS. JACKSON: Your Honor, at this 19 MS. JACKSON: If you could put up CX-20 time, the EPA moves to have Dr. Keteles qualified 20 66. 21 as an expert in the field of toxicology and risk 21 (Whereupon, the above-referred to 22 assessment. 22 document was marked as Complainant's Exhibit No. 202 203 1 66 for identification.) 1 offers CX-66, Dr. Kristin Keteles's expert 2 BY MS. JACKSON: report, into evidence. 3 3 MS. JACKSON: Any objection? Q I'm now showing you what is marked as 4 CX-66. And while I acknowledge that the drum 4 MR. RYAN: No objections, Your Honor. 5 5 logs have already been put in, I'm just going to MS. JACKSON: Okay. So, basically, 6 all of 66 is now admitted into evidence. have you review the whole thing quickly. Okay. 7 7 And is this your report? (Whereupon, the above-referred to 8 8 A Yes, it is. document was received into evidence as 9 Q Did you write this report? 9 Complainant's Exhibit No. 66.) 10 10 MS. JACKSON: Thank you, Your Honor. A I did. 11 11 BY MS. JACKSON: Q Can you please explain the materials 12 that you reviewed in creating your report? 12 Q Dr. Keteles, let's briefly start with 13 13 the NEIC report. What did you learn about the A Well, I reviewed the report written by 14 Dr. Walker. I also reviewed the SDS for the 14 nature of the substances in the burnt drums of 15 15 hazardous waste based on that report? primer. I reviewed the drum logbook from NEIC. 16 16 I reviewed NEIC's analytical chemistry report, A Well, the waste in the drums contained 17 17 chromium. The measurements taken by NEIC and I reviewed CID's inspection report, as well 18 as looking at various photos from the site. 18 revealed levels greater than 35 milligrams per 19 19 liter, and then the results by XRF showed that Q And, Dr. Keteles, does this report 20 20 there were levels of chromium greater than 10,000 accurately reflect the results of your analysis? 21 A It does. milligrams per kilogram. And then NEIC also 22 22 measured the flashpoint, and the flashpoint MS. JACKSON: Your Honor, the EPA

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- 1 ranged from 43 to 45 degrees C. All these
- 2 measurements are consistent with the strontium
- 3 chromate primer.
- 4 Q And so what's the significance of
- 5 that, the mean consistent?
- 6 A The significance is that after the
- 7 fire the chemical constituents remained the same;
- and, therefore, the SDS was applicable to the
- 9 material that was stored at Prime.
- 10 Q Okay. Thank you.
- 11 MS. JACKSON: Ms. Tribbett, if you
- 12 could pull up CX-32 at page 31.
- 13 BY MS. JACKSON:
- 14 Q Dr. Keteles, do you recognize this?
- 15 Yes.

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- 16 Q Let's turn -- well, I should say, for
- 17 the record, what are we looking at?
- 19 for the Universal Urethane yellow primer.

1 It may cause cancer. It may damage fertility or

3 irritation and may damage organs with prolonged

We're looking at the safety data sheet

- 20 MS. JACKSON: Ms. Tribbett, if you
- 21 could scroll to page 33, please.
- 22 BY MS. JACKSON:

- 1 Q We're looking here at Section 3. It
- says composition information on ingredients.
- What does this section in the SDS tell you about
- the strontium chromate primer?
  - A It tells me that there are about 14
- chemicals that are associated with the primer.
- 7 Q And what's the significance of the
- 8 presence of these chemicals in the primer?
- 9 A It also talks about the hazards that
- 10 are associated with those chemicals.
- 11 Q Okay. Let's go to section two.
- 12 Sorry. We're jumping around a little bit. Page
- 13 32. This is the hazards identification section.
- What does this say about the hazards -- well,
- 15 we've already kind of talked about the hazards
- 16 associated with the chemicals. What do you take
- 17 away from this?
- 18 A Well, that it's flammable liquid
- 19 vapor. It's also hazardous to human health.
- 20 It's harmful if swallowed or inhaled. It causes
- serious eye irritation. It causes skin
- irritation. It may cause allergic skin reaction.

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- 1
- 2 the unborn child. It may cause respiratory
  - 3 the fire; so, again, the SDS applies to it.
  - or repeated exposures.
  - Q And what do you know generally about
  - the human health effects from strontium chromate
  - and barium chromate?

11

- 8 rattlesnake and the risk associated with that.
- 9 chromium, is a known human carcinogen, but there
- 10 are also non-cancer effects, such as it can
- 11 affect breathing, making breathing difficult. It

A Well, chromate, or hexavalent

- 12 could also damage liver, kidney, as the SDS says
- 13 fertility. There's been studies that show that
- 14 it reduces sperm count in men. It could also
- 15 damage the unborn child.
- 16 Q And did you address the -- sorry.
- 17 What does the toxicity information for the primer
- 18 indicate to you?
- 19 A That it's hazardous to human health.
- 20 Q And did the fire or storage outside at
- 21 the Prime facility for over 300 days reduce the
- 22 inherent toxicity of the primer?

- A No. The material that was stored at
- Prime is the same material that existed before
- 4 Q Okay. Dr. Keteles, I'd like to turn
  - to discussing the potential volatilization from
- the drums. Actually, before we do that, you
- heard Dr. Walker this morning speak about a
  - A Yes.
- 10 Q Do you agree with that example?
  - A I agree in that, yes, you will not
- 12 experience the adverse effects of venom unless
- 13 you're envenomated, but I don't agree that, if
- you are in the presence of a rattlesnake, you are
- at risk for being bit. Unless that rattlesnake
- 16 or locked away, you are still at risk for getting
- 17 bit. You are at risk for the exposure. And
- then, if you are exposed and envenomated, then
- 19 you would be at risk for the adverse health
- 20 effects.
- 21 Q Okay. Thank you. Now, let's turn to
- 22 the potential volatilization in the drums. Can

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1 we start with a quick description of what is 1 which was 19 days. I also looked at the average

- 2 meant by volatilization and vapors?
- 3 A Volatilization occurs when chemicals 4
  - that are in a liquid become gas or vapor form.
    - Q Okay. And does that make them capable
- of inhalation?

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- 7 A It does.
- 8 Q Okay. And how does volatilization or
- 9 evaporation rate relate to vapor pressure?
- 10 A So the vapor pressure is when
- 11 chemicals are leaving the liquid, they exert an
- 12 upward pressure on air, and that measurement is
- 13 vapor pressure.
- 14 Q And did you consider any temperature
- 15 data as part of your analysis?
- 16 A Yes, I did, because temperature will
- 17 affect vapor pressure and evaporation.
- 18 And can you explain that temperature
- 19

2

- 20 A Yes. I looked at the National Weather
- Service climate book. I looked at the average
- 22 number of days that exceed 95 degrees Fahrenheit,

- number of days that exceed a hundred degrees
- Fahrenheit, and the average is four. However, in
- 2016, 16 days exceeded a hundred degrees in Salt
- Lake City.
- 6 Q And just to be clear, that National
- 7 Weather Service data, is that available on the
- 8 internet?
- 9 A It is.
- 10 Q Okay. And so could the temperatures
- 11 at the Prime facility affect volatilization of
- 12 the chemicals in the primer?
- 13 A They absolutely would.
- 14 Q How so?
- 15 The hotter temperatures would cause
- 16 the volatile chemicals to become vapor. So
- 17 during the day, it would get hot. That would
- 18 heat up the metal drums. Then the vapor would
- 19 form in the head space of the drum, and pressure
- would build up from these vapors in that head
- space. Eventually, the pressure would be great
- 22 that the drums would actually breathe. They

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1 would eject those vapors into the ambient air.

