EXHIBIT 12

FILED UNDER SEAL

IN THE CIRCUIT COURT

TWENTIETH JUDICIAL CIRCUIT

ST. CLAIR COUNTY, ILLINOIS

DIANA HOFFMANN, individually and as Independent Administrator of the Estate of THOMAS R. HOFFMANN, Deceased, et al.,	)	No. 17-L-517
Plaintiff,	)	
v.	)	
SYNGENTA CROP PROTECTION, LLC, et al.,	)	
Defendants.	)	

CONFIDENTIAL

REMOTE VIDEOCONFERENCE CORPORATE DEPOSITION OF SYNGENTA, BY AND THROUGH ITS REPRESENTATIVE

MONTAGUE DIXON

WEDNESDAY, JUNE 24, 2020

REPORTED BY:

DEBRA A. DIBBLE, RDR, CRR, Notary Public

JOB NO. 27663

REMOTE VIDEOCONFERENCE DEPOSITION OF MONTAGUE DIXON, produced as a witness at the instance of the Plaintiffs and duly sworn, was taken in the above-styled and numbered cause on the above-referenced date, from 10:08 a.m. to 4:59 p.m. EDT, before Debra A. Dibble, RDR, CRR, Notary Public, reported by realtime stenographic means at the location of the witness, pursuant to Section 1-109 of the Illinois Code of Civil Procedure pursuant to the Illinois Supreme Court Rules 206 and 204(a)(3).

REMOTE APPEARANCES:

KOREIN TILLERY, LLC
BY: STEPHEN M. TILLERY, ESQUIRE
stillery@koreintillery.com
JOHN A. LIBRA, ESQUIRE
jlibra@koreintillery.com
NICOLE M. GRAHAM, ESQUIRE
ngraham@koreintillery.com
ROSEMARIE FIORILLE, ESQUIRE
rfiorille@koreintillery.com
505 N. 7th Street
Suite 3600
St. Louis, Missouri 63101
(314) 241-4844
Counsel for PLAINTIFFS

WALKUP, MELODIA, KELLY & SCHOENBERGER
BY: KHALDOUN A. BAGHDADI, ESQUIRE
kbaghdadi@walkuplawoffice.com
650 California Street
San Francisco, California 94108
(415) 889-2919
Counsel for PLAINTIFFS

KIRKLAND & ELLIS LLP
BY: THOMAS P. WEIR, ESQUIRE
tom.weir@kirkland.com
1301 Pennsylvania Avenue N.W.
Washington, D.C. 20004
(202) 879-5000
Counsel for SYNGENTA CROP PROTECTION, LLC

HUSCH BLACKWELL LLP
BY: MEGAN A. SCHEIDERER, ESQUIRE
Megan.Scheiderer@huschblackwell.com
4801 Main Street
Suite 1000
Kansas City, Missouri 64112-2551
(816) 983-8295
Counsel for CHEVRON U.S.A. INC.

STEPTOE & JOHNSON LLP
BY: JASON LEVIN, ESQUIRE
jlevin@steptoe.com
633 West Fifth Street
Suite 1900
Los Angeles, California 90071
(213) 439-9455
Counsel for CHEVRON U.S.A., INC.

GORDON & REES LLP
BY: P. GERHARDT ZACHER, ESQUIRE
gzacher@grsm.com
275 Battery Street
Suite 2000
San Francisco, California 94111
(619) 230-7703
Counsel for WILBUR-ELLIS

HEYL, ROYSTER, VOELKER & ALLEN P.C.
BY: ANNE KIMBALL, ESQUIRE
akimball@heylroyster.com
35 N. Dearborn Street
Seventh Floor
Chicago, Illinois 60602
(312) 853-8700
Counsel for GROWMARK

ALSO PRESENT:
MARK SMITH
Syngenta In-House Counsel
TIMOTHY PATTERSON
Syngenta

VIDEOGRAPHER:
ISAAC ORIHUELA,
TransPerfect Legal Solutions

INDEX

DEPOSITION EXHIBITS

PROCEEDINGS

(June 24, 2020 at 10:08 a.m. EDT)

THE VIDEOGRAPHER: We are now on the record. Today's date is June 24th, 2020, the time is 10:08 a.m., Eastern Standard Time.

This is the video deposition of Montague Dixon, in the matter of Diana Hoffmann, versus Syngenta Crop Protection, LLC, et al.

This is filed in the Circuit Court, Twentieth Judicial Circuit, St. Clair County, Illinois. The case number is 17-L-517.

This deposition is taking place via web video conference with all participants attending remotely due to the Covid-19 pandemic.

My name is Isaac Orihuela. I'm the videographer representing TransPerfect.

Would counsel on the conference please identify yourselves and state whom you represent beginning with the questioning attorney.

MR. TILLERY: For the plaintiffs, Stephen Tillery of the law firm of Korein Tillery.

MR. WEIR: Tom Weir, Kirkland & Ellis on behalf of Syngenta.

THE STENOGRAPHER: And I can put the rest on as also present on the stenographic

record.

THE VIDEOGRAPHER: Our court reporter today is Debbie Dibble, also with TransPerfect.

The court reporter can now swear in the witness.

MONTAGUE DIXON,

having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. TILLERY:

Q. Sir, would you state your name for the record, please?

A. Yes, sir. My full name is Montague Uriah Dixon, III.

MR. TILLERY: For the record, I'll note this is a deposition of an adverse party or agent, and I will be conducting it in accordance with Section 3-1102 of the Illinois Code of Civil Procedure, and that is cited at 735 ILCS 5/2-1102.

Q. (BY MR. TILLERY) This is a remote deposition. You understand that, of course, don't you, Mr. Dixon?

A. Yes, sir.

Q. All right. And have you ever given a

Page 10

deposition before?
A. No, sir.
Q. Have you testified before?
A. No, sir.
Q. Okay. Before we begin this remote deposition today, I want to make clear the expectations that all of the attorneys have regarding communications with you, okay?
A. Yes, sir.
Q. All right. During this deposition, Counsel appearing with the deponent and the deponent will have an opportunity to speak off the record at the appropriate time as if this were in a traditional deposition setting, where all parties were represented by attorneys appearing in the same room at the same time where you're located.
But since it's a remote deposition, we want to make sure that you are not using any other means of communication other than at breaks where you can talk to your counsel, and you're not receiving any other signals or answers or communications, for example, in your headphones right now. I mean, we need your assurance that those wouldn't be communications means with others

Page 11

helping you to answer questions.
Do you understand what I'm saying?
A. Yes, sir, and if it's more helpful, I do have an external speaker Jabra that I could engage if you would find that more acceptable.
Q. No, it's not necessary, we just need your assurance.
A. Yes, sir.
Q. That's all. So whatever works best for you is fine with us so long as we have your assurance that there's compliance with the Illinois rules and the other rules that make sure these types of communications don't take place.
It applies to all parties, not just to Syngenta. Everybody has their time that when this virus ceases its grip on our country, we'll go ahead and go back, presumably, to some form of traditional dep, but right now we need your assurance that there's nothing else going on that would give you answers to the questions.
Do you understand that?
A. Yes, sir, and you have my assurance.
Q. Thank you.
Now, could you state your date of birth, please?

Page 12

A. Yes, sir. February 28, 1966.
Q. And your home address?
A. 205 Newberry Street, in Jamestown, North Carolina. The ZIP code is 27282.
Q. And your business address?
A. 410 South Swing Road, Greensboro, North Carolina 27409. Might be 27410. We have two ZIP codes that we use.
Q. We're going to go through your work history at Syngenta, and the -- I believe it is two corporate predecessors you worked for at Syngenta, but before we do, can you tell us what your job title and job responsibilities are today?
A. Yes, sir. I am currently the regulatory portfolio lead for the herbicide group, and as such, I lead a team of three persons that represent our different herbicide products in our North American portfolio.
Q. So a regulatory portfolio lead for the herbicide group, which would include paraquat; right?
A. Yes, sir, it does.
Q. Would you mind telling us what that means, a regulatory portfolio lead?
A. Yes, sir.

Page 13

Q. I know that's a term of art that means a lot to folks at Syngenta, but to us, we might need a little help.
Do you understand?
A. Yes, sir. So essentially I lead a team of regulatory managers, and I still maintain a role as a regulatory manager as well, with responsibilities primarily in my supervision of paraquat and diquat as well as new product development that we are working on. In that role, I interact with the business as well as with regulators to handle, you know, the activities necessary to maintain the license to operate. So to gain registrations, to respond to registration reviews, data call-ins, respond to communications potentially from either EPA, sometimes California.
And then so in that role, I am in contact with the regulatory bodies. I also work with our business partners to develop new use label strategies to gain registrations of new products, sometimes to replace sources maybe of an inert ingredient or an active ingredient within a product, and generally answer questions from different parts of the business that are associated with maintaining our license to operate

Page 14

with selling our registered products.
Q. So would it be a fair assessment that you're the liaison between this company, Syngenta, you work for, and regulatory bodies like the USEPA?
A. Yes, sir, I do act in that capacity, with direct communications and responsibilities for products within the agencies. Certainly there is a tiered approach. I tend to work at a certain level within the agencies. There are folks that, in our organization that work at higher levels in the agency, but I tend to interact primarily with the EPA regulators that have responsibilities for the products for which I also have those responsibilities. So at EPA, certain groups handle certain products, and that would be my direct contacts typically.
Q. All right. So if we can, let's go through the hierarchy of regulatory positions in the United States. You told us your duties and responsibilities and title.
Who is above you on the chain in regulatory affairs in the United States?
A. So my immediate supervisor is Charles Pearson. He is the leader for the entire

Page 15

regulatory -- U.S. regulatory portfolio. That would involve the herbicide group which I lead, the fungicide group which is led by Charles Levey. Then there is the insecticide group -- I'm sorry, fungicide is led by Adora Clark; insecticides by Charles Levey; our professional products by Patrick McCain.
And so above Charles is then John Abbott, who leads the North America regulatory and stewardship group, and John reports in to Chris Davidson.
Q. And where is Chris Davidson?
A. He is located in Washington, DC.
Q. Okay. And what is his role or interaction with the USEPA?
A. I don't believe he has frequent interactions with EPA. Certainly John and Charlie would have more frequent interactions. I honestly cannot tell you how often he does interact with EPA.
Q. Who interacts with respect to paraquat with the EPA most frequently?
A. That would be me, sir.
Q. All right. And how long has that been the case?

Page 16

A. I became the regulatory manager for paraquat in 2006, at the last half of 2006. I want to say probably September-October time frame, sir.
Q. In that period of time, until now, say almost 14 years, has there been anybody else who's had more frequent contact with the U.S. EPA than you?
A. I would not -- I do not believe that to be the case. I would be very surprised if that were the case.
Q. So if there's a meeting that's to be conducted by Syngenta with the U.S. EPA, it's likely you who would establish that meeting; correct?
A. Correct.
Q. And if there was a question that somebody at the EPA had, for example, Marianne Mannix, if she were to have a question, she would go to you, wouldn't she?
A. Most likely.
Q. Okay. And how often does that happen?
A. We've had a series of interactions, particularly when she took over the registration review project that was initially run by Molly

Page 17

Clayton. Marianne Mannix covers the registration review activities. There is also the RD division that would handle new product activities.
I would say during the last four to five years, we've had, I would characterize it as multiple interactions each year. I don't think I could give you a specific number for each year, because as the years have evolved, there's been different questions. We met quite frequently, for example, around the human health mitigation activities that started 2013, '14, and then ran up until the issuance of the human health mitigation decision.
Q. Okay. So in terms of your communications, let's use an example. You know what emetics are, right?
A. Yes, sir.
Q. All right. Have you talked to Marianne Mannix about -- strike that.
Have you talked to Marianne Mannix about emetics in the last three years?
A. Yes, sir.
Q. And was that in connection with communications she received from Jon Heylings?
A. Yes, sir.

Q. And did you reach out to her, or did she reach out to you?
A. I reached out to her. And for clarity of the communications, we alerted Marianne, I believe it was in February of 2019 that we had been informed of some questions being raised by a former employee of the company, and then we met with Marianne around the emetic, and we met with Marianne, and I believe Kelly Sherman, I want to say, in May of 2019, and went through the information around what Mr. Heylings had indicated his concerns were; and communicated that with the agency and had a dialogue at EPA on that topic.
Q. Where did you have that meeting?
A. At the main location, 1 Potomac Plaza in Arlington there at EPA's headquarters.
Q. And I assume Jon Heylings was on the call with you?
A. He was not.
Q. Okay. Was he told about the meeting?
A. I do not believe so. I do not --
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) I'm sorry. Counsel interrupted you. You can answer.
You may answer, sir.

THE WITNESS: Tom, should I answer?
MR. WEIR: Yes, you can answer.
THE WITNESS: I do not have definitive knowledge, but I do not believe that Mr. Heylings was told prior to that meeting that we would be meeting with the EPA; however, I do not have definitive knowledge on that.
Q. (BY MR. TILLERY) And you used the word "we." Who was it besides you who met with the U.S. EPA about emetics?
A. John Abbott.
Q. And how many meetings did you have?
A. Specific to the Heylings situation, the in-person meeting in May was the only in-person meeting. I did have a phone call with Marianne in February in which I let her know of the initial questions that Mr. Heylings had raised.
I would also point out that that was not the only meetings that we had had on emetic. It is the meeting specific to the questions around Mr. Heylings.
We -- as we were developing two new products, one has been registered, one has

not. The product that has been registered, Gramoxone 3 SL, is our new product. We met with the agency to talk about the development of those projects, in those meetings. We shared with the agency that our intention was to retain the same ratio of paraquat active ingredient to emetic concentration that was in our currently registered Gramoxone SL 240.
So that would be another discussion I had with the agency on emetic.
Q. Let me make sure our record is clear. In February of 2019, you reached out to Marianne Mannix on behalf of Syngenta specifically regarding the communications that you expected the EPA to have about emetics in paraquat from Dr. Jon Heylings; correct?
MR. WEIR: Object to the form.
THE WITNESS: My discussion --
MR. TILLERY: If you can, sir, the reporter will tell you this, but if you'd just hesitate a little bit and, Weir, your objections are very, very, poorly audible in here, and I hope the reporter can get those, but it's difficult for us to hear your objections.
(Discussion off the record.)

Q. (BY MR. TILLERY) And the other thing I'd ask you to do is, if you can, just focus on my specific question, We're going to be at this a long time today, and if you could just focus. There will be a lot of opportunity for you to explain your answers, but if you can, at least at this preliminary stage as we go through this, if you could just focus on my specific question. Okay?
Let me go back and restate the question, because our record is a bit garbled. We'll start over.
To clarify the record, you indicated to us that in February of 2019, about 15 months ago, 16 months ago, you reached out to Marianne Mannix of the U.S. EPA regarding Jon Heylings and the statements he was making about the emetic or lack of emetic in sufficient quantities in paraquat; correct?
A. So the initial communication with Marianne was a phone call in which we identified a former employee. We did not identify Mr. Heylings by name. That a former employee was asking questions about a previous study. That was the -- that was related to the emetic. I believe that

Page 22

was the extent of the initial awareness that we communicated to EPA at that time.
Q. (BY MR. TILLERY) Why did you reach out to the EPA?
A. We have tried to maintain a very transparent and good working relationship with EPA, specifically and through the human health mitigation; Marianne and I have had multiple interactions about how to try to address EPA's concerns, primarily around accidental ingestion.
Syngenta took a very proactive and cooperative role with EPA to work on many of the ultimate final requirements that EPA has around paraquat. So over that time period, I had frequent discussions with Marianne. So this was part of maintaining that transparent communication with her that there was some questions around the emetic level, and we were looking into them. And once we had more information, we would come back to her.
Q. So once you really -- as a matter of absolute truth, weren't you really giving her a heads up that she was going to get a communication from John Heylings? Isn't that the truth of the matter, Mr. Dixon?

Page 23

MR. WEIR: Object to form.
THE WITNESS: Okay. May I answer or...
MR. WEIR: Yes.
THE WITNESS: Okay. Certainly. We would want to make sure that she had awareness that there was a possibility that someone could be reaching out to her, absolutely.
Q. (BY MR. TILLERY) All right. All right. And did you tell her that she -- strike that.
What did you tell her specifically about what the former employee was saying about the emetic?
A. The initial conversation -- and I'm doing the best of my recollection -- was that there was questions being raised by a former employee on the earlier studies related to the emetic, but that we were in the process of investigating. And at this point, we just wanted to make her aware of the questions. And as we knew more, we would provide her more information, which we did at that subsequent meeting.
Q. So you, in the first call, just called and said somebody raised a question, a former

Page 24

employee raised a question. That's what you told her; correct?
A. Essentially, yes.
Q. And you told her that the question was raised by the employee about the amount of emetic that had been put in the formulated paraquat products; right?
MR. WEIR: Object to form.
THE WITNESS: I do not believe the specific conversation got into ratios of levels of emetic. It was more that he was asking questions about earlier studies that had been conducted, and that we were going to continue to -- we were essentially looking into his questions and that as we understood his position and understood the questions better, we would be coming back to them with more information.
Q. (BY MR. TILLERY) Did you know at that time that Jon Heylings had already told the people in Europe that he was going to file something with the U.S. EPA?
A. I believe I was aware of that intention of Mr. Heylings.
Q. And what did you understand he was going to send to the USEPA?

Page 25

MR. WEIR: Object to foundation.
THE WITNESS: My understanding was that he was going to express to EPA concerns that the data that underlied the ultimate level of emetic in products which were not the products actually that were being sold in EPA at the time, our current product, was insufficient and that he was alleging there was potential misconduct in the studies to falsify the data.
Q. (BY MR. TILLERY) Okay. And is that what you told Marianne Mannix?
A. At the May meeting, yes.
Q. What about in the preliminary meeting on the phone in February of 2019?
A. No, sir, at that point, I just indicated there was questions about -- that were being asked by a former employee with respect to the emetic, and that we were in the process of trying to fully understand them.
Q. Did you ask for a specific meeting face to face with EPA over this topic?
A. In May, yes.
Q. Did you -- you waited until May to ask for the meeting?
A. We requested the meeting in May, and

Page 26

then --
Q. Okay.
A. -- the meeting request, you know, essentially we said we'd like to meet with her to discuss a few topics. And in the meeting, we went through, in more detail, the information that Mr. Heylings had shared with our European team and that had come to us.
Q. And on the February 2019 call, was there anyone besides you and Marianne Mannix of the United States Environmental Protection Agency?
A. No, sir. I told her directly.
Q. How long did that call last?
A. My recollection -- and I can't say definitively -- would be no more than ten minutes.
Q. Okay. How long have you worked with Marianne Mannix?
A. Since she took over for Molly Clayton. I would assume that was sometime around 2014 or -- probably 2014.
Q. Do you know --
A. I know --
Q. Sorry. I was just trying to get a direct answer to my question. So from 2014.
Did you know her predecessor, Molly

Page 27

Clayton, personally?
A. Not personally. In a professional manner, yes, but not personally. But I do --
Q. Go ahead. I'm sorry.
A. I do want to make sure that I'm -- these dates I'm giving you are the best of my recollection.
Q. They all are. We know that. We assume that in the deposition. People do make mistakes. If you make one and you find out later in the dep that you remember that a different date or a different name or a different time, please clarify that on the record for us. Okay? You understand?
A. Yes, sir.
Q. Okay. Now, you said that you knew these people. You've never met them personally is what you're saying; right?
A. Well, when -- the question was asked if I knew them personally. I assume that to be on a social level.
Q. Yes.
A. And, no, not on a social level. Purely on a professional level, only having ever met with Marianne at the USEPA.

Page 28

Q. Okay. So you reported, then, the content of that call to other people at Syngenta, didn't you?
A. Yes, sir.
Q. And you put that in a memorandum or e-mail?
A. I do not believe I wrote an e-mail or memorandum to that. I believe that was verbally communicated.
Q. And that was to John Abbott?
A. It would have been to John Abbott, yes, certainly.
Q. Who else did you verbally communicate it with?
A. At the time, it would have also been Janis McFarland, who at that time I believe was still with the organization. Let me confirm that. Maybe Janice had left. Certainly with John.
I don't believe Charlie was in his role at that point. And then it would have also been relayed to the team at Syngenta that was responding to the concerns that Mr. Heylings had raised around the emetic. That would have involved counsel, Mark Smith, as well as other members of that team.

Page 29

Q. Okay. And when you refer to people like Charlie or John or whatever, if you would refer by their last name for the record, it would help us as well. Okay?
A. Yes, sir.
Q. So there's no guesswork when we go back and look at the record. Okay? Thank you.
Now, the meeting, then, took place, first the face-to-face meeting took place in June -- or May, you said, right?
A. In May.
Q. What date?
A. I don't recall a specific date. I believe -- I will say I believe it was approximately the 23rd, but that's the best of my recollection. I know it was in May, and I think towards the third week.
Q. And did you have any further communications with Dr. Heylings between your February call with Marianne Mannix and the time you requested a meeting in May of 2019?
MR. WEIR: Object to the form and foundation.
MR. TILLERY: Excuse me. It's a 2-1102 deposition. I understand you have to

Page 30

make -- you think you've got to make a record, but I -- are we laboring under a misconception of how the deposition is being taken?

This is a 206 witness, and being taken under 2-1102, which is our right. This is cross-examination. It's -- so from now on, we have an obviation rule under Illinois law, and that obviation rule requires if you say "form only" it preserves nothing, so I'd ask you to specify what your objection to form is when you make it. Otherwise, it's simply disruptive of the deposition.

And if you want a hearing on it, we can have it in ten minutes, but saying -- saying form objection doesn't mean anything. So tell me what your problem is with my question, and then I'll reframe it, so we don't have to do this over again.

All right. Let's go back and re --

MR. WEIR: Would you like to know the basis of my form objection?

MR. TILLERY: Yes.

MR. WEIR: I'm happy to give it to you. So I -- it assumed that Mr. Dixon had

Page 31

conversations with Dr. Mannix. That was my objection to the form and foundation.

Q. (BY MR. TILLERY) Yeah, so can we go back and look at the question? Rather than trying to find it on this, I'll just restate it to you.

Do you know whether or not anyone at Syngenta had communications with Dr. Jon Heylings between the time of your call with Marianne Mannix in February 2019 and the time you reached out to establish a face-to-face meeting with Marianne Mannix in May of 2019?

A. I do not have a certainty of that communication. I do know there was dialogue going on between our European colleagues that were engaged with Dr. Heylings. There may have been a communication after that February meeting and prior to the May meeting. I just do not have specific information on that.

Q. Were you supplied any kind of e-mails or communications about any such meeting in writing?

A. I do not recall receiving such an e-mail. However, it is possible. I just do not recall receiving such an e-mail. We did have, as part of that team, teleconferences, and certainly

Page 32

approaches and communications between folks would have been mentioned in that. I just don't specifically recall such an e-mail, Mr. Tillery

Q. Okay. How many people were at the meeting in May with the EPA?

A. Syngenta: Myself and John Abbott. From EPA, we had requested Reuben Baris. Reuben, at the time, was the registration division team leader for paraquat products.

We requested Reuben, Marianne Mannix, Kelly Sherman. Reuben was unable to attend. He sent someone in his place. I do not recall. It was -- I do not recall the lady's name, but there was somebody representing Reuben from the RD division. In the meeting, I believe in addition to myself, was John, Kelly Sherman, and Marianne Mannix.

Q. Why did you believe --

A. And this person --

Q. Why did you request Reuben?

A. As part of our desire to make sure EPA was fully aware of the questions around the emetic, Reuben would be working on at the time; and Reuben is who I mentioned earlier that we had met with, Reuben and Mindy Ondish, when we were

Page 33

discussing our new product, Gramoxone 3 SL as well as Gramoxone Magnum.

Because we had had that dialogue with Reuben earlier and discussing our intention to submit those products, we wanted to make sure he was fully aware as well that there was a question being raised about the level of emetic in the product.

Q. Did you give the EPA representatives in the meeting anything in writing?

A. I do not believe anything was presented to them in writing.

Q. Okay. Was there a PowerPoint presentation made?

A. I do not believe there was. There was at that earlier meeting with Reuben and Mindy, but at this one, I do not believe there was a PowerPoint presentation. I certainly don't recall that there was one.

Q. When you say there was an earlier meeting with Reuben and Mindy, that wasn't regarding Dr. Heylings' claims or comments, was it?

A. No, sir.

Q. That was regarding your new product?

Page 34

A. Correct.
Q. Did that PowerPoint involve the emetic?
A. That PowerPoint in the meeting with Reuben and Mindy did have a slide to my recollection that demonstrated the ratio of emetic in the current product and the pending ratio of emetic in the two new products that were going to be submitted.
Q. And when did you have that meeting?
A. Hard to recall the specific date. My best assumption would have been sometime in 2017.
Q. Okay. So it certainly wasn't last year; right?
A. No, sir. No, sir.
Q. All right. And who did the speaking for Syngenta, both you and Mr. Abbott or one of you?
A. Primarily myself.
Q. And would you explain to us how long the meeting lasted and your best recollection of what information you conveyed and Mr. Abbott conveyed to the USEPA during the meeting?
A. Yes, sir. I would estimate the meeting lasted between 30 and 45 minutes. During

Page 35

that meeting, we communicated the allegations from Mr. Heylings that he was concerned that data had been falsified and that he even had retained copies of those data that he alleged were not correct.

An interesting element of the meeting was that EPA had said that they essentially are considering moving away from the emetic because the key element to minimizing --
Q. Sir, can you answer my question? Please. I don't know where you are on this meandering road you're on right now, but please go back and answer my question. Let me start over.

My question simply to you is: What information did you convey to the USEPA about Mr. -- or Dr. Heylings' statements about the emetic in paraquat? What did you say?
A. I had indicated that Mr. Heylings had expressed concern that the data underlying the emetic level -- and this would be the 0.5-gram per liter emetic level, was based upon potentially falsified information, and that he had indicated he had records to that effect.

We were asked what our view on that was, and we responded that the level of

Page 36

emetic in the current products had been set at 1.5 grams per liter, back when we had set Inteon, and that we were maintaining that level of emetic.
Q. So, in other words, your new product had three times more emetic in it than the emetic that Dr. Heylings was making his statements about; correct?
A. That is correct.
Q. And therefore, you're not still selling the prior paraquat products at .5 percent; right?
A. That is correct. Syngenta, when we registered Gramoxone Inteon, we cancelled the registration of our former products that had that other level of emetic in it.
Q. And now your new product has three times of the emetic; right?
A. It's not quite three times. We've maintained the ratio of paraquat to emetic. So 1.5 grams per liter emetic in the 240-gram Inteon, created a ratio -- I can't remember the specific ratio. I have an idea. We had maintained -- when we went to the 360-gram per liter, we, accordingly, increased the emetic up to maintain that ratio. The Gramoxone Magnum product that has

Page 37

1.5 grams -- I'm sorry, that has two -- 160 grams of paraquat, the emetic was reduced to be consistent with the ratio of emetic that was in our currently registered product Gramoxone Inteon.

So as the product concentration went up, the emetic level went up, I want to say it's approximately 2.3 grams per liter, and the 360 product --
Q. What was the old version, how much was it per liter? What was it before you changed it?
A. So before we went to the Inteon, sir, or after?
Q. Before you went -- before you jacked up the amount of emetic three times, what was the measure?
A. In the former products, it was a 0.5-gram per liter emetic, and a 360-gram paraquat product.
Q. So 0.5-gram emetic to 360 grams of paraquat.
A. Yes, sir.
Q. Okay. And just so we're -- just abundantly clear, the new product, you raised that to, for the same amount of paraquat, to 1.5 grams of emetic; correct?