- And as the night cools, which Dr.
- 3 Walker mentioned, what's going to happen is that
- 4 you're going to actually, you're going to change
- 5 the pressure difference between the head space
- 6 and the ambient environment. So as it cools,
- 7 it's actually going to cause more of a release of
- 8 those vapors that are in the head space that had
- 9 been heated up the day before. So what you're
- 10 going to get is high temperatures in the morning
- 11 because that's when the coldest temperatures are
- 12 the day after a really warm day --
- 13 Q Sorry. You said high temperatures in
- 14 the morning. You mean high temperatures --
- 15 A Oh, sorry. High temperatures the day
- 16 before, cooling temperatures at night would cause
- 17 a very rapid release of those volatile chemicals.
- 18 MS. JACKSON: Go ahead.
- 19 THE WITNESS: I know that was a lot.
- 20 JUDGE COUGHLIN: Okay. A couple of
- 21 things. I guess, to what you just said, can you
- 22 explain why? And then can you also, when you

- talk about head space, what are you referring to?
- 2 THE WITNESS: Good question, Your
- Honor. So the head space is that space between
- the material and the drum. It would be empty, it
- would have air, right?
- 6 JUDGE COUGHLIN: Okay.
- 7 THE WITNESS: But the volatile
- chemicals are then going to leave that liquid and
- enter the head space as a vapor, and that vapor
- 10 would build up and it would exert a pressure, and
- 11 I can give you an example. You have a bottle of
- 12 soda, and you open it, the gas comes out. The
- 13 same thing is going to happen with the drum that
- you're going to have gas, but it's going to build
- up in that head space at the top of the liquid.
- 16 And then due to the temperature difference
- 17 between the inside and the outside of the drum,
- 18 it's going to cause that vapor to escape, just
- 19 like your soda bottle would.
- 20 JUDGE COUGHLIN: Thank you.
- 21 THE WITNESS: And that would, again,
- 22 in the mornings, you could have quite high levels

- $1 \hspace{0.1in}$  of vapor because of that rapid release of the
- 2 vapors that were in the head space.
- 3 JUDGE COUGHLIN: Thank you.
- 4 BY MS. JACKSON:
- 5 Q And, Dr. Keteles, so I guess my
- 6 question is do you agree with Dr. Walker's
- 7 opinion that the potential for exposure is low
- 8 because of volatilization or the evaporation rate
- 9 of the primer being low?
- 10 A No, I don't agree. And the reason I
- 11 don't agree is because what I just mentioned,
- 12 it's called breathing, drums breathe. And if you
- 13 look at the drum logbooks, NEIC actually measured
- 14 the volatile organic compounds with a
- 15 photoionization detector, and they got pretty
- 16 high levels of organic compounds in the vapor
- above the drums that, on average, was 500 parts
- 18 per million. And those measurements were
- 19 actually taken in the afternoon. They would have
- 20 been much higher in the morning. And even at 500
- 21 parts per million, I would still expect that the
- 22 occupational exposure limits would be exceeded

- 1 for some of those chemicals just based on the
- 2 composition of the chemicals that were in that
- 3 material.
- 4 Q Thank you. And, Dr. Keteles, you
- 5 mentioned that the PID measurements in the NEIC
- 6 logbook. What does that indicate to you
- 7 generally, the results that you were just
- 8 discussing?
- 9 A It indicates that the organic
- 10 chemicals were volatilizing. They were becoming
- 1 a vapor, and they could be inhaled.
- 12 Q And, Dr. Keteles, did any of the
- 13 inspection information you reviewed, sorry, any
- 14 of the other inspection information that you
- 15 reviewed indicate active volatilization of the
- 16 drums? In other words, chemicals leaving the
- 17 drums.
- 18 A Yes. The CID inspection report
- 19 mentioned that there was a strong chemical odor
- when they removed the tarp, and that would also
- 21 indicate that the chemicals were volatilizing.
- Q Okay. And do you agree with Dr.

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- 1 Walker's opinion that the chemical constituents
- 2 in the drums of hazardous waste were probably
- 3 present at low concentrations based on everything
- 4 you've just shared?
- 5 A No. Based on what I just shared, I
- 6 believe that the concentrations could actually be
- 7 quite high and even exceed some of the
- 8 occupational exposure limits.
- 9 Q And did you want to say anything about
- 10 the volume of the drums?
- 11 A Yes. The drum logbook does indicate
- 12 that most of the drums were quite full, three-
- 13 quarters full, seven-eighths full, so the volume
- 14 wasn't substantially reduced by the first fire.
- 15 Q And, Dr. Keteles, do you agree with
- 16 Dr. Walker's conclusion that any potential
- 17 exposure to solvent vapors would be very low and
- 18 brief and any vapor that may have been present
- 19 would be at much lower levels than those
- 20 considered safe under the permissible exposure
- 21 limits set by OSHA?
- A So as I mentioned, the vapors could

- 1 be, the levels could be quite high. It could
- 2 exceed some of those exposure limits set by, say,
- 3 OSHA. But one thing to keep in mind that the,
- 4 like, the PELs, the permissible exposure limits,
- 5 so they are based on an eight-hour time-weighted
- 6 average, so eight hours. Think of it this way:
- 7 that's your daily dose over eight hours is set by
- 8 the PEL. However, if the levels exceed the PEL,
- 9 you might get your daily dose a little sooner.
- 10 So let's just say the levels are double the PEL.
- 11 That would mean you would get your dose in four
- 12 hours and so forth.
- OSHA allows employers to then reduce
- 14 people's exposure by time, so you would limit
- 15 your duration. Again, if you knew that there was
- 16 a release and you were monitoring that release,
- which is what should have been done so we
- L8 actually knew what the exposure levels would be,
- 19 and then the employer can reduce the time that
- 20 employees are near that chemical. However,
- 21 hexavalent chrome is so hazardous that OSHA
- 22 doesn't allow you to manage exposure with time.

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- 1 Q So not with permissible exposure 2 limits?
- 3 A If you exceed the permissible exposure
- 4 limit, OSHA will not let employers reduce the
- amount of time that they are near the chemical in
- 6 order to reduce their exposure. They have to
- 7 wear PPE. Well, first, you have to reduce the
- 8 exposure by using proper controls and then, as a
- 9 last resort, you would provide PPE.
- 10 Q Okay. And, Dr. Keteles, do you agree
- 11 with Dr. Walker's opinion that he chemical
- 12 constituents in the drums of waste were probably
- 13 present at low concentrations due to their
- 14 ability to rapidly dissipate?
- 15 A No, I don't agree with that, and that
- 16 is because the density of the vapor would be
- 17 greater than air, so it would actually sink. It
- 18 wouldn't just rise and dissipate. And also, if
- 19 you consider when NEIC sampled, it was actually a
- 20 fairly windy day. I went back and looked at the
- 21 historical records at the time that NEIC sampled,
- 22 and the winds were 10 to 20 miles an hour with

- gusts up to 30 miles an hour, and they were still
- getting high readings of, again, average of 500
- ppm, so that suggested it was dissipating but not
- enough to really make it safe.
  - MS. JACKSON: Ms. Tribbett, if you
- could pull up CX-32 at -- oh, you already have it
- 7 -- at 35, please.

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- BY MS. JACKSON:
- 9 Q This is the SDS associated with the
- 10 strontium chromate primer. I just wanted to have
- this in front of you, but how does this language
- 12 in here under section five, firefighting
- 13 measures, inform your assessment?
- 14 A Well, it talks about how vapors may
- 15 accumulate in low or confined areas or travel a
- 16 considerable distance to a source of ignition and
- 17 flashback. So that speaks to the fact that it's
- 18 more dense than air and, therefore, it would
- 19 accumulate in lower confined areas, such as the
- drums being stored on that trailer. They would
- 21 accumulate in there, and you could potentially,
- 22 it could have potentially, if there was an

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- 1 the ground, just the metal drums banging
- together, static electricity from, say, the tarp.
- 3 I did notice there was a train nearby. A spark
- 4 from the train that could set the brush on fire,
- and then you have a flame which then could ignite
- the waste. Pretty much anything that generates a
- spark. A faulty electrical wire. Just the
- construction equipment dragging a metal blade
- across the concrete could generate a spark.
- 10 Q And, Dr. Keteles, can you explain the
- 11 potential release mechanisms from the drums in
- 12 the event of a fire?
- 13 A Yes. So the fire would create heat
- and, initially, the volatile substances burn off.
- 15 You would get combustion byproducts as the
- 16 material burned, and the combustion byproducts
- 17 are mentioned in the SDS of what would form metal
- 18 oxides, halogen oxides, as well as fumes, smoke,
- 19 particulates from the material.
- 20 Q Thank you. Now let's turn back to the
- 21 parameters of a risk assessment. Can you remind
- 22 us how exposure fits into risk assessment?