Page 38

A. No, sir. In the new product, where it went to 1.5 grams of emetic, the amount of paraquat was reduced from 360 grams down to 240 as part of the Inteon technology.
Q. So then what is the increase overall? If you had .5 grams to 360, and you're now at 1.5 grams per 2 -- would you say 40?
A. 240.
Q. Okay. How much have you increased the emetic?
MR. WEIR: Objection, foundation.
MR. TILLERY: You have the background. We haven't asked you questions, but, sir, you have a master's degree in chemistry, don't you?
THE WITNESS: Yes, sir.
Q. (BY MR. TILLERY) All right. So let's -- if you can, answer my question. What's the percentage increase?
A. Well, without having a calculator in front of me, it's a little difficult to do the math. I will say that our 360 product had 0.5 grams. We referred to that as 1 X. Okay? When we went to the 240-gram per liter and it went up to 1.5 grams of

Page 39

emetic, we've referred to that as 3 X emetic.
Q. Okay.
A. As far as the ratio, you just simply take the amount of emetic and divide it by the paraquat. That gives you the ratio. I could do that with a calculator, I just can't do that in my head.
Q. We'll do it at the break. But it's certainly over a four-time increase, isn't it? It's over a 400 percent increase, isn't it?
A. It went from --
Q. I'm doing it just by looking at the numbers, and I'm sure you can do it by math, and I'll ask you to do that at the break.
A. Sure.
Q. But it looks like it's over 400 percent. If that's the -- if that's the case, when did you first start increasing the emetic at that level?
A. My understanding of the emetic increase was part of the development of the Inteon formulation, that I believe Dr. Heylings was actually the patent holder on that. And in the U.S. Inteon formulation, which other components

Page 40

were put in, one element of that was to lower the concentration of paraquat, increase the level of emetic to add sodium alginate and add magnesium sulfate. So that was a transition. There was a series of formulations tested over, I'm not sure -- I would say the whole existence of a product, companies are constantly modifying formulations, obviously, but the level of emetic that was in the final paraquat U.S. formulation was 1.5 grams per liter, as part of the --
Q. What I'm trying to figure out is when did you start selling that in America.
A. Oh, I'm sorry.
Q. The 1.5 grams per 240 grams of paraquat, when did that start?
A. I believe it was registered at the end of 2005 and would have been marketed starting in 2006.
Q. With that same formula?
A. That was with the Inteon formulation, yes, sir.
Q. And you're saying the Inteon formulation is continuing to be used?
A. No, sir. What has happened, and just

Page 41

to be clear, once we got the Inteon registered, which was the 240-gram per liter formulation, we cancelled the Gramoxone Max, which was that former formulation that you were referring to. The Inteon formulation was sold as Inteon until approximately 2012, when we introduced Gramoxone SL 2.0. The key difference between Gramoxone SL and 2.0 and Inteon was the removal of the sodium alginate, and so that product has remained our primary product until our current registration of Gramoxone 3. So currently we have the Gramoxone SL 2.0 and the Gramoxone SL 3.0, which the Gramoxone SL 3.0 increases the paraquat back up to 360, and the emetic was increased up to approximately 2.3 to retain the same ratio as in Inteon and in the Gramoxone SL 2.0.
Q. So the 2.3-gram emetic to 360-gram paraquat, in your view, is fairly proportional to 1.5 gram emetic to 240 grams of paraquat; correct?
A. Yes, sir, that is the same ratio.
Q. All right. Now, let's go back to the meeting. You're in May of 2019, 13 months ago. You've had a meeting, then, with the EPA

Page 42

representatives; correct?
A. Correct.
Q. And during the meeting, did you make a recommendation about what they do with the communications that they had received from Dr. Heylings?
A. No, sir.
Q. Did you tell them -- strike that.
Had they already received Dr. Heylings's report?
A. If so, they did not indicate that at the meeting.
Q. What did they tell you they knew of this issue?
A. Specifically, they indicated that they were considering removing the requirement of emetic in light of the requirement they were going to put in place of using a closed system for all products less than 120 grams per liter, because that was viewed in the agency's eyes as a more effective way of preventing accidental ingestions.
MR. TILLERY: Yeah, I move to strike your answer as unresponsive.
Q. (BY MR. TILLERY) What did they tell you they knew of the issue, the issue being the

Page 43

communications with Jon Heylings? What did they tell you they knew?
A. They did not indicate any awareness or any communications from -- other than what I had told them in February.
Q. And did they indicate they had received anything in writing from Dr. Heylings?
A. I certainly do not recall them saying that at the meeting. I don't believe they made any references.
Q. That's all I'm looking for.
All right. So then, did Mr. Abbott make any recommendations about this?
A. Recommendations? No.
Q. Yeah, did he tell them what he thought they should do?
A. No, our position was that everything that we had done and -- with respect to emetic and paraquat, we stand by scientifically.
Q. And did you get a call after this meeting from Marianne Mannix or anyone else at USEPA indicating they had heard from Dr. Heylings?
A. We heard more from Dr. Heylings, I believe, that he --
Q. Can you answer my question? Can you

Page 44

answer my question? Do you know what my question is? Let me read it back.
Did you get a call after this meeting from Marianne Mannix or anyone else at the USEPA indicating they had heard from Dr. Heylings?
A. I don't recall ever receiving a call from Marianne Mannix or anyone at EPA indicating they had received a communication from Jon Heylings.
Q. And let's go back to the meeting again.
Did you or Mr. Abbott take any position regarding the accuracy of the assertions being made by Dr. Heylings?
A. I believe the position that we took was that we stood behind the science that underlies the emetic.
Q. And you told them that there was nothing wrong with any of the data; right?
A. I don't recall using those words, so I can't say that we said that.
Q. Well, did you deny that the numbers created by Dr. Michael Rose were altered? Did you deny that?
MR. WEIR: Object to the scope,

Page 45

object to the form as well.
THE WITNESS: Okay. I don't believe we denied or confirmed anything.
Q. (BY MR. TILLERY) So you didn't say to them that there is a former scientist who was a well-respected member of our scientific team in Europe who thinks that Dr. Michael Rose fabricated information that was filed with the United States EPA many years before, and you didn't speak to that at the meeting? Is that what you're trying to tell us?
A. No, sir.
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) Okay. You did tell him or you didn't?
A. We did inform them of the allegations.
Q. And did you tell them that allegation was correct?
A. I do not believe we told them that allegation was correct. I don't believe we think that allegation was correct.
Q. Okay. Did you tell them that allegation was wrong? That you had done your own analysis, and it was wrong?
A. I cannot recall making that statement.

Page 46

Q. Well, I'm sorry to say this, but you're being a little opaque right now. What I'm trying to find out is what your communications were. Think back. 13 months ago. Somebody's claimed that thousands of people are dead because of a problem with falsification of some data. Big deal. Now, can you tell us what you remember about the meeting and what you said?

A. Yes, sir. My understanding --

Q. All right. So what did you say?

A. To the best of my recollection, our position was and is that certainly we acknowledge that Mr. Heylings is alleging data was falsified. We don't believe we agree that those data were falsified, and we certainly believe that the data that underlies the effectiveness of the emetic was valid.

Q. And was this meeting ever reported publicly? This meeting that you had with the USEPA?

A. I do not believe this particular meeting was reported publicly.

Q. If I went in and called Marianne Mannix, do you think she'd talk to me?

MR. WEIR: Object to foundation.

Page 47

Q. (BY MR. TILLERY) Do you think she would? Well, strike the question.

What I'm asking you is this: Where can I find a record of your meeting on the public website of the USEPA where you had this little private session with all of these people at the USEPA? How can I find a record of that?

MR. WEIR: Object to foundation, scope.

THE WITNESS: Mr. Tillery, I do not believe there is anything in the federal register or in the registration review document that talks about the specifics of that meeting at this time.

Q. (BY MR. TILLERY) Okay. When you say "at this time," do you think there's going to be something?

A. The indications from Dr. Heylings, as I understand it, is that Marianne Mannix told him -- and this is coming from our understanding of communications from Mr. Heylings to Syngenta -- that at some point the information he provided would be presented on the paraquat docket.

Q. And has it been presented on the paraquat docket in 13 months?

Page 48

A. I have not seen it presented on that docket. There is a lot of information on there, but I do not recall and do not believe it is on there.

Q. So there is no indication that any communication the USEPA has received from a former scientist of Syngenta about a widely-used product called paraquat has ever made it into the public domain.

Is that a fair statement, sir?

MR. WEIR: Object to the form.

THE WITNESS: Okay. I would say I'm not aware of that information in the public domain.

Q. (BY MR. TILLERY) And have you ever published, at Syngenta, prior to this day, in this deposition, any indication of this private meeting with USEPA?

A. I do not believe so.

Q. Okay. Now, afterwards you gave a report to others about the communications; right?

A. Correct.

Q. Who did you report to?

A. It would have been the team at Syngenta that was working on the -- responding to

Page 49

the allegations from Mr. Heylings. That team involved counsel as well as Phil Botham, Andy Cook, and other members of that group.

Q. And you told Dr. Philip Botham exactly what happened; right?

A. We would have reported, yes. We reported that we communicated to EPA and that we made them aware of the information that Mr. Heylings had alleged.

Q. And you had told them -- strike that.

And you told Dr. Botham and the other people that you mentioned, Andy Cook as well, what the USEPA responded to you; correct?

A. I believe that was part of the team meeting discussions, yes.

Q. And the report you gave to them was an accurate assessment of what happened; right?

A. Absolutely.

Q. Okay. Now, has there been any follow-up communication with USEPA about, let's call it the John Heylings' assertions about the emetic in paraquat?

MR. WEIR: Object to form, foundation.

THE WITNESS: Okay, I do not

Page 50

recall any additional communications with EPA on that topic.
Q. (BY MR. TILLERY) Has there been any communications with any other regulator in the rest of the world that you're aware of?
MR. WEIR: Object to scope, foundation.
THE WITNESS: I'm not aware of my -- my focus is primarily USEPA, sir.
Q. (BY MR. TILLERY) Yeah, but are you aware of any?
A. I am not -- I would have to defer to the team on that, and the communications from that team.
Q. Yeah, that's not the answer, though, is it? That's not an answer to my question.
Are you aware of any inquiry about Dr. Heylings' comments about the emetic in paraquat in any other parts of the globe besides the U.S.?
MR. WEIR: Objection --
Q. (BY MR. TILLERY) Are you aware of it or not?
A. All I can say is that as part of our teams, there's discussions about communications,

Page 51

but I cannot tell you specific dates or communications.
Q. (BY MR. TILLERY) Okay. Now, what else have you heard that we haven't talked about about the emetics assertions being made by Dr. Heylings?
A. I'm not sure I understand the question, sir.
Q. I'm trying to find out if you've had any other interaction on this topic that we haven't talked about.
A. My understanding is based upon work that Syngenta -- we have been trying to evaluate the effectiveness of the emetic, and it's my understanding that currently the medical community is moving away from recommendations of emetic.
Q. That's not my question. My question is: This topic being Jon Heylings' assertions about the emetic, what other interaction or information or any communication, if you had, that we haven't previously discussed in the deposition.
A. I believe that information may be covered under attorney-client privilege. Certainly our --
Q. And if you have talked to your

Page 52

lawyers, I don't mean to include that. You can exclude that, sir.
A. Okay. So, I'm not -- can you please restate the question, following your advice?
Q. Right. I'm ready to move on to a new topic in our discussion here today.
A. Okay.
Q. I want to know is there anything on the table I should ask you about? Is there any more you've done? Any people you've talked to, any scientific analysis, any communications with the EPA? Anything else that I haven't talked to you about, about the John Heylings' assertions about emetic in paraquat?
Understood?
A. Yes, sir. I think other than the potential communications mentioned that the team is having, which is with our attorneys, I can't think of anything.
Q. Thank you, sir.
MR. WEIR: If you're going to move to something else, do you mind if we take a short break?
MR. TILLERY: Not at all. You tell me when. That's fine. Let's take a short

Page 53

break.
THE VIDEOGRAPHER: We are going off the record at 11:03 a.m. Eastern Time.
(Recess taken, 11:03 a.m. to 11:18 a.m. EDT)
THE VIDEOGRAPHER: We are back on the record at 11:18 a.m. Eastern.
Q. (BY MR. TILLERY) Mr. Dixon, are you still using at Syngenta the same emetic formula that you've always used?
A. Yes, sir, PP796.
Q. Okay. There's been no structural modification or change in the design of that particular emetic formula, to your knowledge; correct?
A. To my knowledge, no. I know it as PP796, which is, I believe, how it's always been referred to.
Q. Okay. And did you make Dr. Heylings aware of your meeting with the EPA in May of 2019?
A. I do not recall if we informed him of the meeting or not.
Q. Did you invite him to dial in to the meeting and participate?
A. No, sir.

Page 54

Q. Now, let's go back, if we can, to the CV that you've given us and go through your background.

You received a bachelor's degree in chemistry from the University of North Carolina, Chapel Hill, in 1989; is that correct?

A. Yes, sir.

Q. And you received a master's degree in chemistry the following year from the University of North Carolina, Greensboro; right?

A. No, sir, not the following year. That was in the year 2000.

Q. Oh, I'm sorry. It was 11 years later. I apologize. So you received that in -- I misread your CV. It was 11 years later you received it, right?

A. Yes, sir.

Q. All right. What was your first full-time employment?

A. First full-time employment was with a company called Roche Biomedical. And that lasted for a relatively brief period of time, I want to say for about six months in 1989.

Q. Okay. And what did you do then?

A. I was a laboratory technician,

Page 55

analyzing medical samples.

Q. What did you do next?

A. Next I went to work for the University of North Carolina at Chapel Hill in the department of pathology. In that role, I was helping to synthesize certain potential pharmaceutical agents.

Q. How long did you stay in that job?

A. Approximately one year.

Q. And then?

A. And then I went to work for, in March of 1990, for Ciba-Geigy Corporation, in the residue chemistry department.

Q. How long were you in that job?

A. In that particular job, one year, and then I transitioned within the same company to the metabolism chemistry department.

Q. What were you doing in those jobs?

A. Analyzing samples to produce, in the case of metabolism, to identify -- to isolate and identify metabolites from applications of our products. In that earlier role, in the residue chemistry, to determine the magnitude of potential residues in crops treated with our products.

Q. What was the next job you had?

Page 56

A. In approximately 2000, I moved into the operator and residential safety group. And in that role, I worked to assess people's potential exposure to our products either through occupational uses or through residential uses.

MR. WEIR: Steve, I don't know if you're muted. I can't hear you.

Still nothing. Mr. Dixon, can you hear?

THE WITNESS: I'm not hearing Mr. Tillery, but I'm hearing other people.

THE VIDEOGRAPHER: Shall we go off the record?

MR. WEIR: Yeah, we can go off the record until he gets that sorted out. That's fine.

THE VIDEOGRAPHER: We are going off the record at 11:23 a.m.

(Recess taken, 11:23 a.m. to 11:29 a.m. EDT)

THE VIDEOGRAPHER: We are back on the record at 11:29 a.m. Eastern.

Q. (BY MR. TILLERY) What my point was is that your prior employment before 2000 when the company became known as Syngenta was including

Page 57

associations with corporations that ultimately ended up being a predecessor business to Syngenta; correct?

A. Mr. Tillery, I'm sorry because the audio broke up. I don't think I got the full breadth of the question. Could you please just restate that?