Q Okay. And, Dr. Keteles, do you agree with Dr. Walker's opinion about the risk of fire

4 being improbable during the storage of the burned

5 drums of hazardous waste at Prime?

ignition source, it could ignite.

6 A No, I don't. And she did mention the

- 7 flashpoint of 112 degrees, so at 112 degrees you could get enough vapor that could ignite in the
- 9 presence of an ignition source. And I believe
- 10 that you could exceed the flashpoint. These are
- 11 metal drums on a hot day, a hundred degrees. And
- 12 then, again, as the drums breathe and they
- 13 eliminate the vapors outside of the drum and it
- 14 could collect in the trailer or even it can
- 15 travel considerable distances along the ground,
- 16 if there's an ignition source, it could ignite
- 17 and catch fire again. The material in the drums
- 18 caught fire once. They could catch fire again.
- 19 Q And with regard to the flashpoint you 20 mentioned, can you give some examples of an
- 21 ignition source?
- 22 A Sure. So dragging a metal chain on

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1 A Yes. So you need two pieces of the 2 puzzle to assess risk. You need to know the 3 inherent toxicity, the levels that would cause an adverse health effect; and then you need to know

the actual exposure levels, what levels people

6 come in contact with and how long they come into 7 contact with it.

8 Q And did you evaluate how people could 9 be exposed at the Prime facility?

A I did.

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10

10 11 Q Can you explain what you found? Well, 12 actually, we'll wait until we get to your 13 conceptual site model. Can you explain, did you 14 evaluate the exposure pathways? 15 A I did. I looked at exposure pathways, 16 which are how people can come in contact with a 17 chemical that's released into the environment. 18 MS. JACKSON: Okay. And, Ms. 19 Tribbett, if you could pull up CX-66, page nine, 20 figure three. Thank you.

BY MS. JACKSON:

1 but can you describe for the record what we're looking at in figure three? 3 A This is the conceptual site model that

4 I developed for the Prime hazardous waste storage site. It's just a visual representation of the source of contamination, how it's released into

7 the environment, where it ends up in the environment, and then how people are exposed.

9 Q Okay. And can you explain how people 10 or organisms could be exposed to the hazardous

waste at the Prime facility using this figure? 12 A Sure. So you would have 13 volatilization, which we've already discussed,

again, due to heat from the sun, from the high ambient temperatures, as well as fire. That

16 would release those chemicals into the air where 17

they could be inhaled. Also, just given the very 18 poor condition of the drums, they were rusted,

19 they were burned, they're missing their bunghole

covers. You could get leaks. Leaks could end up

in soil. There was dirt nearby the drums. Then

the soil could get blown, and it could end up in

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1 the air where it could also be inhaled. Also, if 2 the soil is contaminated, it can get on skin 3 where it then results in exposure.

Q I know we looked at this this morning,

4 You also have that paint on the 5 exterior of the drums. That's on a rusted drum. 6 It's probably going to fluff off and form this 7 dust and potentially contaminate the soil where, 8 again, that could result in an exposure pathway to humans from just the dust containing the

11 Q Thank you. And who did you consider 12 to be potentially exposed to the hazardous waste 13 stored at the Prime facility?

hexavalent chrome from the paint that spilled.

14 A Well, I considered the workers because 15 they're present there. So at EPA, in risk 16 assessment, unless a site is completely locked 17 and inaccessible, we would consider the pathway 18 complete. So because the workers had access to 19 the drums, we consider that the pathway is

20 complete. We wouldn't rule it out. We would 21 still consider them at risk. They are potential

22 receptors because they still have access to it.

I also considered the first responders that would respond in the event of a fire, and 3 then visitors that might be present at the site, as well.

conditions at the Prime facility that contributed to this -- in your opinion, what were some of the storage conditions at the Prime facility that

Q And what were some of the storage

contributed to this potential for exposure?

10 A Well, the fact that the drums were

11 stored out in the sun. Again, in the hot summer 12 sun, they were stored on a tilted trailer. The 13 drums were in poor condition. They were rusted.

14 They had already been through a fire. They were

compromised. And so that's why I considered the

16 potential for volatilization, as well as the

17 leaks, and then the potential for fire, too, just

18 given the flashpoint and the flammability of the

19

20 Q Okay. And similar to Dr. Walker, did you review the Google imagery of the facility 22 during the period of storage? And if so, what

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- 1 did it indicate to you?
- 2 A Yes, I did look at some Google Earth
- 3 images, and I noticed that there was construction
- 4 activity nearby, which, again, would result in
- 5 potential exposure to the construction workers.
- 6 I also noticed that there was train tracks
- 7 nearby, so that could be an ignition source, in
- 8 addition to the construction company. I noticed
- 9 that trucks, and, depending on what date you
- 10 looked at the Google Earth images, there were
- 11 trucks that had moved, so there was obviously
- 12 human activity there. People were there, and
- 13 people had access to those drums.
- 14 MS. JACKSON: Ms. Tribbett, if you
- 15 could pull up Exhibit CX-10 at page 16.
- 16 BY MS. JACKSON:
- 17 Q Do you recognize this photo?
- 18 Yes, I do.

22

- 19 Q And what does this photo illustrate to
- 20 you with regards to the potential for exposure to
- 21 people at the Prime Salt Lake City facility?
  - A It shows the storage condition of the

- 1 drums. They're in a collapsing, tilting, burned
- trailer. Close proximity to a building and
- trucks, so, again, presumably, there would be
- workers there. There's a fence that's down.
- There's dirt, soil, on the ground.
- Q Okay. Thanks. We're just going to
- look at a couple more pictures at five, same
- exhibit, so CX-10 at page five. You had
- testified about the railroad behind. Is that
- 10 what you were referring to as an ignition source?
- 11 Α Yes.

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- 12 Q Okay. And then last picture, if we
- 13 could look at CX-10 at page 17. And what does
- 14 this photo illustrate to you with regards to
- 15 potential exposure to people at the facility?
  - A It shows the condition of the drums,
- 17 the bungs are open, which, again, would result in
- 18 breathing of the drums and the release of the
- 19 volatiles. They're also rusted, they're burned,
- 20 poor condition. There's metal nearby, which,
- 21 again, could generate a spark. There's also
- heavy construction equipment, which could also

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1 generate a spark and also indicates the presence

- 2 of human receptors.
- 2
- 3 Q And do you see that maintenance
- 4 facility there, as well?
- 5 A Yes, that's close by, as well. Again,
- 6 that indicates that there are workers present,
- 7 there are workers that have access to the drums.
- 8 They're not fenced in, so, yes, people had access
- 9 to it, so there could be exposure.
- 10 Q Okay. Thank you, Dr. Keteles. And
- 11 what are the possible medical conditions for
- 12 humans exposed to leaks or releases of the
- 13 hazardous waste from the drums?
- 14 A Well, referring to the SDS, breathing
- 15 difficulties, as well as headache, nausea from
- 16 the solvents which cause neurological effects
- 17 that Dr. Walker had mentioned, as well as
- 18 prolonged or repeated exposures could result in
- 19 kidney, liver damage, and then, of course, cancer
- 20 for prolonged exposure.
- 21 Q Okay. And this question is in
- 22 response to Dr. Walker's report. Is the risk of

- exposure decreased because the drums were in a
- fire previously?
- 3 A No, because the material is the same
- as before the fire, so it's just as flammable as
- it was before the fire.
- 6 Q And, Dr. Keteles, does the location of
- the facility and a low-density population or
- industrial area make the risk to employees, first
- 9 responders, and/or visitors a low risk?
- 10 A No. So at EPA, we don't have a de
- 11 minimis number of receptors. If people could
- 12 come in contact with it, we would consider the
- 13 risk. And just for an example, for my work
- experience, I've assessed risk at sites that are
- very remote, like in the national forest from,
- 16 say, illegal marijuana grows where they use a lot
- 17 of dangerous pesticides. And even though there
- 18 are no roads there and the chance of somebody
- 19 coming across it are probably low, like other
- than a backpacker or forest ranger, we still
- would consider that a risk and we would do
- 22 something about it by removing that hazardous

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- 1 material.
- 2 Q And, Dr. Keteles, do you agree with
- 3 Dr. Walker's opinion that there's a low potential
- 4 for environmental risk from Prime storage of the
- 5 hazardous waste at the facility?
- 6 A Again, just with ecological receptors,
- 7 as with human receptors, if there is the
- 8 potential to come in contact with it, we would
- 9 still consider that in the risk assessment. So
- 10 if birds could access this facility, say small
- 11 mammals, reptiles, like what was mentioned, a
- 12 lizard, they would still be considered receptors
- 13 that could come in contact with this material
- 14 that wasn't properly stored.
- 15 Q Dr. Keteles, based on your knowledge
- 16 and experience in the field of toxicology, your
- 17 review of the materials in this case, including
- 18 Dr. Walker's report, do you have an opinion as to
- 19 whether Prime, Inc.'s storage of hazardous waste
- 20 created a potential for exposure?
- 21 A Yes, I believe there was a potential
- 22 for exposure because employees had access to the

- 1 site, the poor condition of the drums, missing
- 2 the bungs, the rusted and burned drums, and then
- 3 the potential for fire, took, they could catch
- 4 fire, there was a potential for exposure.
  - Q And you mentioned poor conditions of
- 6 the drums. How about the fact that it wasn't
- 7 labeled, they weren't labeled?
  - A Yes, that's definitely a very
- 9 important consideration because, without the
- 10 proper labeling, say an emergency responder that
- arrives at the site wouldn't know that there's
- 12 hazardous waste there and that the fumes are
- 13 hazardous. In fact, in my work experience, I had
- 14 a very unfortunate case where volunteer
- 15 firefighters were exposed because they were
- 16 unaware of chemicals that were in a warehouse
- 17 that burned, and the same thing could happen
- 18 here. If there was a fire, firefighters could
- 19 show up and the drums aren't labeled. They don't
- 20 know what's in them or that it's hazardous.
- 21 Q Thank you. And, Dr. Keteles, based on
- 22 your knowledge and experience in the field of

- 1 toxicology and your review of the materials in
- 2 this case, including Dr. Walker's report, do you
- 3 have an opinion as to whether Prime, Inc.'s
- 4 storage of hazardous waste created a potential
- 5 for harm to human health and the environment?
- 6 A Yes. My opinion is that the storage
- 7 of this hazardous waste did create a potential
- 8 for harm, just, again, because we have the
- 9 potential for exposure, the inherent toxicity of
- 10 the waste, and then the potential for fire.
- 11 Q Okay. Thank you, Dr. Keteles. No
- 12 further questions at this time.
- 13 JUDGE COUGHLIN: Just one quick
- 14 question. I think you've already covered this
- 15 actually in one of your latter responses about no
- 16 de minimis standard regarding risk, and you used
- 17 the example of, you know, an otherwise remote
- 18 area and even if maybe one backpacker or a ranger
- 19 came into contact, EPA would still consider that
- 20 risk.
- 21 So as I'm looking at this photo as an
- 22 example -- and, counsel, I'm still on page 17 of

- 1 CX-10 -- and I think it was here that you talked
- 2 a little bit about, you know, the construction
- 3 activity, the equipment. So I see somebody, it
- 4 looks like a person, on a piece of equipment in
- 5 the back. So I guess what I'm asking about is
- 6 does proximity feed into the equation at all, or
- 7 is it simply because, you know, if there's
- 8 access, EPA considers that a risk?
- 9 THE WITNESS: Yes. So if there's
- 10 access, like I mentioned, unless a site is
- 11 completely locked, like locked and nobody can
- 12 access it, we would still consider that somebody
- 13 could come in contact with that. I mean, I've
- 14 had other sites that I've looked at and, unless
- 15 it's fenced off, we would consider the potential
- 16 for exposure, that there could be receptors.
- But to answer your other question,
- 18 yes, distance would matter. But since Prime
- 19 didn't do the occupational monitoring, we don't
- 20 know how far away the vapors would travel. But
- what I do know from the drum logs is that nearby
- 22 the drums the levels were high. And based on

- $1 \hspace{0.1in} \hspace{0.1in} \text{that chemical composition that day, they would}$
- 2 have likely exceeded some of the occupational
- 3 exposure limits.
- 4 JUDGE COUGHLIN: Okay. Thank you.
- 5 Thank you very much.
- 6 MS. JACKSON: Just one quick follow-up
- 7 question, and I just want to, since we're still
- 8 on this exhibit, I just wanted to have you -- do
- 9 you see a fence there in between the drums and
- 10 the construction activity?
- 11 THE WITNESS: I don't.
- MS. JACKSON: Okay. Thank you.
- 13 CROSS-EXAMINATION
- 14 BY MR. RYAN:
- 15 Q Good afternoon, Dr. Keteles, I'm Mark
- 16 Ryan. I represent Prime. Since we were just
- 17 talking about the fence and the lack of fence
- 18 there in that last exhibit, 66 -- excuse me -- 10
- 19 at page 17, this was taken on the day of the EPA
- 20 inspection. Do you know whether EPA asked Prime
- 21 to move that fence so that they could get these
- 22 drums out?

- 1 A I don't.
- 2 Q So that's a possibility?
- 3 A Sure.
- 4 Q We'll start with the end of your
- 5 testimony, and then we'll go back for it, you
- 6 said there was a potential for harm and a
- 7 potential for exposure. Do you recall that?
  - A Yes.
- 9 Q And that's your professional opinion?
- 10 A Yes, it is.
- 11 Q And did you, I don't recall in your
- 12 report you ever talked about the probability for
- 13 harm.

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- 14 A No, I did not look at probability of
- 15 harm. I just looked at potential for exposure
- 16 and just the inherent toxicity because that's all
- 17 the information that I had.
- 18 Q Okay. And did you look at the
- 19 probability of exposure?
- 20 A No, I did not.
- 21 Q Now, you testified, you said you've
- 22 testified eight times before.

234 235

- 1 A Yes.
- 2 Q And is it always on behalf of the EPA?
- 3 A Yes, because I'm employed by EPA.
- 4 Q So you're always testifying in favor
- 5 of the government?
- 6 A I testify as their witness, but I
- 7 wouldn't say in favor of the government.
  - Q You're supporting government.
- 9 A They use my testimony however they
- 10 want to use it.

8

- 11 Q Now, you attached the drum logs to
- 12 your expert report, and we can pull this up if
- 13 you want to see it, but there were several
- 14 references to yellow viscous and opaque in the
- 15 drum logs, another refers to white viscous
- 16 opaque. Do you recall that?
- 17 A Yes, I do.
- 18 Q Okay. And would you agree with the
- 19 definition of viscous as having a thick sticky
- 20 consistency between solid and liquid?
- 21 A That is the definition of viscous.
- 22 Q And you would agree that thick and

- 1 sticky substances flow less readily than other
- 2 substances?
- 3 A Yes.