Q. Frankly, it's not -- we can move on.

What was your first job with the business currently known as Syngenta?

A. We became Syngenta in 2000. And that time frame is when I moved into what was called our operator and residential safety group. And in that role, I was involved with doing risk assessments to quantify potential exposure risks, either through occupational settings or through residential settings.

Q. And how long were you in that job?

A. Until 2006, sir.

Q. And that's when you moved into regulatory?

A. Yes, sir.

Q. And have you brought us up-to-date about your regulatory experience previously? We've talked about all of your jobs?

Page 58

A. Yes, sir.
Q. All right. Now, do you understand today that you're testifying as the corporate designee for both Syngenta AG and Syngenta Crop Protection, LLC?
A. Yes, sir.
Q. What is the name of the entity you are technically employed by?
A. I believe it's Syngenta Crop Protection, LLC.
Q. Okay. For purposes of this deposition, can we refer to both Syngenta AG and Syngenta Crop Protection, LLC as Syngenta?
A. Yes, sir.
Q. All right. What do you understand your role to be as the corporate designee for Syngenta?
A. To be able to respond to a series of questions that were identified to me, and to speak to the best of my knowledge on the companies' records related to those positions.
Q. You were given a number of deposition topics, I presume; right?
A. Yes, sir.
Q. And those, for my records, show that

Page 59

they are topic 40, 41, 42, 43, 44, 45, 46, 48, 49, and 63.
Is that your understanding? Do those sound right?
A. The numbers sound right. I don't actually have that form in front of me, but the numbers sound generally correct.
Q. Okay.
MR. WEIR: Just for the record, it's topic 63 with respect to the EPA and not other regulators.
MR. TILLERY: That's correct. We agree with that.
Q. (BY MR. TILLERY) What have you done to prepare for the deposition?
A. So over the last several months, in February, I had a couple of meetings with counsel. Also was presented with witness copies that included multiple tabs of documents that I have read through and reviewed. I have tried to review my e-mails and other documents to try to get an understanding of some of the topics for which I may not have had an understanding.
Have on, for a couple of different topics, also asked questions of colleagues to try

Page 60

to increase my understanding of the topics.
Q. Who were those colleagues you talked to?
A. Andy Cook.
Q. And why Andy Cook?
A. I was under the mistaken impression that I would potentially be testifying with respect to our communications in other regions such as Brazil, and since I was not involved in those communications, I reached out to Andy to try to have a little bit better understanding of when those meetings were and the nature of those meetings.
Q. Is he the sort of go-to person in the Syngenta umbrella of companies on the topic of Brazil?
A. He is my counterpart in the global regulatory and has direct communications with Brazil on paraquat as I would have with EPA on paraquat.
Q. And your regulatory experience started, you said in 2006, right?
A. Yes, sir.
Q. And you were having communications with the EPA when you started in regulatory in

Page 61

2006?
A. Yes, sir.
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) And would you tell me how your job duties changed from 2006 to the current time?
A. Yes, sir. So I started out with responsibility for multiple herbicides including paraquat and diquat. Over the years, I've continued to maintain responsibilities, regulatorily-wise for paraquat and diquat. Moved from being a regulatory manager to a senior regulatory manager. Essentially, that's just with experience, being promoted to a new level. And approximately two years ago was promoted to being a team lead in the summer of 2017.
Q. Okay.
A. So my --
Q. Okay. Do you understand that in testifying for Syngenta on the designated topics, you're required to answer not based solely on information known or available to you personally, but also based on information known or reasonably available to Syngenta? Do you understand that?
A. Yes, sir.

Page 62

Q. And did you take that into account in preparing to testify on the designated topics?
A. Yes.
Q. Okay. Did you also understand that in testifying for Syngenta on the designated topics, the matters on which you are required to testify are not limited to the period since the formation of Syngenta but cover the entire period from the discovery of the herbicidal effect of paraquat in the 1950s through the present time? Did you understand that?
A. Yes.
Q. Did you take that into account in preparing to testify today?
A. Yes, sir.
Q. And did you understand that in preparing for the testimony in this case, that the designated topics would include the knowledge and actions with respect to Syngenta's predecessors in the paraquat business, the Zeneca, Empirical Chemical Industries, other companies and their subsidiaries? Did you understand that?
A. I understand that, yes.
Q. All right. Was there any other person that you spoke to in preparation for your

Page 63

testimony?
A. I spoke to our Canadian colleague, Anna Shulkin, trying to find out if and when we had meetings with PMRA. I have not heard back from her on that. She was going to let me know. But that was, as I stated a bit earlier, I was under the impression that I was perhaps covering other regions other than the U.S.
Q. Were there other employees that you have omitted that you spoke to in preparation other than the lawyers who represent you?
A. The two lawyers on the call and one other lawyer, Alan Nadel.
Other than that, no.
Q. Are there any other employees of other entities, not affiliated with Syngenta, that you've spoken to in preparation for this deposition?
A. No, sir.
Q. Okay.
A. Dr. Tillery, I'd like to make one -- I just recalled something that I would like to mention to you.
Q. Okay.
A. I'm not sure if it's relevant to your

Page 64

question, but in trying to understand what potential 6(a)(2) communications that we may have had, I did reach out to our 6(a)(2) person, Christina Lovingood, and initially had requested her to potentially provide me with a list. However, I was able to access our team space and was able to do it directly, so ultimately I told her I did not need a list.
Q. And what is her last name? How is it spelled?
A. Lovingood, L-O-V-I-N-G-O-O-D.
Q. And what is her title?
A. I do not know her specific title. I do know her role is when we do do 6(a)(2) submissions, she is the one that actually submits it to EPA, through Federal Express.
Q. Do you have the list of 6(a)(2) submissions that you've made?
A. As far as there is -- I could create a list, an Excel sheet or something. I do not have one readily on me. We do have records --
Q. Sorry, go ahead. Finish your answer.
A. Yes, sir. I'm sure I do have Excel files, and actually copies of 6(a)(2) submissions in my records.

Page 65

Q. And that would include all of the 6(a)(2) submissions with respect to paraquat as well; right?
A. That should. We maintain a 6(a)(2) team space with those records, and so I would assume every one is in there.
Q. Have you consulted that database in preparation for the deposition?
A. Yes, sir.
Q. And have you looked at the 6(a)(2)s that were filed with respect to paraquat?
A. I did. Certain 6(a)(2)s. There is 6(a)(2)s that are associated with fatalities. I did not go through those. But I did refer to the 6(a)(2)s relevant to the topic of the deposition.
Q. How many fatalities are reported on the 6(a)(2)s?
MR. WEIR: Object to the scope.
THE WITNESS: I do not have a specific number. I would say that our 6(a)(2) database from Syngenta onward, which would be 2001, has records that we're required under FIFRA 6(a)(2) to submit. I believe there were submissions going even back into the mid '80s that I don't know. If you were to ask it, I just can't

Page 66

give you a specific number, sir.
Q. What is the database called where the 6(a)(2)s are housed?
MR. WEIR: Object to the scope.
THE WITNESS: I believe it's referred to as the PRF team space.
Q. (BY MR. TILLERY) You said the PRF team space?
A. Yes, sir.
Q. And that's the potentially referable finding space?
A. Yes, sir.
Q. And it's filed under the group that considers potentially referable findings to the USEPA?
MR. WEIR: Object to the scope again.
THE WITNESS: So my answer is that that is the repository where those considerations are maintained, yes.
So the group that is involved in the 6(a)(2) committee has access to that space.
Q. (BY MR. TILLERY) Does that collection of documents also include all of the submissions to the committee, whether or not they were

Page 67

reportable 6(a)(2) statements?
Do you understand my question?
MR. WEIR: Can I just get a standing objection with respect to the actual discussion of the team space itself?
MR. TILLERY: I -- of course. I don't understand. He's designated on this exact topic. I don't know what you mean by scope.
MR. WEIR: I'm objecting to the scope with respect to the document practices or the scope of the team space itself. I know he's been designated on topics with respect to the location --
MR. TILLERY: Yeah, and just for the record for the Court, if we end up going that route, I mean, there's a topic, No. 63, that appears to be on point with respect to the USEPA. But I'll consent to a continuing objection on the topic so that you don't have to keep making this objection.
Q. (BY MR. TILLERY) Let me start over with my question, Mr. Dixon.
Is there a place that -- a database in Syngenta's records, corporate records, where potentially referable findings with respect

Page 68

to paraquat as an active ingredient or any formula or any added product including emetics, anything connected with it that could ultimately wind up as a 6(a)(2) reporting event is housed?
MR. WEIR: Object to the foundation.
THE WITNESS: Okay. We maintain a file room. And in the file room, there is a record of the submissions as well as events that were considered but not deemed reportable.
Q. (BY MR. TILLERY) Where is that file room?
A. It is in our Greensboro location, second floor of F building.
Q. Second floor, F building?
A. Yes, sir.
Q. Okay. Who is the custodian of those records?
A. As far as the custodian of the records or the file room itself is Kim Clark I guess maintains the overall responsibility before it goes into the file room. Our 6(a)(2) committee is, Nina Heard is the effective leader of that group.
Q. And who is on your 6(a)(2) committee?

Page 69

A. The membership changes over time. Typically, Brian Reeve is a member. Typically, John Abbott is a member, and then depending on the topic, other stakeholders are brought in with relevance to the considerations.
Q. And what is the purpose of the 6(a)(2) meeting? Strike that.
What is the purpose of the 6(a)(2) group?
A. The purpose of the 6(a)(2) group is to evaluate the recommendations from the PRF committee. And if the recommendations are deemed relevant for a 6(a)(2) submission, that determination is made and the submission is made.
Q. Are you a member of this 6(a)(2) meeting group yourself?
A. It depends on which topics. There are topics that if it's a molecule that I am responsible for, I am often involved in those meetings.
Q. Let's say paraquat.
A. I would have been involved in 6(a)(2) committee meetings for paraquat.
Q. For how long?
A. Starting probably in 2006 and '7, once

Page 70

I took responsibility. I was not necessarily a driving member, but a part -- a member of the committee.

Q. Okay. And who has been on those committees since that time, throughout, say, 2006, that you remember?

And I'm talking about the 6(a)(2) FIFRA group meeting.

A. Sure. Tim Pastoor, John Abbott, Nina Heard.

I'm sorry, I'm just in my -- it's been so many years, I'm just trying to remember the different personnel that may have been on those committees. They may have included Fernando Suarez, may have included Dan Minima.

And depending on the topic, relevant product safety scientists; the last two gentlemen I mentioned were toxicologists.

Q. Have you ever had a situation where -- occur where the PRF committee has recommended that no report be made to the USEPA under 6(a)(2), but the 6(a)(2) committee in the United States has overridden that decision, all with respect to paraquat?

A. I do not recall --

Page 71

MR. WEIR: Objection.

THE WITNESS: -- a circumstance such as that.

Q. (BY MR. TILLERY) Has there ever been a time with respect to paraquat where the 6(a)(2) committee has gone a different direction than the recommendations of the PRF committee?

MR. WEIR: Object to the scope.

THE WITNESS: I do not recall such a time.

Q. (BY MR. TILLERY) As far as you recall, the 6(a)(2) committee has always followed the recommendations with respect to paraquat by the PRF committee; correct?

MR. WEIR: Same objection.

THE WITNESS: As far as I recall, I would say yes.

Q. (BY MR. TILLERY) Has there ever been a time when the 6(a)(2) committee has, on its own, without reference to any PRF committee, filed a 6(a)(2) document with respect to paraquat?

MR. WEIR: Same objection.

THE WITNESS: I believe -- there's one situation where I think may fit the circumstances you're describing, Mr. Tillery, and

Page 72

that would have been our informing the EPA of this litigation.

Q. (BY MR. TILLERY) When did you do that?

A. I believe in January of 2019.

Q. And what did you tell them about this litigation?

A. My recollection is that there were -- we were subject to litigation; I believe we were informed in December of 2018. I believe it identified two different plaintiffs groups, if I'm remembering correctly, and that we communicated that to EPA under the 6(a)(2) provisions.

Q. That's what I'm trying to find out. What did you say about the case?

MR. WEIR: Object.

THE WITNESS: My recollection is we informed the agency of pending litigation on paraquat. I don't know how much further it went beyond informing of potential litigation and identifying the two groups.

Q. (BY MR. TILLERY) And you did that in the context of a 6(a)(2) notice?

A. Yes, sir.

Q. And under what section of FIFRA did

Page 73

you believe there was a requirement for a 6(a)(2) notification of the lawsuit?

MR. WEIR: I'll object to the scope. And, Steve, can I just expand my standing objections to any questioning with respect to PRFs and 6(a)(2)?

MR. TILLERY: Yes.

MR. WEIR: Thank you.

THE WITNESS: So in response to, that, it would have been guidance provided by the 6(a)(2) committee working with our counsel.

Q. (BY MR. TILLERY) But you don't know which section of FIFRA they were relying upon by making a 6(a)(2) report of the lawsuit; right?

A. I cannot quote you that section of FIFRA, no, sir.

Q. Okay. What is the Federal Insecticide, Fungicide, and Rodenticide Act? FIFRA for short.

A. Yes, sir. I believe it was passed in 1948. It is the series of statutes and laws that govern -- one of the sets of laws that govern the registration and distribution of pesticides in the United States.

Q. Syngenta is familiar with Section

Page 74

6(a)(2) of FIFRA, isn't it?
A. Yes, sir.
Q. And can you, in general terms, tell the ladies and gentlemen of the jury what that means?
A. Yes, sir. So within the provisions of FIFRA 6(a)(2), if a registrant becomes aware of a new potentially adverse finding either in a study, might be one particular situation, they are obligated to notify the EPA. There are other reporting obligations such as if there is a potential event, a B loss event, potential injuries have to be reported on a monthly basis. If there is a fatality. So there are certain criteria that if the registrant becomes aware of, they're obligated to inform the EPA through the 6(a)(2) process.
Q. So let's take a look at FIFRA 6(a)(2), which is cited as 7 United States Code Section 136d(a)(2). And just take a look at that on the screen. We'll pull that up for you.
We're going to refer to this as Exhibit No. 1.
MR. WEIR: Steve, can I also get a standing objection to any questions that are going

Page 75

to ask for a legal interpretation of the 6(a)(2) regulations?
MR. TILLERY: Yes.
MR. WEIR: Thank you.
(Dixon Deposition Exhibit 1 marked.)
Q. (BY MR. TILLERY) This is Dixon Exhibit No. 1.
Do you see that, sir?
A. Yes, sir.
Q. And this is the FIFRA 6(a)(2) section you were talking about, isn't it?
A. May I read it for a second, please, sir?
Q. Absolutely. Take your time.
A. Thank you.
[Document review.]
A. Okay, sir, I'm ready.
Q. And this creates, this document and the law or regulations set out in it, creates a reporting obligation for pesticide registrants, doesn't it?
A. Yes, sir.
Q. And to whom must a registrant report information?