- 4 MR. RYAN: Could we pull up Exhibit
- 5 CX-17, please? I'm sorry. Could you go to page
- 6 nine? Could you rotate that? Sorry.
- 7 BY MR. RYAN:
  - Q So what I'm showing here, Dr. Keteles,
- 9 is page 9 of 13 from Complainant's Exhibit 17.
- 10 Have you ever seen this photo before?
- 11 A I probably glanced at it at some point
- 12 during my review.
- Q Would you agree this is a photo taken
- 4 on the night of the fire?
- 15 A It appears to be, from my
- 16 recollection.
- 17 Q And would you agree that --
- MS. JACKSON: Your Honor, can I just
- 19 request that Mr. Ryan lay a little foundation so
- 20 she knows what you're referencing, where you're
- 21 looking at this, what it's from.
- MR. RYAN: This is from your exhibit

236 237 1 A I can't confirm. I wasn't there, and 2 MS. JACKSON: Yes, just what exhibit I don't have any data on the material that's on 3 this is. I just want to make sure Dr. Keteles the ground, so I do not know what that is. 4 knows what she's looking at. Q Do you know anything other than paint 5 MR. RYAN: Okay. I'm sorry. Could that spilled from the truck the night of the fire? you go back to page one? 7 7 JUDGE COUGHLIN: I think it was, we're A That I don't know because, again, I 8 8 in CX-17 at page nine, are we not? wasn't there. 9 9 MR. RYAN: Can we go back to page one, Q Okay. But whatever this substance is, 10 10 would you agree it didn't flow -so I can lay the foundation as requested? 11 11 BY MR. RYAN: MS. JACKSON: Your Honor, I have to 12 12 object. Dr. Keteles is limited to the rebuttal Q So earlier in your testimony, Dr. 13 Keteles, you said you reviewed some of the EPA 13 of Dr. Walker's report, and it really was focused 14 documents. Is this one of the -- and many of the on the storage alone. I don't see why the night 15 EPA photos. Is this one of the ones you 15 of the fire or anything from the night of the 16 reviewed? 16 fire is relevant. 17 17 MR. RYAN: It goes to viscosity, A Yes, it is. 18 18 viscosity, Your Honor, which was definitely part Q So going back to page nine, this 19 19 appears to be a photo taken the night of the of her testimony. 20 20 fire. I think we already established that. MS. JACKSON: Well, I believe that's 21 been asked and answered. 21 Would you agree that that substance on the ground 22 22 appears to be the paint? JUDGE COUGHLIN: I'll overrule the 239 238 1 objection. Go ahead. You can answer, unless you 1 white substance coming out in a tube form. 2 2 need to restate it. Do you recognize this picture? 3 3 BY MR. RYAN: A Yeah. Again, it appears to be from 4 Q Looking at this picture on page 13 of the CMB Report. 5 5 Exhibit C-17, CX-17, excuse me, page 9 of 13 of Q Um-hum. And would you agree that that 6 Exhibit CX-17, would you agree that the substance white substance in the tube form we see coming 7 7 we see on the ground here didn't flow very far? from the bunghole is a, is paint? 8 8 A It's hard to say without contact, to A Yes, it's probably paint. 9 see the whole scene. And, and then it went -- it Q And you would agree that paint is not 10 water soluble, right? went through fire, it was burned. 10 11 11 A Right. Q Okay. 12 A So, that's going to -- that's going to 12 Q And because something is not water 13 influence it. 13 soluble, it means it mixes less readily with 14 Q Okay. And would -- it would include 14 water, correct? 15 15 if they burned again, wouldn't it? A Correct. 16 16 A Yes. To some extent it would. Q Can we pull up Dr. Keteles' expert 17 17 report, please? Which is CX66. And could we go Q Okay. Can we go to page 12 of this 18 Exhibit please? And could you update that, 18 to page five, please?

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21

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please? Thank you.

So, this is from the same Exhibit,

Exhibit, Complainant's Exhibit 17. And this is

a, appears to be a picture of a burned drum with

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Now, on direct examination, Dr.

And if we could highlight those bullet

Keteles, we talked about those bullet points

there in the middle.

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- points in the middle of that page five of Exhibit 2 66, that would be great.
- 3 And, I think, as I recall, you
- 4 described these as the, as the, you know, the bad
- qualities, to use a lot, a better -- a common
- word, of this paint.
- 7 And, the danger is a function of the
- 8 things -- the first four items says danger. And
- 9 I would assume that's a function of the other
- 10 things below it?
- 11 A These are the hazard statements for
- 12 the primer.
- 13 Q Okay. So, it says there's flammable
- 14 liquid and vapor. But, you would agree with Dr.
- 15 Walker, wouldn't you, that you need an ignition
- source for something to catch fire?
- 17 A Yes. With this flammable material you
- 18 would need an ignition source.
- 19 Q And in the 300 some odd days it sat in
- 20 Salt Lake City, it didn't catch fire, did it?
- 21 No. But, it had caught fire at one
- 22 point.

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- 1 Q Correct. Yeah, no. The testimony
- before was that the dragging tire heated to 750
- degrees and started the fire.
- 4 The -- and I see you have your causes
- serious eye irritation. There's no evidence that
- anyone had any eye irritation anywhere near this
- 7 in the 300 some days it was there?
  - A I haven't seen any evidence of that.
- 9 Q Okay. And do we have any evidence of
- 10 anyone getting cancer from this?
- 11 A No.
- 12 Q Or any unborn children affected, or
- 13 women, you know, pregnant women being exposed to
- 14 it?

8

- 15 A No.
- 16 Q No. And the same thing for causing
- 17 respiratory irritation. We've seen pictures of
- 18 Prime employees helping the EPA move the drums.
- 19 And, the Prime employees were not
- 20 wearing PPE. Has there been any evidence that
- 21 any of them were harmed in any way?
- 22 A No.

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- cause damage to organs to prolonged or repeated
- exposure. And so, 300 days this stuff was, this

Q And, it says, finally it says, may

- paint was sitting on the Salt -- the Prime lot.
- 5 And, there was no evidence of anyone
- 6 having any organ damage, is there?
- 7 A No.
  - Q Now, you stated that you did not
- 9 evaluate the probability of exposure in your
- report. But, I'm going to ask you a couple of
- 11 questions about probability, more in the
- 12 abstract.
- 13 So, if you're -- if you're close to a
- 14 toxic substance, you're more than likely to be
- 15 exposed to it. Would you agree with that?
- 16 A Correct.
- 17 Q And if you're further away, you're
- 18 less likely to be exposed?
- 19 A Or to be exposed to lower levels.
- 20 Q But, at some point, you wouldn't be
- 21 exposed at all, correct? If you're 100 miles
- 22 away, you're not going to be exposed.

- A Sure. If you get far enough away. 2 Q Right.
- 3 But, the only way to know that is to
- monitor for it.
- Q Now, you said you -- the NEIC
- 6 monitored for vapor in the air. Do you recall
- 7 that?
- 8 Yes.
- 9 Q And I believe you said it was 500
- parts per million? 10
- 11 A Correct. That's average.
- 12 Amongst the various samples they Q
- 13 collected.
- 14 A Yes. Among all the drums that they
- 15 sampled, --
- 16 Q Um-hum.
- 17 They took PID measurements above the
- 18 drums.
- 19 Q Okay. And it was how far above the
- 20 drums did they collect that sample?
- 21 Two inches.
- 22 Q Two inches. Okay. So, two inches

247

1 above the drum, is 500 parts per million.

- 2 A Right.
- 3 Q And you mentioned it was a windy day.
- 4
- 5 Q Okay. So, you would expect, wouldn't
- you not, that 500 parts per million two inches
- 7 above the drum, would rapidly dissipate into the
- 8 air on a windy day?
- 9 A That day was a, I wouldn't say the
- 10 best case scenario, but it's a better case
- 11 scenario.
- 12 Q Now, I'm not talking about at the two
- 13 inch level. We -- we'll give you that at two
- 14 inches, it was 500 parts per million.
- 15 At 20 feet though, it would have
- 16 dissipated, right?
- 17 A No.

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11 there.

lying area.

noticed.