Page 76

A. It is reported to the EPA, sir.
Q. And that's to the administrator; right?
A. Yes, sir. If that's the definition, we address it to EPA. I don't believe we address it to the acting administrator.
Q. All right. And Syngenta itself is a registrant under FIFRA with respect to some of its pesticide products, isn't it?
A. Yes, sir.
Q. And that certainly includes paraquat, doesn't it?
A. Yes, sir.
Q. And that would include the components formulated products of paraquat as well, wouldn't it?
A. Yes, sir.
Q. All right. 6(a)(2) requires pesticide registrants, like Syngenta, to report information -- I'm quoting -- regarding unreasonable adverse effects on the environment of the pesticide; doesn't it?
A. Yes, sir, that's what that says.
Q. And it says: An adverse effect is defined to include any unreasonable risk to man or

Page 77

the environment, taking into account the economic, social, and environmental costs and benefits of the use of the pesticide; right?
MR. WEIR: Object to the form. Are you reading from a different document now?
MR. TILLERY: I'm asking him if that's what this means.
MR. WEIR: Okay.
Q. (BY MR. TILLERY) Do you understand that to be the reporting obligation?
A. Will you please restate that, Mr. Tillery?
Q. Yeah, let's look at 557, if you'd pull that up.
(Dixon Deposition Exhibit 2 marked.)
Q. (BY MR. TILLERY) And this will be Dixon Exhibit No. 2.
A. I am opening it.
Q. For the record, this is 7 USC Section 136(bb).
A. Okay. I'd like to read this real quickly, sir.
Q. Of course.
[Document review.]

Page 78

A. Okay, I'm ready for your question, sir.
Q. All right. So my question simply is, is that FIFRA imposes on the registrant the duty to keep the administrator informed of the registrant's pesticide projects; right?
MR. WEIR: Object to the form.
THE WITNESS: I concur with your statement.
Q. (BY MR. TILLERY) In other words, because of the number of chemical companies and the thousands and thousands of chemicals, it would be impossible for the USEPA or any regulatory body to police those companies and those products on their own; correct?
A. I would agree with that, sir.
Q. And that means it's an affirmative obligation, where the person or company responsible for that chemical that's subject to the FIFRA regulation has an affirmative obligation to come to the EPA and tell them this information; right?
MR. WEIR: Object to the form.
THE WITNESS: I would agree that if it is deemed to be an unreasonable effect or as

Page 79

a role-out of the chemical, the registrant does have an obligation to make that communication.
Q. (BY MR. TILLERY) And when you say it's deemed to be an unreasonable effect, deemed to be by whom?
A. Well, we have a process in which we evaluate these -- the information presented, and to determine whether or not the information qualifies as a 6(a)(2). There are certain other provisions of 6(a)(2), for example, that might actually say something does not qualify for submission.
Q. Well, what I'm saying to you is simply this: You have an affirmative obligation to follow these rules and the regulations and the definitions in FIFRA, don't you?
A. Yes, sir, we are obliged to follow and comply with FIFRA.
Q. And you understand you can't come up with some internal definitions that are contrary to the intent and focus of FIFRA and use those as a means of avoiding reporting information that would otherwise be reportable.
MR. WEIR: Object to the form.
THE WITNESS: My understanding is

Page 80

that within the confines of 6(a)(2), there are reporting requirements and that the company -- in this case, Syngenta, it's been my experience, evaluates all of the criteria associated with reports; and when they deem that these comply with our understanding of FIFRA requirements, we make the submission.
MR. TILLERY: Let's move to strike that and go back to my question.
Q. (BY MR. TILLERY) My simple question is this: Syngenta can't come up with its own definitions to counter the reporting obligations of FIFRA.
Would you agree with that?
A. I would agree that Syngenta cannot come up with its own definitions.
Q. Syngenta has to follow the law, not its -- some other internal set of rules that it adopts; it has to follow FIFRA; right?
MR. WEIR: Object to form.
THE WITNESS: Yes.
Q. (BY MR. TILLERY) Can you answer my question?
A. Yes, sir, Syngenta follows FIFRA.
Q. Okay. And it can't come up, for

Page 81

example, with a definition of relevance that runs counter to the law of FIFRA and thereby say, well, we're following our own rules, we didn't think it was relevant.
Would you agree with that?
MR. WEIR: Object to the form.
THE WITNESS: Syngenta does not have definitions of its own that are counter to FIFRA. It operates within its understanding of the FIFRA 6(a)(2) requirements.
Q. (BY MR. TILLERY) Well, you keep saying within its understanding and forgive my level of queasiness about that. What I want to make sure is that you don't have a set of rules that are counter to the fair reading of FIFRA.
Do you understand?
A. I understand.
Q. All right. So you agree with me that Syngenta cannot create its own set of definitions or rules that are antagonistic to its reporting duties and obligations under FIFRA; correct?
A. I agree.
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) All right. Okay. All right.

Page 82

A. I was going to say, and then I spoke too quickly and Tom cut --
Q. Yeah, he -- the reporter got your answer.
A. Okay.
Q. Now, do you understand that if you don't file reports that are required under FIFRA, it's a criminal violation?
A. I understand that if Syngenta did not comply with the reports under FIFRA, that would be a violation.
Q. I didn't say that, I said a criminal violation.
MR. WEIR: Object on foundation.
THE WITNESS: I concede or understand what you're saying, and I agree that if you do not follow the requirements of FIFRA 6(a)(2), that it would be a criminal violation.
(Dixon Deposition Exhibit 3 marked.)
Q. (BY MR. TILLERY) Let's go to Dixon Exhibit No. 3.
Please let me know when you've had a chance to review deposition Exhibit No. 3.
A. Yes, sir.

Page 83

[Document review.]
A. I have read it.
Q. And you are aware of this statute as well; right?
A. This is my first time reading it, but I acknowledge what it says.
Q. And this is not a new concept to you; right?
A. No, sir.
Q. All right. You understand, at Syngenta, that if you falsify, conceal, or cover up material facts with respect to your dealings with the executive, legislative, or judicial branch of the United States government, that it's a crime; right?
MR. WEIR: Object to the form and foundation.
Q. (BY MR. TILLERY) You know that?
A. That's clearly what's stated right here.
Q. And if you make a materially false, fictitious, or fraudulent statement or representation to those branches of the U.S. government, it's a crime, right?
MR. WEIR: Same objections.

Page 84

THE WITNESS: That is what this statute says.
Q. (BY MR. TILLERY) And if you make or use any false writing or document knowing that that document contains materially false, fictitious, or fraudulent statements to any of these branches of the U.S. government, that's a crime; right?
MR. WEIR: Same objections.
THE WITNESS: I agree that that's what this statute says.
Q. (BY MR. TILLERY) And that's information that Syngenta has known about since this statute has been passed; correct?
MR. WEIR: Objection --
THE WITNESS: I would agree with that statement.
MR. TILLERY: All right. Let's look at No. 4.
(Dixon Deposition Exhibit 4 marked.)
THE WITNESS: I'm reading the document.
MR. TILLERY: Okay. Thank you, sir.

Page 85

THE WITNESS: Yes, sir.
[Document review.]
THE WITNESS: Okay, sir, I have read it.
Q. (BY MR. TILLERY) You're familiar with this particular section of FIFRA as well, aren't you?
A. Yes, sir.
Q. Right?
And Exhibit 4 is 40 C.F.R. Section 159.158, and it's entitled What Information Must Be Submitted.
Do you understand that?
A. Yes, sir.
Q. And it says -- strike that.
What is your understanding of the purpose for the EPA requirement that a registrant report relevant conclusions or opinions of a person employed or retained directly or indirectly by the registrant?
MR. WEIR: Object to the foundation.
MR. TILLERY: That's No. 1.
THE WITNESS: Okay. My -- would you please restate that, Mr. Tillery?

Page 86

Q. (BY MR. TILLERY) Sure. What is your understanding -- when I say "you" in this deposition, I don't mean Montague, I mean Syngenta. You're speaking for Syngenta, and you are, for purposes of these topics, Syngenta today.

Do you understand that, sir?

A. Yes, sir.

Q. All right. So let me ask you: What is your understanding of the purpose for the EPA requirement that a registrant report relevant conclusions or opinions of a person "employed or retained directly or indirectly by the registrant"?

MR. WEIR: Object to the foundation.

THE WITNESS: It's my understanding that the purpose of that is to ensure that the agency receives relevant information as they continue to evaluate or for the -- their understanding of the risk associated with a registered product.

Q. (BY MR. TILLERY) Well, let me --

MR. WEIR: Sorry, Steve, I do just want to state for the record, since I have a standing scope objection on this, it is our

Page 87

position for the record that Mr. Dixon is testifying based on his personal knowledge and not on behalf of Syngenta with respect to these.

MR. TILLERY: Well, I mean, if you're trying to pull him from the topic that he's been assigned, on the USEPA, he is the only witness that you have designated on the USEPA. Are you aware of any others?

And if you are, please state that on the record.

MR. WEIR: No, I am not pulling him from --

MR. TILLERY: He's the only one.

MR. WEIR: I let you speak, Steve, please let me speak. For the record, I am not pulling him from our designation for topic 63 with respect to the EPA. There were numerous other topics with respect to PRFs, with respect to 6(a)(2), and we designated Dr. Phil Botham on those documents, and you spent extensive time questioning him on that.

So I am objecting to the scope of this questioning, and I am making my record that this topic is outside of what we've designated Mr. Dixon for. And it is our position that he is

Page 88

testifying based on his personal knowledge and not on behalf of Syngenta.

MR. TILLERY: Yeah, for the Court, so we can leave this record where it is and have a way for the Court to understand why the parties have such a difference, it's -- it may be strategic to have somebody speak on the 6(a)(2) and PRF committees but then not on the agency itself and stop that discussion, and then simultaneously have somebody talk about the agency reporting but not talk about the things leading up to it.

So effectively, the strategem would be, you curtailed the substance of the entire questioning of any one person. And that obviously isn't going to fly, because in order for Mr. Dixon to speak to the reporting obligations under the topic with respect to the USEPA, he can't do it in a vacuum. He has to do it in the context of the rules that govern those communications, for which you agree he's been designated.

So as a consequence, I think you can take it up, you can -- I'll agree to your continuing objection, but it's clear that he has

Page 89

to talk about and understand these topics in order to talk to us about the topics he's designated for.

Do you have anything else?

MR. WEIR: I disagree with that, but I think we've both made our record.

MR. TILLERY: Okay. That's fine. Let's move on.

Q. (BY MR. TILLERY) I heard what you said, sir, but I want to ask if you understand the reason for the inclusion of that section which is in parentheses No. 1 is that the conclusions or opinions of a registrant's own employee would carry added significance when the adverse conclusion or opinion is against the registrant's own commercial interests?

Do you understand that?

A. I'm not sure --

MR. WEIR: Objection to foundation, please.

THE WITNESS: Mr. Tillery, would you please restate your last point?

MR. TILLERY: Okay. Would you read back? We have got your objection on the record, but it's -- it's interfering -- you're

Page 90

now -- we've got continuing objections on everything. You're continuing to interfere with the deposition.

So I -- if -- let's read back the question to the witness. Your objections are noted, Counsel.

(Whereupon, the following testimony was read by the court reporter.)

"QUESTION: I heard what you said, sir, but I want to ask if you understand the reason for the inclusion of that section which is in parenthesis No. 1 is that the conclusions or opinions of a registrant's own employee would carry added significance when the adverse conclusion or opinion is against the registrant's own commercial interests?"

Do you understand that?

(End of readback.)

THE WITNESS: Okay. My answer was -- to that -- thank you for reading that back -- is I do not agree that the information retained or gained by an employee, they would be most likely certainly to hear it if they are the registrant. I do not believe that it is tied to commercial interest. At least as it's written.

Page 91

Q. (BY MR. TILLERY) Well, are you -- do you think you can ignore 40 C.F.R. 159.158(a)(1)?

MR. WEIR: Object to the form.

THE WITNESS: Yeah, I'm certainly not saying that. I'm just saying that's not, from my understanding and my -- it's not tied to commercial interest. It's if you have adverse information, then that's where the statute is, it's based upon the information, not a relevance to commercial interest.

Q. (BY MR. TILLERY) Right. Relevance isn't involved in that aspect, is it, sir?

A. In the context of your question, as I understood it, you were saying that this had a commercial relevance, and I was just saying the statute itself is just speaking specifically about information.

Q. So you understand that if this type of information that's described under General comes from a person who is employed or retained from the registrant, it should be reported. That's what section 159.158 says; right?

A. If it fits within the reporting requirements, it should be reported.

You -- for example, if you look at

Page 92

No. 3, it could be that the employee has information that a qualified expert does not believe is valid information. So you could have that situation where 1 and 3 are in contradiction to each other.

Q. And both of them are such as to require reporting, aren't they?

A. I'm not sure that if No. 3, a qualified expert, determines the information in No. 1 is not valid, legitimate, or scientifically factual, if there would still be a reporting requirement.

Q. So let's make sure we understand. You understood 40 C.F.R. 159.158 to have three parts under A, right?

A. Yes, sir, I see that.

Q. Okay. And there is an EPA requirement that the registrant report relevant conclusions or opinions of a person who is a qualified expert as described under Section 159.153(b), that's at No. 3; right?

A. Yes, sir.

Q. And they also have to report information from whom the registrant requested the opinion or conclusions in question. In other

Page 93

words, if you sought information from some people and got that information, you'd have to report that as well; right?

MR. WEIR: Object to the form.

THE WITNESS: It's my understanding that if a registrant becomes aware of adverse information, a new study result or a new study finding, there is a reporting obligation.

Q. (BY MR. TILLERY) Okay. And is there any change in their reporting obligation by virtue of these three different described sources under Section 159.158?

MR. WEIR: Object to the form.