- 18 Q It would still be 500 parts per
- 19 million at 20 feet?
- 20 A No. You're act -- you're actually
- 21 incorrect. It would be at 20 feet. Those vapors

1 vapors too. And it would also depend on the

2 elevation of the ground, and if there's a low-

were in the courtroom the last few days I

Q Now, you heard the testimony -- you

witness this morning, Brian Sing -- Mr. Singleton

that people rarely -- the truckers who came in to

Q Yeah. And do you have any evidence

morning that any truckers were back there working

15 that other than what Mr. Singleton stated this

A I don't. Just evidence that there's

19 trucks and there's obviously human activity

Q So, for you, in terms of your

22 analysis, it's enough that they're just in the

have their trucks worked on, didn't go back

You heard that?

A He did say that.

on the trucks?

You heard the testimony from the Prime

22 are heavier than air.

1 So, they would sink. So, you would

- not see vapors at 20 feet above the drums.
- 3 Q So, you're saying that the wind would
- not blow these vapors up?
  - A No. I mean, the vapors are heavy.
- They're going to sink.
  - Q So, they --

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- (Simultaneous speaking.)
- 9 A The wind might disburse them. But, it
- 10 would disburse them, you know, at the ground
- level, because they're heavier than air.
- 12 Unless you have a big updraft, I
- 13 supposed. I'm not a meteorologist.
- 14 Q Okay. And vapors on the ground would
- 15 be less likely to be breathed, wouldn't they?
- 16 A I could see a trucker that's working
- 17 on his rig with his breathing field close to the
- 18 ground.
- 19 Q No, I said, as we walk around on our
- 20 feet, we're less likely to encounter vapors on
- 21 the ground. Isn't that correct?
- 22 A It would also depend on the amount of

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- A They have the potential to come in
- contact with it. So, the exposure pathway is
- 5 But, you -- thank you. Now, we talked
- about the flash point a bit. No, let's go back
- for a second.
- 8 On the -- on the drums, you talked
- of the drums. Now, you would agree that the, as
- 12 out of these drums.
- 13 Isn't that correct?
- A Yes, I believe most of them were 14
- 16 Q Okay. And if one, if a bunghole was
- 18 A Unless the pressure built up so much
- 19 it would cause the bungs to release.
- 20 Q Yeah. But, there's no evidence of any

general area. That's enough? 2

complete.

- 7
- about the vapor pressure building up in the top
- 11 far as we know, all those bungholes were blown

- 15 blown.
- 17 not blown, nothing would escape, correct?

- 21 bungs releasing on this pre-order in Salt Lake
- 22 City?

there.

- 1 A No. Because they'd already blown.
- 2 Q So, when a bunghole blows, it's now
- 3 open to the atmosphere, correct?
- 4 A Correct.
- 5 Q So, the pressure differential between
- 6 the atmosphere and the drum would be essentially
- 7 the same, wouldn't it?
- 8 A No.
- 9 Q How -- let me step back a second. You
- 10 use the example of a soda pop bottle. Now,
- 11 everyone, many of us have drunk some soda pop,
- 12 put the cap back on.
- You wait a little bit; you open it up.
- 14 You have a sss -- you hear a release of pressure,
- 15 right?
- 16 That didn't happen here, did it? Here
- 17 the bungholes were never put back on. The
- 18 bungholes were always gone, always missing.
- 19 A No, they weren't. Which is what would
- 20 cause the material to breath out of the
- 21 bungholes.
- 22 Q Okay. I think we're miscommunicating.

- 1 The bungholes were open the entire time, correct?
  - A Correct.
- 3 Q So, it's not like a soda pop where you
- 4 put the cap back on and then remove it. These
- 5 bungholes were always missing.
- A Yes. But, there's still a temperature
- 7 differential, which changes the pressure. As
- 8 you're getting the material heated, it's forming
- 9 vapors.
- Those vapors inside the drum are going
- 11 to put pressure on the drum. And they're going
- 12 to escape through the bung.
- And then, as the ambient temperature
- 14 cool, you're going to have a temperature
- 15 differential from what's inside the drum and
- 16 what's outside. That creates a pressure
- 17 difference too.
- 18 Q But, you would agree that the drum was
- 19 already at all times open to the atmosphere?
- 20 A Yeah. The bungs open.
- 21 Q Yeah.
- A But, there's still a pressure

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- 1 differential. If you'd like me to explain
- 2 further --
- 3 Q No. I'm --
- 4 A Okay.
- 5 Q I'm good, thank you.
- 6 A Okay.
- 7 Q Now, you would agree that when you're
- 8 near toxic substances wearing personal protective
- 9 equipment, would reduce the risk of exposure.
- 10 Would you agree with that statement?
- 11 A It depends on the personal protection
- 12 equipment. If it was appropriate for that, that
- 13 chemical.
- 14 Q Okay. Let's assume for the sake of
- 15 argument that the person is wearing the
- 16 appropriate personal protective equipment.
- 17 It's been properly fitted to their
- 18 face. And they're wearing whatever else they
- 19 need.
- 20 And that if properly employed that
- 21 would reduce the risk of exposure, wouldn't it?
- A Perhaps. It would depend on the level

- 1 of chemical as well.
- 2 Q So, I mean, you in your work at NEIC,
- 3 you worked with a whole host of very dangerous
- 4 chemicals, don't you?
- 5 But you're evaluating?
- 6 A I don't work with them. I get the
- 7 data from the chemists.
  - Q Okay. Let me rephrase the question.
- 9 You at -- NEIC, as an -- as a part of EPA,
- 10 routinely evaluates dangerous chemicals in the
- 11 environment?

- 12 A They do.
- 13 Q Okay. And those dangerous chemicals
  - 4 run on a spectrum. Some are very dangerous and
- 15 some are less dangerous. Would you agree?
- 16 A Yes.
- 17 Q For example hydrochloric acid is, you
- 18 would agree that's a very dangerous chemical.
- 19 A Yes.
- Q Yeah. And when NEIC people, or anyone
- 21 from the EPA, does an inspection where they
- 22 suspect hydrochloric acid is present, they will

252 253 1 take great precautions. Correct? 1 A It's an industrial application. 2 2 A Correct. Okay. Let me -- let me rephrase the 3 3 Q Yeah. But, this paint is not in that question. 4 4 category, is it? So, we have a 55 gallon drum of 5 A It's hazardous. chromate based paint at Steel -- Steel Safe, I 6 Q That wasn't my question. It's not in think, was the name of the company that was 7 the category of hydrochloric acid, is it? buying this stuff, this paint. 8 8 A It's -- it's different. And, it's perfectly usable. It's not 9 Q So, there some discussion earlier, I been burned. It's not a hazardous waste. It's a 10 think, I believe that the Judge asked a question 10 hazardous material, the SDS says so. 11 about dry paint on the outside. And they spill some down the side. It 12 12 would be the same, basically the same risk of If you had this -- if you had a bucket 13 of this exact paint at home, and it had not been 13 exposure as we have in Salt Lake City, isn't that 14 correct? burned, and you spilled some on the outside, that would not be a -- that would have the same effect 15 I don't necessarily think so. I mean, 16 as here, wouldn't it? in Salt Lake City you had the drums sitting 17 17 outside exposed to the elements. I mean, in terms of the dry paint on 18 So, the paint would be exposed to sun, 18 the outside, in terms of it's -- it's the 19 19 likelihood of exposure to a human? 20 20 Q Um-hum. A I'm not sure why you would have 21 A The elements. It would break down. 21 chromate based paint at your house. 22 Become dust. 22 Q Okay. 254 255 1 1 If you're storing your drum in a Q Yeah. I will -- we will -- we will 2 warehouse, it wouldn't be exposed to the submit that during the inspection on August 24 3 elements. You wouldn't have that rapid when the drums were picked up by a forklift, and 4 degradation and formation of dust. we will ---5 5 MS. JACKSON: Objection, Your Honor. Q And if it -- so, is there any of it 6 that's the formation of dust from spilt paint at 6 He's testifying. 7 7 MR. RYAN: I'm -- I'm describing one this site? 8 A I don't think they collected samples 8 of the Exhibit's, Your Honor. But, we will agree 9 9 of the dust. that some paint spilled during the inspection. 10 10 Are you aware of any -- other than the Q Or any of it is --11 11 inspection, are you aware of any paint that A I would like to see that though. That 12 12 would be very interesting. spilled? Or leaked? 13 13 Q But, there is no evidence, as far as THE WITNESS: Since I wasn't there, 14 no. 14 you know? 15 15 A No. BY MR. RYAN: 16 16 Q And there's no evidence of leaks from Q And have you ever been at the 17 17 these drums, is there? facility? 18 18 A I mean, the spilled paint could come A No, I have not. 19 19 from a leak. I didn't inspect the individual Q Have you ever observed any person --

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21

22

well, never mind.

drums.

22 drums, so.

But, there was paint dripping down the

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May I have just a moment, Your Honor?

JUDGE COUGHLIN: Sure.

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256 MR. RYAN: Now, just a few more 2 questions, Dr. Keteles, and I appreciate your 2 before they came? 3 3 A That I don't know. time.

So, I believe -- I believe you're 5 aware there were two inspections. One on August 6 2 and one on August, I think, 24th, is that

7 right? 2016.

4

8 The first one was by the CID. And 9 then they came back on the 24th with NEIC. Is 10 that consistent with what you understand?

11 THE WITNESS: That's what I 12 understand.

13 BY MR. RYAN:

14 Q And I believe you heard testimony this 15 morning, since you've been here in court, that you've seen photographs showing that Prime

17 employees around the drums, assisting CID in the 18 sampling.

19 And none of those Prime employees were wearing PPE. Do you remember that? Do you 21 recall seeing that?

A I don't know. Again, I wasn't there.

22 A Yes.

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Q Now, NEIC likely had the SDS for this

4 Q And if they had the SDS, if they were

aware, I'm just talking about any NEIC procedure,

you work for NEIC. 7 If NEIC, excuse me, sends a person to

8 a site to take samples, and they know what's

9 probably in the drum, they will take the nor --

10 the necessary precautions, wouldn't they?

11 A They would do a job hazard analysis and take the necessary precautions. 12

13 Right.

14 A If they knew what was present.

15 Right. And, EPA has known from the

16 very beginning of this investigation by CID,

17 sometime in late '15, early '16, that these drums

18 involved paint. Correct?

19 A That I don't know. I don't know what

20 they knew.

2.1 Q So, are you aware that anyone from

22 NEIC warned the Prime people to put on PPE?

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2 I didn't even work for NEIC at that time. 2

Q Okay. Would it be standard procedure hazardous, they would. But, if they don't know

4 now for NEIC to ask a company to assist it with 5 drums, and not warn the workers that the -- the

6 company workers to wear -- personal protective 6

7 equipment if they thought it was dangerous?

8 A If they don't know that it's

9 dangerous, they wouldn't know to warn them.

10 Q But, if -- so, you're assuming NEIC

11 had no idea what they were sampling?

12 I mean again, I didn't even work for

13 NEIC. I don't know what --

14 Q Okay.

15 What they knew.

16 Q All right. So, if NEIC today, as from

17 what you know about NEIC, if they had no idea

18 what was in the drum, wouldn't they ass --

19 wouldn't they assume they needed to be, that one

20 needed to wear PPE?

21 A I don't think they would assume. It

22 depends on what's in the drum.

1 Q Well, if they --

If they have reason to suspect it's

what's in it, they wouldn't know what type of

5 PPF.

So, had the drums been labeled, then

7 they might have an indication.

8 Q Okay. I'm going to repeat my question

9 one more time.

10 If they have no idea what's in the

11 drum, what substance will they think?

12 MS. JACKSON: Objection, Your Honor.

13 I think he's kind of getting in that territory of

14 speculation here.

15 MR. RYAN: She is a PhD scientist with

16 NEIC, Your Honor. I think she's entitled to tell

17 us what their procedures are.

18 JUDGE COUGHLIN: Yeah.

MS. JACKSON: But, Your Honor, she's

not a trained inspector. And, I don't think

21 she's inspecting the drums.

22 JUDGE COUGHLIN: Okay. I'll overrule

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	the objection. If you don't know, just say you don't know.  THE WITNESS: I don't know. I have a PhD in toxicology. But again, I'm not a field inspector.  I wasn't present. I don't know what they knew.  MR. RYAN: Okay.  THE WITNESS: I don't know what the scene was for them.  MR. RYAN: Okay. Thank you. Your Honor, I have no further questions.  JUDGE COUGHLIN: Okay. I just had a couple. I'll jump in, in case you all want to ask anything else.  But, and this again maybe outside your field of expertise. So, just tell me if it is. It's just I'm wondering now.  Are if you know, are sampling methods all the same?  And I'm asking the question with the context of, if there are NEIC folks going to this	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	facility to take samples of these drums, do they not need to have some idea of the material they're sampling in order to do effective sampling?  THE WITNESS: That's hard for me to answer. So, I do know that NEIC, they have procedures for field sampling.  But, I don't know what they would do if they don't know what's present to sample. And I suspect that they probably didn't know, because they might have collected different samples or more samples based on what we know about the drums now.  But, I can't really speak to the field program.  JUDGE COUGHLIN: Okay.  THE WITNESS: All I know is that, you know, they have pretty rigorous procedures for like how they collect samples.  But, they have to know what material they're sampling to know which procedure to use.  JUDGE COUGHLIN: Okay. So, that
	262		263
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	okay. Well, and I'm not trying to ask you something that's but, that then makes me think wouldn't they need to know what the material was if they're going out there to take samples?  THE WITNESS: Yeah. I mean, they would they would need to know. But, if Prime didn't tell them, then they might not know what samples to collect.  JUDGE COUGHLIN: Okay. Okay. Okay. And, a couple of other questions. If again, if you know.  This paint, when it if it's if it were being used as intended, let's say, would PPE be required based on the contents of it?  THE WITNESS: So, I follow the SDS. And the SDS does state that respiratory protection is needed.  JUDGE COUGHLIN: Okay. So, some type	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	

264 265 1 JUDGE COUGHLIN: Okay. Great. 1 just for context, because I think we're on the 2 THE WITNESS: I don't see it. beginning. But, it --3 3 THE WITNESS: Yeah. MS. JACKSON: Oh. 4 4 Do you see it at -- oh, it's going on JUDGE COUGHLIN: Goes further down. 5 And I don't know if you're able to see that. that. 6 There you go. But, okay. 7 7 JUDGE COUGHLIN: Okay. Yeah, the THE WITNESS: Yeah. It has the 8 8 individual protection measures. So, that's what chemical resistant impervious gloves. So, you 9 9 would clue somebody in what you need to do to would select your respirator based on the known 10 protect yourself if you're using -- if you're 10 or anticipated exposure levels. 11 11 applying this product. JUDGE COUGHLIN: Okay. Okay. And, 12 12 kind of switching a little bit now to like the THE WITNESS: Right. 13 13 JUDGE COUGHLIN: Okay. vapors. 14 14 Do you -- what would be in them? If THE WITNESS: So, again, you would do 15 15 a job hazard analysis. You would know what the you know. If you can --16 exposure limits are. Do the monitoring. 16 THE WITNESS: Yeah. So, like the 17 And, that would, you know, that would 17 chemicals, the volatile chemicals that are listed 18 18 ultimately determine the necessity for in the SDS, like the trimethylbenzenes can be --19 19 respiratory protective equipment. the naphtha, which is kind of just a mixture of 20 20 But, you'd have to do that monitoring different organic vapors. 21 21 Those chemicals that are listed in the to determine. 22 22 SDS, those volatile chemicals would be in the JUDGE COUGHLIN: And it goes on, and 266 267 1 vapors. 1 temperatures cool, the ambient temperature 2 outside the drums is cooler. JUDGE COUGHLIN: Okay. And then, I 3 think, at one point you were wanting to explain a 3 So, you've got warm vapors, cool air. 4 little more about a pressure differential, even And just that temperature difference is going to 5 though the bung covers are missing. cause a pressure difference. It's going to cause 6 Do you remember what you wanted to a release of those vapors. 7 7 JUDGE COUGHLIN: Okay. Thank you. say? 8 8 THE WITNESS: Yeah. THE WITNESS: You're welcome. 9 9 JUDGE COUGHLIN: Or if it would help REDIRECT EXAMINATION 10 10 MS. JACKSON: I just have one quick me to understand? 11 question for --11 THE WITNESS: I thought this 12 12 illustration might help. So, this is from, you THE WITNESS: Sure. 13 13 BY MS. JACKSON: know, weather. 14 14 Q Just one question. When you have a cold front and a warm 15 15 front, there's wind. Because those differences Α Okay. 16 Q So, this is in response to a question 16 in temperatures which creates the pressure 17 you were asked on cross. Can you explain why you 17 differential, which causes air to move. 18 So, the same thing with these drums, 18 did not look at the probability of exposure and 19 what you would need to look at that probability? 19 you're going to have a -- you're going to have a 20 20 temperature difference, because those metal drums A So, I was just asked to assess risk. And so, again, for a risk assessment, we look at 21 are going to heat up during the day on a hot day. 22 the exposure, the levels, the durations, and we 22 And then overnight, as the