THE WITNESS: I can tell you from my experience, with respect to your question, sir, that we have a committee that because of these, I guess, considerations, goes through and determines whether or not the information reaches that threshold. And once it does, it's submitted.

As far as the mechanics behind it, that's why we have a committee that does that evaluation.

Q. (BY MR. TILLERY) Well, here's what I'm saying. Let's assume that you make a

Page 94

determination from looking at some science or report about paraquat, that it's not relevant to the assessment of risks or benefits, and you're not going to report it. Okay?

Do you understand that?

A. If I'm following you, it might be a situation, for example, just to make sure I'm following you, Mr. Tillery. If there is information that comes to a registrant's awareness but that it's already in the public domain and it's not new information, are you saying there's still a reporting requirement to report understood information already?

Q. Right, and that's a perfect example. Let's use your example. And let's say that you reached the conclusion that it's already in the public domain; therefore, we don't have to report it.

Are we with each other now?

A. So, yes, we're -- the example I'm thinking of or the type of information, if the EPA is already aware of information, you're not obligated to report duplicative information, is my understanding.

Q. Okay. So let's assume that's the fact

Page 95

pattern we're working off of.

You have some information about scientific studies that's come into your hands, and you deem that it's already in the public domain, or the public scientific information, and you don't have a reporting obligation.

Are we okay up to that point?

MR. WEIR: Object to the form.

THE WITNESS: I guess my answer on that is --

Q. (BY MR. TILLERY) I'm just asking if you understand my question.

A. Okay.

Q. This is not the question. I'm asking -- I used your example.

A. Yes, sir.

Q. Okay. Now, does that decision change or is it reevaluated if the source of that information is a person employed or retained directly or indirectly by the registrant?

A. I'm trying to think through your question and make sure I fully understand it. Give me just a second, please.

So if an employee comes across new information, they're clearly -- there is the

Page 96

reporting obligation.

If it's not new information, I don't believe there is a reporting obligation.

Q. So what I told you to assume is your own fact pattern, and that is that Syngenta determined that the scientific information that it had was already in the public domain and did not need to report it.

That's what you said; correct?

A. I said that in the context of information EPA was already aware of.

Q. Okay. Or at least charged with knowledge of; right?

A. That EPA should have had knowledge of or had awareness of.

Q. All right. Now, does it change that decision-making process if the source of that information was from a person who was employed or retained directly or indirectly by the registrant?

A. I'm not sure I know the answer to that, sir.

Q. Okay. Does it change the decision about reporting obligations of the fact pattern you told us if the source was from somebody that Syngenta requested an opinion or conclusion from

Page 97

under B, or 2?

A. Under B? Okay.

MR. WEIR: Object to the form.

THE WITNESS: So this is a situation, just to make sure I'm following the question, where we've requested an opinion from somebody. The opinion is information new or unknown by EPA, then is there an obligation --

Q. (BY MR. TILLERY) No. No, you said -- your fact pattern, let's not change horses here; we're in midstream. We're going good. Let's stay with it.

And that is you said this information was already known, it was in the public domain. Therefore, we didn't need to report it.

Now I'm asking you, does that decision process change if the source of this new information that you have that you decided not to report falls under (a)(2) --

A. So --

Q. -- if it came to the registrant from somebody from whom they requested an opinion or conclusion?

A. And just to make sure, sir, that I am

Page 98

clear on how I'm making the decision, the public domain being EPA has the information.
Q. I'm using your fact pattern. It was in the public domain.
A. And when I said that, the intention was, if it was not in my first statement, certainly it has been as I've been trying to answer your questions here, the fundamental assumption is that EPA is already aware of the information. It's a different situation if EPA does not have knowledge of information versus information that EPA -- my answer is based upon EPA already has the information.
Q. Yeah, so why don't you answer my question?
A. Okay.
Q. My question was very distinct. I said: Using your fact pattern, that Syngenta had decided not to report it because they thought that the findings were already in the public domain, does that decision change if the source of the information comes from (a)(2)?
A. Okay.
Q. Someone from whom Syngenta requested an opinion or conclusion.

Page 99

A. Okay.
MR. WEIR: Object to the form.
THE WITNESS: And again, I'm just trying to make sure, I'm trying to answer your question, Mr. Tillery, but I want to make sure that we're operating from the same -- as you say, it's my facts. My facts are with the assumption EPA is already aware of it.
In that situation, even if the information came from someone else, that determination would have to be made by our committee that handles these things as to whether or not the information that is being generated is different than the information EPA is already aware of.
Q. (BY MR. TILLERY) I don't have any idea what that answered, but that had nothing to do with my question.
Are you having trouble understanding me?
A. I feel like I'm answering your question, sir. I'm sorry if it's frustrating you.
Q. Well, I don't think you are. But let's go back to it and let's see if we can get through this and move on. It's a tedious point we

Page 100

have here. And let's see if we can do this together in a cooperative spirit, okay?
A. Yes, sir, I am trying to cooperate.
Q. It's fact-finding, truth-finding.
Do you agree with me?
A. Yes, sir.
Q. I'm asking you to use your own hypothetical situation, where a Syngenta decision has been made not to report information that -- scientific information that has come to you about, let's say, paraquat, because you think that the findings that came to you, the scientific findings, had all been -- already been reported in the scientific literature. That's the fact pattern that you gave. Correct?
A. I -- correct. And the assumption that EPA is aware of it.
Q. All right. Now, does that decision change or alter in any way if the source of the information was from any one of those three people, or groups of people defined under 40 C.F.R. 159.158 (a)(1), (2), and (3)?
A. I will say the answer does not change.
Q. All right. Then why have those? Why are they in the statute?

Page 101

MR. WEIR: Object to the form.
THE WITNESS: I'm not sure I understand the question, sir.
Q. (BY MR. TILLERY) What would their purpose be if you've already determined that you're not obliged to turn over the information, because you made a determination it doesn't meet the definition of relevant information, what's the purpose of those three sections in Syngenta's understanding of 40 C.F.R. 159.158?
MR. WEIR: Object to the form and foundation.
THE WITNESS: It's my understanding that these elements that are here are all factored into Syngenta's compliance with the 6(a)(2) policy, and we do comply with these.
MR. TILLERY: I move to strike that as unresponsive and out of the blue.
Q. (BY MR. TILLERY) Now, tell me what you at Syngenta believe the purpose of these three pieces is for your reporting obligations if your overriding decision on relevance already means you're not going to report the information.
MR. WEIR: Same objection.
THE WITNESS: These are all

Page 102

factored into Syngenta's decisions when making 6(a)(2) determinations for reportability.
Q. (BY MR. TILLERY) So in other words, you made the decision that fact -- the fact that it came from a qualified expert still makes it irrelevant if it's in the public domain; right?
MR. WEIR: Same objection.
THE WITNESS: No, I -- I didn't go that far with that. That's not what I was saying, sir.
Q. (BY MR. TILLERY) Well, let's go back and do it -- keep doing this.
You're telling me that you -- the PRF committee has solid scientific information about some aspect of paraquat that -- let's put it this way -- that would be otherwise reportable if it were a new finding.
Do you understand that?
A. I understand that.
Q. All right. And which the PRF committee has decided is not reportable because it already exists in the scientific literature; correct?
A. There is a possibility that determination may have been made, yes.

Page 103

Q. All right. And in that situation, tell me, then, what is the purpose of 40 C.F.R. 159.158(a)(1), (2), (3), in terms of that decision-making process?
MR. WEIR: Object to the form.
THE WITNESS: So as you laid it -- yes, sir. As you laid it out, you said the PRF committee has sound scientific information.
In that situation, it would go forward. If the PRF committee had information that was deemed not definitive or not sound by a qualified expert who may be able to look at that information that was initially presented to a PRF committee and said we think this is a reportable finding, but a qualified expert looks at it and says, no, that information does not represent an adverse finding, that could change the outcome.
Q. (BY MR. TILLERY) Well, let's say that the person retained and employed or the person in 2 who is a person from whom you've asked for an opinion or conclusion, or in 3, is a qualified expert, have all made the finding of relevancy under the rules, but Syngenta's PRF committee finds that this information is in the public domain, does Syngenta still have a reporting

Page 104

obligation because of this section?
MR. WEIR: Object to the form.
THE WITNESS: Yeah, and my answer to that would be based upon just this one section, it would seem to speak to that, but that's where we would rely upon the legal advice and the expert members of the team to ultimately make that decision.
Q. (BY MR. TILLERY) I'm unclear about what you mean "it would seem to speak to that." Do you mean under this section it seems like you'd have to report it; correct?
A. Under this section, as you're positioning it, it would seem that way.
Q. Yes.
MR. WEIR: Steve, why don't we do a break? Do you want to do lunch -- break for lunch now, or do you want to do one more section before lunch?
MR. TILLERY: Well, let's hold on here just a second. Let's not go off the record but give me one second, please.
Yeah, we can go off and take a lunch break and come back in half an hour, at 1 o'clock Eastern -- no, it would be -- excuse me,

Page 105

yeah, it would be 1 o'clock Eastern, 12 noon Central. Okay?
MR. WEIR: Go off the record.
THE WITNESS: We are going off the record at 12:30 Eastern Time.
(Recess taken, 12:30 p.m. to 1:20 p.m. EDT)
THE VIDEOGRAPHER: We are back on the record at 1:20 p.m. Eastern.
MR. WEIR: Before we get started again, this is Tom Weir from Kirkland & Ellis. I just want to state for the record that this deposition is confidential pursuant to the protective order in the case, and we are reserving the right to read and sign.
(Discussion off the record.)
Q. (BY MR. TILLERY) Now we're going to put up and direct your attention to plaintiffs' deposition Exhibit No. 5.
And this is 40 C.F.R. Section 159.165A.
(Dixon Deposition Exhibit 5 marked.)
A. Okay, I will read the document, sir.
[Document review.]

Page 106

A. Okay, sir, I'm ready for your questions.
Q. (BY MR. TILLERY) Are you familiar with this EPA regulation?
A. Yes, sir.
Q. Okay. It's one you've dealt with in the past; correct?
A. As our 6(a)(2) committee has been the folks that handled it, but I have participated in making the submissions accordingly.
Q. Okay. All right. And do you understand the purpose of (a), No. 1, which is under the heading Adverse Effects Information Must Be Submitted As Follows: (a) Toxicological studies, and then it says, under No. 1: The results of a study of the toxicity of a pesticide to humans or other non-target domestic organisms if, relative to all previously submitted studies, they show an adverse effect under any of the following conditions.
Have you got that?
A. Yes, sir.
Q. Okay. Its purpose is to make sure that the EPA knows about any toxicity studies that reveal new adverse information about the toxicity

Page 107

of the chemical.
Would that be a fair statement?
MR. WEIR: Object to foundation.
THE WITNESS: That seems to be the intent of the statement, sir.
Q. (BY MR. TILLERY) Okay. And that would be to make sure that the EPA knows about any toxicity studies that reveal new adverse effects in a different organ; right?
A. That appears to be what sub-bullet 1 or i says, yes, sir.
MR. WEIR: Sorry, the same objection with respect to foundation.
MR. TILLERY: And I'll consent to a continuing objection on foundation. Okay?
MR. WEIR: Thank you.
Q. (BY MR. TILLERY) And it also seems to have as its purpose to make sure the EPA knows of any toxicity studies that reveal new adverse effects involving a different tissue; right?
A. That appears to be consistent with the -- that's first bullet i in parentheses.
Q. And new adverse effects at a higher incidence; correct?
A. That's what is stated in number 3,

Page 108

yes, sir.
Q. Okay. Or frequency; right?
A. Yes, sir. And that's what's stated.
Q. Okay. Or in any different species of test organisms; correct?
A. That is -- yes, sir, that's what's there.
Q. Or in a different strain of test organism; right?
A. Yes, I see that, sir.
Q. Or in a different sex of test organism, right?
A. Yes, sir.
Q. Or in a different generation of test organism.
A. That is what's in part 4, yes, sir.
Q. Or by a different route of exposure; right?
A. Yes, sir, that's what's in part 5.
Q. Do you know why new adverse effects in a different species, strain, sex, or generation of test organism are important for the EPA to know about? Do you understand the logic of that?
A. Yes, I think I could certainly understand the logic of that.

Page 109

Q. What do you understand the reason for them wanting to know if there is any new adverse effects in a different species, strain, sex, or generation of the test organism that have been found?
A. Okay. This would be my speculation of EPA's position, but I believe they would welcome information or want information that they would use to evaluate their current position on a molecule that's registered; and new information and a different species, they would probably want to consider that.
Q. They want information that helps them evaluate the safety of the continued use of a pesticide, don't they?
A. That would be the purpose, I believe, of the toxicity studies.
Q. And wouldn't you think that would be their general feeling about the reporting obligations, the underlying general feeling is that if there's some evidence that underscores some hazard or potential problem for users or applicators of a chemical, they'd like to hear about it, right?
MR. WEIR: Object to the form.