268 269 1 look at the inherent toxicity. 1 MR. RYAN: Thank you. 2 2 So, that's why I use those two things. JUDGE COUGHLIN: Absolutely. We'll 3 We don't look at, what are the chances of come back, I guess, in -- well, why don't we just 4 4 somebody walking past the site. come back at 2:00? 5 5 (Whereupon, the above-entitled matter Just like with my example from the 6 went off the record at 1:53 p.m. and resumed at National Forest, with the illegal marijuana 7 7 2:00 p.m.) growth, we don't say, well there's a low 8 8 probability of a back packer coming here, so JUDGE COUGHLIN: We're back on the 9 9 we're just going to leave it in place. record. If anybody happened to hear me when I 10 10 said I just sent a mouse flying, I didn't mean So, I mean, again, we would consider 11 11 if there is a potential for human exposure, then literally an animal. 12 12 It's a digital mouse under here that we would do something about that. 13 13 Q And what would you need to evaluate I kicked with my foot. And Alyssa said, you said 14 14 the possibility? Would you need exposure levels? you sent a mouse flying. And I was like, oh, not 15 15 what I meant. A You would want to know like how often 16 16 people are there. And again, we just look at, (Laughter.) 17 17 JUDGE COUGHLIN: So, you know, I there's a potential for exposure. 18 haven't seen any animals in the courtroom. I 18 MS. JACKSON: Okay. Thank you. 19 19 MR. RYAN: Your Honor, may we have a don't want to create a false impression. 20 20 MR. RYAN: I have no further five minute break to look at these before we 21 21 questions, Your Honor. rest? 22 22 JUDGE COUGHLIN: Okay. Great. All JUDGE COUGHLIN: Yes. 271 270 1 1 right. Thank you very much, Dr. Keteles. CEX 6 through CEX 10. CEX 13 through 2 THE WITNESS: You're welcome. CEX 20. CEX 22 through CEX 31. Oh, I'm sorry. 3 JUDGE COUGHLIN: Anything else from 3 Actually, it's beyond that, because we have a 4 Complainant in the way of rebuttal? bunch of stipulated. 5 5 MS. JACKSON: No, Your Honor. CEX 22 all the way through CEX 47. 6 JUDGE COUGHLIN: Okay. And from CEX 49 and 50. CEX 52 through CEX 67. And CEX 7 7 75 through CEX 77. Respondent? 8 8 MR. RYAN: No, Your Honor. We're And, I guess just as a point of 9 complete presentation. clarification, in addition to CEX 04 corrected, 10 JUDGE COUGHLIN: Okay, great. Let me 10 CEX 4 was also admitted into evidence. 11 just, very quickly, make sure we all are on the 11 MR. RYAN: By this one. 12 same page with what's in evidence. 12 JUDGE COUGHLIN: Yes. Okay. And then 13 13 And I'm going to kind of, you know, so in terms of Complainant's, we're on the same page? 14 just speak in chunks to kind of make this simple, 14 15 15 because I think it's the third time we're MS. JACKSON: We are, Your Honor. 16 listening to it. 16 JUDGE COUGHLIN: Okay. Great. And 17 17 But, so I'll start with Complainant's. then turning to Respondent's, REX 1 through REX 18 And what I have admitted is CEX 1 through CEX 4 18 11. REX 13 through REX 20. Is that correct? 19 19 MR. RYAN: And I admitted 14A and 14B. 20 20 And this includes that which was JUDGE COUGHLIN: Yes, thank you. And 21 stipulated to. I'm just lumping it together to 21 REX 14A and 14B. Michael, did you circulate 22 save time. 22 those?

272 273 1 COURT REPORTER: Yes. 1 JUDGE COUGHLIN: Okay. All right, 2 JUDGE COUGHLIN: Okay. Michel's 2 great. So, we're all on the same page. Anything 3 circulated those. So, hopefully you'll have else then? Before I wrap this up? 4 4 MR. RYAN: No, Your Honor. 5 5 MS. JACKSON: Can I just ask a quick JUDGE COUGHLIN: Okay. 6 6 MS. JACKSON: No, Your Honor. auestions? 7 7 JUDGE COUGHLIN: Sure. JUDGE COUGHLIN: All right. Thank you 8 8 MS. JACKSON: For clarification. Was all very much. I appreciate your flexibility, 9 9 the resume of Kelly O'Neal admitted? I -- we your courtesy, your professionalism. 10 don't have record of it. 10 I wish you safe travels home. I'm 11 MR. RYAN: Yes. I believe all but one going to just quickly, I guess, let you know, you 12 12 of our Exhibits were admitted in. We did not may be familiar or not, once I close the 13 move it into evidence, but that was CEX -- yes. 13 evidentiary record here in just a few moments, 14 14 MS. JACKSON: Okay. I'll pack up and what not. 15 15 But, in terms of what will follow from MR. MCKAY: Kelly O'Neal's resume was 16 in. 16 our office, is we will, I believe, eventually get 17 17 the transcript of the hearing. And I believe we MS. JACKSON: It's just our notes. 18 18 transmit that to all of you, to the parties. Okay, thank you. 19 19 JUDGE COUGHLIN: Yeah. The only thing And then we'll be issuing an order 20 20 that will outline deadlines for any motions to I don't have in evidence from Respondent was REX 21 conform the transcript, should there be any 12. 22 errors that you need to identify, as well as some MR. MCKAY: That's right. 274 275 deadlines for post-hearing briefing. 1 close the record. And I'll just take a minute to 2 2 Typically, I start with Complainant. pack up. 3 3 And then allow some time for Respondent, simply MR. MCKAY: Thank you, Your Honor. 4 4 because they carry the initial burden. JUDGE COUGHLIN: Thank you. 5 5 So I stagger it essentially for (Whereupon, the above-entitled matter 6 6 initial briefs and any reply briefs. And, then went off the record at 2:06 p.m.) 7 7 once that briefing schedule is closed, that's 8 8 when I get to work reviewing everything and 9 9 coming to a decision. 10 10 And just the last housekeeping 11 11 measure, as an FYI, that email that we talked 12 12 about, has been uploaded and is in our case 13 13 tracking system. 14 14 And it's identified in the way that I, 15 with the title that I gave it and read into the 16 record. So it's been preserved. Anything else? 16 17 17 MR. MCKAY: No, thank you. 18 18 JUDGE COUGHLIN: All right. Well, 19 19 thank you all very much. Safe travels home. And 20 20 it's been a pleasure. 21 21 I appreciate the opportunity to 22 preside. The hearing is closed. And you can 22

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