Page 110

THE WITNESS: Yeah, I don't want to speak on behalf of EPA, sir.
Q. (BY MR. TILLERY) Okay. So you don't know one way or another if that is an underlying intent of the agency?
THE WITNESS: I just don't want to speak on EPA's position, sir.
Q. (BY MR. TILLERY) Can you answer my question?
A. I believe I did, but I'm happy to listen to it again and restate it, sir.
Q. I said you don't know one way or another if that is the underlying intent of the agency.
A. I cannot speak to the definitive intent of the agency. I certainly -- my experience would be EPA wants information to inform their risk assessments.
Q. Okay. Now, I think the next is number 6.
(Dixon Deposition Exhibit 6 marked.)
THE WITNESS: I am reading this, sir.
MR. TILLERY: Okay. We'll pull it

Page 111

up for display because it's one page.
THE WITNESS: Okay.
MR. TILLERY: Let me know when you're ready to discuss it.
THE WITNESS: Yes, sir, Mr. Tillery.
[Document review.]
THE WITNESS: Okay, sir, I believe I can answer your questions.
Q. (BY MR. TILLERY) Are you familiar with this reporting obligation?
A. I don't believe I have ever specifically read this, but I am aware of the intention and content of it.
Q. Okay. You understand Plaintiffs' Deposition Exhibit No. 6 to be 40 CFR Section 159.195; correct?
A. That appears to be that, yes, sir.
Q. Okay. And you understand the purpose, then you said you think you understand the purpose.
A. Yes, sir.
Q. What is it?
A. It appears, based upon my reading of this and my general understanding of 6(a)(2), that

Page 112

information such as this should be communicated to EPA if we become aware of, for example -- and I'm sorry, I'm just reading through it again as we go through, this appears more -- I believe it is to provide information to EPA to inform risk assessments that may be additional information to what they formed their prior risk assessments on.
Q. Yeah. Actually, it's a catch-all, isn't it? To make sure the EPA knows anything about a pesticide that might materially bear on its continued registration or the terms of its registration but which was not covered by other agencies's regulations; right?
A. I would rely on -- or the interpretation of our counsel and our 6(a)(2) committee to ensure that we were complying with that.
Q. Well, what did they tell you? You're here. You are here, not -- we can't delay. Today is the day. You're not going to rely on something and say -- and dodge the question.
If that's the case, you're speaking for Syngenta today. We've noticed this deposition. We have scheduled these and sent these notices out months and months and months

Page 113

ago. Back last fall.
So the question is: Can you tell me whether or not this document, this 159.195 is a catch-all to make sure the EPA knows about anything about a pesticide that might materially bear on its continued registration or the terms of its registration?
MR. WEIR: I'll object to the form and just note that I would like my continuing objection with respect to scope and foundation, just to be noted for the record.
THE WITNESS: I would rely on the interpretation from our legal experts on the committee to be able to answer that question, sir.
Q. (BY MR. TILLERY) Okay. So you are unable to answer that question; right?
A. I would answer -- I would rely on the advice given by our 6(a)(2) attorney to be able to answer that, sir.
Q. Okay. In preparing to testify for Syngenta AG and Syngenta Crop Protection on these topics today, did you make any attempt to obtain information that would answer that question?
A. No, sir, I did not.
Q. Did you make any effort to obtain

Page 114

information, additional documentation, to answer the question?
A. This particular question, sir?
Q. Yes.
A. No, sir, I did not.
Q. Did you search any documents or data available to you for information that might answer that question?
A. No, sir. I did not. I did review our 6(a)(2) documents on things that we had submitted, but not specifically interpretations of regulations, no, sir.
Q. Did you ask anyone for information or data that might help you answer that question?
A. No, sir.
Q. Did you go to the 6(a)(2) appointed lawyer to ask questions for interpretations so you could answer the question?
A. With respect to this deposition, no.
Q. Are you aware of anyone at Syngenta, other than the lawyers, that you believe may have the knowledge or data that might be able to lead to an answer to the question?
A. It would be -- questions such as these would be handled by our 6(a)(2) committee.

Page 115

Q. So the only thing you could say is that you would have a committee that has changed in configuration and membership over the years that would answer it; right?
A. Correct.
Q. So we would have to convene your 6(a)(2) committee for this deposition; right?
In your view? To answer that question?
MR. WEIR: Object to the form.
THE WITNESS: My -- I am unable to answer that question because I would rely on the guidance provided by the attorneys and our 6(a)(2) committee.
MR. TILLERY: So, just so counsel understands, in a 206 deposition, presenting a witness who refuses or cannot answer the question, we deem, on behalf of Syngenta entities, for this to be a binding, evidentiary admission. And if you have some way, if you want to take a break, you want to do it, it is not going to work to say I don't have an answer. I'm relying on my lawyers. Cute, but not effective.
So if you think that's going to work, we're going to deem it the other way.

Page 116

So I urge you to try to come up with answers other than to say it's our counsel or it's a committee, because today is the date for the deposition.
MR. WEIR: Just to be clear for the record, I just want to reiterate our position that this was not the witness that we tendered with respect to the 6(a)(2)s or PRFs. We think you are beyond the scope of the deposition topics that we have designated Mr. Dixon for.
I think you can proceed with your questions, and I disagree with any claim that this is -- somehow operates as a binding admission of the company.
MR. TILLERY: Well, we'll continue on. Our position is that you've just made your decision, vis-à-vis the USEPA, and that's what he's designated to talk about.
MR. WEIR: Just to be -- I don't fully understand your position, Steve.
MR. TILLERY: You just locked yourself into an evidentiary admission that you have no answers, and I don't believe you'll be able to offer any testimony at trial by any witness that contradicts what was just said on

Page 117

this record. Because this is a 206 witness. So if you want to rest on the fact that you offered him up for EPA and not Dr. Botham, I would have been happy to ask my EPA questions and all of this to Dr. Botham, but you excluded EPA from his list and gave it to this witness, exclusively, and made that point to me in Dr. Botham's deposition, several times. But I wasn't asking questions about this in the USEPA.
Now, you can't have it both ways. He either answers the questions or Dr. Botham, and you've designated this witness as your deponent for this topic. And if you now come in and say it has to be some committee whose membership we don't even have ironed out, or some lawyer whose identity is unknown, and that's the answer, on a day for the deposition of a corporate designee, then I'm happy to take that forward and see if that doesn't bind Syngenta for that answer. And that's all I'm saying to you. Okay? And I'm happy to move on.
MR. WEIR: Okay. Let me just respond quickly. I think you've made your record on the point. I think I've made my record. I think it was clear that you did ask Dr. Botham

Page 118

about issues relating to 6(a)(2), which I think showed your understanding of what we had designated him for. But I think we've both made our record, and I'm happy for you to continue asking questions of Mr. Dixon.

Q. (BY MR. TILLERY) Let me ask you a question, sir. How can you do your job as a regulatory officer, chief regulatory officer for Syngenta in North America, including the United States, if you don't understand the 6(a)(2) and FIFRA reporting obligations?

MR. WEIR: Object to that question, argumentative.

THE WITNESS: Mr. Tillery, I am not the chief regulatory representative. I would make that statement. And then we have a process through which we have our 6(a)(2) procedures, we have a committee and a lawyer to ensure that we are compliant. And as a regulatory person, I rely on our structure to be able to fulfill my obligations to report. When the committee deems something is reportable, I execute that report.

Q. (BY MR. TILLERY) Well, let me ask you, who at the Syngenta company in the United States has a greater understanding as an

Page 119

employee of the reporting obligations under FIFRA, than you?

A. All employees are briefed on reporting obligations, but we rely on the advice of the 6(a)(2) committee and the legal advice provided through that committee to guide our compliance.

Q. Do those people have names?

A. They are certainly people on the committee, yes.

Q. All right. Who are they?

A. I will not be able to give you a definitive list of all of the participants. I will tell you people that are on the committee, Nina Heard.

Q. Does she had -- just stop for a second. Does Nina Heard have a better understanding, would she be able to answer my questions on this topic? Nina Heard?

A. Nina Heard is the head of that committee in North America. We rely heavily on the guidance of Brian Reeve, the legal counsel.

Q. Sir, I had a question pending to you.

A. Yes, sir.

Q. I asked you would Nina Heard be able to answer my questions on this topic?

Page 120

A. I would speculate -- I shouldn't say speculate. I would direct Nina Heard as the 6(a)(2) committee lead would be certainly aware of these obligations, but again, it's the committee working with legal counsel to determine how they're executed.

Q. So you're unable to tell me whether she could answer this question either; right?

A. I don't want to speak to her definitive knowledge. I'm just identifying her role. And in her role as the 6(a)(2) committee, she is certainly aware of all of the requirements.

Q. Okay. So can you tell me "yes" or "no" whether or not she would be in a position, a better position to answer my questions about reporting obligations under FIFRA than you?

A. I believe in her role as the lead of the committee, yes.

Q. All right. And who else on that committee would be in a better position to talk about the reporting obligations to the USEPA?

A. Brian Reeve.

Q. Brian Reeve would too?
And is that R-E-E-V-E?

A. I believe that's correct, sir.

Page 121

Q. Okay. And who else on the committee would be in a better position to answer my questions about reporting, FIFRA reporting obligations to the EPA?

A. Those would be the two key people.

Q. And then you keep referencing a lawyer, without naming it. Is that Alan Nadel?

A. No, sir. That's Brian Reeve.

Q. So Brian Reeve is the lawyer?

A. Correct.

Q. And Nina Heard is the other member; right?

A. Correct.

Q. Okay. So those are the two people you would go to for an interpretation?

A. Absolutely. If I had a question about a 6(a)(2) interpretation, I would consult with those two individuals.

Q. Okay. And you think that they'd be in a better position to answer these questions; right?

A. They are more knowledgeable on those topics than I am.

Q. Okay. If the information, the reporting information would be relevant to an

Page 122

agency decision on the continued registration of the pesticide or to the proper terms of its registration, would you agree the registrant is required by Section 6(a)(2) to submit the information to the EPA?
A. Can you please restate that, sir?
Q. If the information -- strike that.
If the information would be relevant to an agency decision on the continued registration of the pesticide, or to the proper terms of its registration, the registrant is required by Section 6(a)(2) to submit the information to the EPA, isn't it?
A. I'm just trying to make sure I'm fully grasping the question. I believe that is the intent of 6(a)(2).
Q. So you agree with that statement?
A. I believe that's the intent of 6(a)(2). We would follow the recommendations and the guidance of the 6(a)(2) committee to make sure we were complying with the 6(a)(2) requirements.
Q. So you -- I'm asking if you agree with that statement.
A. Would you please read it again, sir?
Q. That's all right. We'll move on.

Page 123

Let's go to Exhibit No. 7.
(Dixon Deposition Exhibit 7 marked.)
THE WITNESS: Mr. Tillery, I've opened the exhibit.
MR. TILLERY: Okay. Why don't you refresh yourself with this exhibit, please.
THE WITNESS: Okay.
[Document review.]
THE WITNESS: It's quite a long exhibit, sir. I'm scanning through. I do not believe I've seen this before.
[Document review.]
THE WITNESS: Given that it's 75 pages, sir, is there a particular area you'd like me to refresh on?
MR. TILLERY: Yes, I will. Yes.
Q. (BY MR. TILLERY) I'll represent to you this is a document that was produced to us as Syngenta 00493318. And it's entitled Paraquat & Parkinson's Disease. Document refers to a research proposal at CTL in Alderley Park, United Kingdom. And Syngenta CTL refers to the Syngenta Central Toxicology Laboratory; correct?
A. Yes, sir. And, sir, do you have a

Page 124

time frame for this document? When it was published?
Q. I will have when we get in it, yes, sir.
A. Thank you, sir.
Q. I believe it's in the document itself.
But if you'd look at this, CTL is one of the in-house laboratories for toxicology studies at Syngenta; correct?
A. Correct.
Q. Okay. Let's go to and maybe we can answer your question about the timing. Let's go to slide 14 at 3331.
And just so you understand, sir, these are documents produced to us as-is. We're presenting this document to you. It was a production document produced to us by your counsel. Okay?
A. Yes, sir.
Q. It's not our personal document. It was produced in the discovery process in this litigation. Okay?
A. Yes, sir.
Q. And do you see that document?
A. Yes, sir.

Page 125

Q. It's entitled Recent Literature Developments of Concern.
A. Yes, sir, I'm reading this slide real quickly.
Q. Okay. And we're talking about the United States here, aren't we?
A. Certainly the first bullet references U.S., so I believe so.
Q. Okay.
A. And records --
Q. Two US based research groups have produced a series of publications since 1999 implicating paraquat in a Parkinson's disease animal model - work still on going.
Is that correct? That's what it says, right?
A. Correct. That's what it says, yes, sir.
Q. And then it refers to those two. One is the Cory-Slechta group - Rutgers, New Jersey, University of Rochester; right?
A. Yes, sir.
Q. The other is DiMonte group, Parkinson's Institute, Sunnyvale, California; right?

Page 126

A. Yes, sir.
Q. And then it says: Using the C57Bl6 mouse model and i.p. -- that stands for intraperitoneal, doesn't it?
A. Yes, sir.
Q. -- dosing of PQ (1 through 30 milligrams per kilogram) -- typically 3 weekly doses of 10 milligrams per kilogram.
Do you see that?
A. Yes, sir.
Q. And they're looking at three biological endpoints as markers.
A. I see that.
Q. All right. And you see neuropathological - loss of neurons. And that's determined, they reference, by stereology.
And then neurochemical-loss of dopamine from the striatum.
You understand that too, right?
A. Yes, sir.
Q. And you know what that means?
A. I have a general awareness of that, yes, sir.
Q. Okay. And then neurobehavioural, where it says reduction in locomotor activity.

Page 127

A. Yes, sir.
Q. These studies found that paraquat was neurotoxic to the black mouse, didn't they?
MR. WEIR: Object on scope.
Can I get a standing objection on the scope?
MR. TILLERY: Yes, you can.
THE WITNESS: Okay. Mr. Tillery, I don't see the results of these studies, but I believe these were the studies that indicated a reduction in some of the -- I believe it was neurons, but I would like -- I don't -- I do not see the actual results of the study, so I'm just going off of my recollection of the work they did.
Q. (BY MR. TILLERY) All right. You're familiar with the fact that these scientists found that there was a loss of dopaminergic neurons in the substantia nigra of the mouse brain; correct?
A. I believe that's what's in their publications. I'm assuming that's the publications referred to. This is my first time seeing this slide, but I am familiar with those two groups and the nature of the work, and I believe it's consistent with my understanding of the publications at the time.

Page 128

Q. Okay. They found that paraquat caused loss of dopaminergic neurons in the mid-brain, is that your understanding? In the mouse. In a mouse model.
A. Yes, sir.
Q. All right. And the substantia nigra pars compacta is sometimes abbreviated as capital S, capital N, small P, small C; right?
A. Correct.
Q. Okay. Now, if we go to slide 18, which is at 3335 of this exhibit.
A. Could you please scroll it down just a bit on my screen?
The other way, please. Or do I have the ability to scroll? Okay. Thank you. Okay.
Q. Take your time in reading it, sir.
A. Yes, sir.
[Document review.]
A. Okay, sir.
Q. Okay. So this slide is entitled Research Activity At Syngenta CTL Strategy Being Followed; correct?
A. Correct.
Q. And it says: If findings are not

Page 129

reproducible, aim to publicly refute the claims in the literature by offering our own alternative experimental findings; correct?
A. I concur, that's what the second bullet says.
Q. And then it says: If findings are repeatable, Syngenta CTL-generated data will be used to build a defensive position for paraquat based on establishing a no effect dose (under various dosing regimens) in the C57Bl6 mouse model, based on a biological endpoint - neuronal cell loss in the substantia nigra.
That's the next point they're planning; right?
A. Yes, sir, that's what's there.
Q. And then read the last point into the record for me, please.
A. The bottom bullet? Avoided measuring PQ levels in the brain, since the detection of any PQ in the brain (no matter how small) will not be perceived externally in a positive light.
Q. So avoid, avoid measuring paraquat levels in the brain of the animal. Don't measure it. Don't record it. Since detection of any paraquat in the brain, no matter how small, will

Page 130

not be perceived externally in a positive light.
Now, that reference, externally, what's that mean?
MR. WEIR: Object to the form and foundation.
Q. (BY MR. TILLERY) What's that, in your best understanding of reading Syngenta documents, what's "externally" mean?
A. My understanding externally would be outside of Syngenta, in the public domain.
Q. It would be in the public domain. Okay. Now let's go to this document.
And what exhibit number is this?
(Dixon Deposition Exhibit 8 marked.)
Q. (BY MR. TILLERY) We're looking now at Dixon deposition Exhibit No. 8.
A. Okay. I am seeing No. 8 here, sir.
Q. Are you familiar with this?
A. It appears to be a study conducted by Louise Marks, yes, sir.
Q. Okay. And this is her study XM7229/Research/Report; right?
A. That's what -- yes, I agree.
Q. And you know Dr. Louise Marks too,

Page 131

right?
A. I know that she worked for Syngenta, but she's someone I've never met or never had any communications with.
Q. Now, her work was in where, in the United Kingdom?
A. It looks like the performing laboratory was CTL, so that would be in the UK, sir.
Q. All right. And this was a neurotoxicity study conducted by Dr. Marks at Syngenta CTL administering paraquat to the black mouse; right?
A. Let's see here. Yes, sir.
Q. So this is, as far as you understand, the same mouse type that was being referenced in that prior exhibit; right?
A. I only see the C57. I believe it's the C57BLj6, so that might be further specified. I'm not sure if a C57 black mouse is the same as a C57BLj6.
Q. Okay.
Now --
MR. WEIR: Can I get another standing objection on the scope of this line of

Page 132

questioning, please?
MR. TILLERY: Yes.
Q. (BY MR. TILLERY) Now, at the time this study was reported, you were about one year into your job; correct? This was a year later.
A. Yes, sir, I would have been in the job just a little over -- almost a full year. I think I started in October, so I would have been in the job almost a year.
Q. All right.
And this job, this study was reported to you at the time?
A. I don't believe it was reported to me, sir, at the time.
Q. When was it reported to you?
A. I became aware of these studies -- and I'm trying to remember back to 2007. I do not believe I had any awareness at that time. You know, I certainly became aware of it as we have gone through preparation for the deposition here.
Q. So when did you start your preparation for the deposition?
A. Well, actually, the preparation formally started in May -- I'm sorry, I believe in February. I was -- as we go back to this, I

Page 133

certainly was aware of these studies. I believe we had received communication from your law firm, and we did submit a series of studies to EPA, I want to say it was December of '19, and I believe this may have been one of those.
Q. So you're talking six months ago; right?
A. If my timing is -- recollection is correct.
Q. Okay. And was that the first time you had ever become aware of this study?
A. I would say in detail, yes. There is a paraquat health sciences team that I have participated on over the years, and there's been many meetings, and I certainly -- although was not very involved with it at all, especially in the early part of my time in regulatory, I would have to assume at some point these studies may have been referenced during those meetings. I don't have a specific recollection of it. But it is possible that I may have been in a meeting or something where one of these studies would have been referenced in the past.
Q. Well, let me ask you this: When was the first time you were put on any kind of formal

Page 134

notice in your regulatory capacity of the existence of this study?
MR. WEIR: Object to form.
THE WITNESS: I do not recall a specific day, sir.
Q. (BY MR. TILLERY) Well, it would have been December of last year, six months ago, wouldn't it?
A. Well, that's certainly when my awareness reached a high level, because --
Q. All right, then. All right, then, if we're going to do it that way then let's go back.
When did you first learn of these studies?
A. I do not have --
Q. Let's do that.
A. I do not have a specific time frame in mind when I first learned of these studies. I may, over the course of 14 years -- not 14 years, but over the course of the work of the paraquat health sciences team as I was involved with coordinating the EPA meetings, it's certainly possible that I could have been in a meeting where these studies were referenced. I don't recall that, but it is possible.

Page 135

Certainly --
Q. Well, whether it's possible or not is not my question to you. Okay? That's not what I asked you, sir. I didn't ask you what you might have seen, may have -- I'm asking you when did you receive notice, as part of your job responsibilities at Syngenta, of the existence of this study that's marked as Plaintiffs' Deposition Exhibit No. 8? What was the first date?
A. Mr. Tillery, I do not have a recollection of what that date would be.
Q. Okay. What's the first date where you have a clear recollection of ever having seen the study?
A. Of ever having seen the study, I would say my best recollection is it would have been in December -- late -- I would say December of 2019 as we were preparing for the submission.
Q. All right. And that's because I wrote a letter to your counsel demanding that this be filed; correct?
A. If this is -- and I think there was a series of three studies. I don't remember the study number. But I believe this was one of the ones that we did submit, and we did submit it

Page 136

after receiving your letter.
Q. Now, let's look at this exhibit. Okay? And let's go to page 9, which is 2897 of Exhibit 8. And Study Design. There you go.
Do you see that, sir, the study design?
A. Yes, sir.
Q. The study design was to investigate the reproducibility of claims in the literature of the nigrostriatal neurotoxicity following administration of the herbicide paraquat to mice; right?
A. Yes, sir.
Q. So this study was part of the paraquat mouse research program described in the Syngenta CTL presentation that we looked at as the last exhibit; correct?
A. That would appear to be the case, sir.
Q. All right. And look under the Results section, please.
Do you see that?
A. I do.
Q. We see that: The administration of 10 milligrams per kilogram of paraquat dichloride, or the reference is, once a week for three weeks,

Page 137

resulted in a small but non statistically significant reduction in dopaminergic cell number in the substantia nigra paras compacta.
Do you see that?
A. I -- yes, I think I just found it. Yes, sir.
Q. Go ahead and take you're time and verify it.
A. Yes, sir.
Q. Verify that what I said is correct.
A. Okay. Administration of 10 milligram per kilogram paraquat dichloride once a week for three weeks. Yes, sir.
Q. All right. Now, if you go to page 22, which is 2910. If you'd pull that up.
And at the bottom of that, please read that.
A. The last -- which -- what -- the last paragraph, sir?
Q. Yes. The last paragraph. When she references the stereology.
A. Okay. In addition to the smaller magnitude of cell --
Q. Actually, you can just read it to yourself. I just want you to be familiar with it

Page 138

for the questioning.
A. Okay. Thank you, sir.
[Document review.]
A. Okay, sir, I've read the paragraph.
Q. Okay. So she points out that independent researchers had used an automatic staged setup, an automated one; correct?
A. She speculates that. I don't think she knows it definitively.
Q. Were you aware -- strike that.
And Dr. Marks used a manual setup, she says; right?
A. Let me just make sure.
I'm sorry, I'm just -- there's a lot of information here. I'm not an expert in this area. I want to make sure I'm reading it correctly.
Q. If you could just go to the -- where it says "However," about mid paragraph?
A. Yes, sir.
Q. Do you see that?
A. I am.
Q. However, the cell counts presented in the literature have, in the majority of recent -- I'm sorry, let's go up a little from there.

Page 139

The method of cell counting or stereology used in the present study, namely the optical fractionator method, is the standard method of estimating total cell counts in tissues and has been cited in the majority of recent PQ publications. However, the cell counts presented in the literature have been obtained using an automated stage set up which may confer a greater degree of accuracy to the counting process. Our method, in which the counting frame is moved manually from sampling point to sampling point, has been tested for sensitivity and has produced consistent values.
Our technique has been proven sensitive, and it gives the number at 13.8 percent reduction in TH+ cell number following MPTP administration.
Do you see that?
A. Yes, sir.
Q. Nevertheless, nevertheless, even small differences in methodology -- and if we go to the next page -- could lead to our system potentially being deemed less accurate than the automated systems available and this may explain in part the differences in total cell counts obtained.

Page 140

Do you see that?
A. Yes, sir.
Q. Okay. What do you understand that to mean?
A. What I understand that to mean is that Dr. Marks was giving her scientific view that the automated process may provide a more reproducible interpretation than the manual process.
Q. Okay. Now let's go to the next exhibit.
A. And, Dr. Tillery, when -- before, I thought it read she -- they may have used. When you read it, I realize it said they have used, so I certainly can see the point that she was saying they did use that. It wasn't her speculation.
Q. Thank you, sir.
We'll go to Exhibit 9.
(Dixon Deposition Exhibit 9 marked.)
Q. (BY MR. TILLERY) Now, please take a look at this.
This is Syngenta 00492889. And it's a document entitled Paraquat Dichloride Hydrate, and it references a study investigating reported paraquat-induced neurotoxicity in the Alderley

Page 141

Park C57 black mouse: The neurochemical and pathological effects on the dopaminergic system of three weekly injections of 10-milligram per kilogram, 1,1-dimethyl-4,4-bypyridinium paraquat; right?
A. Yes, sir.
Q. That's XM7229.
MR. WEIR: Is that Exhibit 9?
MR. TILLERY: Sorry?
MR. WEIR: The title you read appears different from the Exhibit 9 that I have on eDepoze. Are you on XM72598?
MR. TILLERY: Should be.
THE WITNESS: It does not indicate the 10 milligrams in the title.
MR. WEIR: That's why I just asked.
MR. TILLERY: Maybe I have the wrong one.
We can come back to this one. Thank you, Counsel, for pointing it out.
MR. WEIR: Of course.
MR. TILLERY: So we can come back to this.
Q. (BY MR. TILLERY) So the exhibit

Page 142

marked No. 9, in the title here, is referencing XM7258 study; right?
A. Yes, sir.
Q. And if we go all the way to the Purpose, you can go to 116790.
Do you see Study Design?
A. Yes, sir.
Q. And here it says the design was: To investigate whether the lack of nigrostriatal neurotoxicity observed in study XM7229 could be repeated, a dosing study was designed using C57BL6J mice from the external supplier Charles River UK.
Right?
A. Yes, sir.
Q. And then it reports that the mice were injected with paraquat in order to assess whether a dose of 10 milligrams per kilogram once a week for three consecutive weeks caused a reduction in the striatal dopamine and a loss of dopaminergic neurons, right? In the substantia nigra pars compacta; correct?
A. That's what it reads, yes, sir.
Q. Okay. And if you go to the Results section under 1.2: The administration of 10 milligrams per kilogram paraquat dichloride once a

Page 143

week for three weeks resulted in a statistically significant -- and it gives the numerical data -- reduction in dopaminergic neuronal cell number in the substantia nigra pars compacta.
Right?
A. That is stated there, yes, sir.
Q. Okay. And the magnitude of these clinical signs was greater in Charles Rivers C57 mice than was previously seen in Alderley Park C57 black mice.
Do you see that at the end of the sentence?
A. I do.
Q. And then the conclusion is: Three weekly i.p. injections, 10 milligrams per kilogram of paraquat dichloride, when administered to Charles River, male, C57BL6; mice, appeared to produce a statistically significant reduction in dopaminergic cell number in the substantia nigra.
The magnitude of this cell loss was similar to that previously reported by others.
Do you see that?
A. Yes, sir.
Q. And consistent with findings in the literature, paraquat did not produce a reduction

Page 144

in the concentration of striatal dopamine and its metabolites.
Do you see that?
A. Yes, sir.
Q. All right. Now, if you skip forward, do you --
A. Sir, may I ask, would it be possible for the person doing the eDepoze to make the screen just a little bit bigger? I'm struggling with reading some of the text.
Q. Absolutely. We'll try.
A. Thank you.
MR. WEIR: While we're doing that, I would just like to reassert my standing objection, this is outside of the scope of the designated topics.
Q. (BY MR. TILLERY) And if you'd look over this, take your time and read it to make sure you see it.
A. Sir, the conclusion?
Q. Actually, let's go to the page 116792.
And if you'd go to Recent reports in that page? I think part of it might be cut off a little bit.
A. Unfortunately, yeah, it is. Part of

Page 145

it is cut off.
Q. There you go.
A. Thank you.
Q. When we try to enlarge it, it might --
And if you'd read that page.
A. Okay.
[Document review.]
MR. WEIR: Do you know if it's possible to put it in landscape mode so that it can go bigger? I haven't worked with it in presentation mode so I don't know.
MR. TILLERY: We'll do our best.
MR. WEIR: Appreciate it.
THE WITNESS: I've got a huge screen but seeing very little text, so my poor eyes are struggling.
MR. WEIR: Steve, I don't know if you all intended to do it, but we've gone out of presentation mode. I don't know if you intended for Mr. Dixon to navigate to the page, which we'll be happy to do.
MR. TILLERY: Well, we're struggling trying to make it bigger.
MR. WEIR: Understood.
THE WITNESS: I can power through

Page 146

if we can't.
MR. TILLERY: Maybe if we gave the document to you to look at, so you could handle it yourself, perhaps that would work better.
THE WITNESS: I'm happy to give that a try.
Okay, I'm opening the exhibit.
MR. TILLERY: So please familiarize yourself with that.
THE WITNESS: Okay, sir. And what page were we going to?
MR. TILLERY: We'd been through the first page on Executive Summary, I believe. We had talked about that and the conclusions.
So if you could direct yourself to the page 11 of 57 of the study.
THE WITNESS: Okay.
I am on that page, and I do have the ability to make it a little bit larger, so thank you for that.
MR. TILLERY: All right.
THE WITNESS: It works -- in the landscape mode, it's able to get bigger. Okay.
[Document review.]
THE WITNESS: Okay, sir, I've read

Page 147

through the document, that page.
Q. (BY MR. TILLERY) All right. Yeah, and just keep looking through it. I've got some general questions.
Dr. Marks reported the statistically significant reduction in neurons, dopaminergic neurons in this study, didn't she, sir?
A. I'm trying --
Q. You're looking through the results? Just take your time and look through the document.
A. Yeah. So that was back at the Results section.
Q. If you look at the Conclusion -- you can look at Results or Conclusion.
A. Yes, sir, I'm going to go back to that first page, sir. The Section 1.1, 1.2, and 1.3 where the conclusion is.
Okay, I'm back on that page. So Dr. Marks' conclusion was three weekly i.p. injections appeared to produce a statistically significant reduction in the dopaminergic cell number in the substantia nigra, yes, sir.
Q. Right. Did you get a copy of this study at the time it was filed in June 2007?

Page 148

A. I do not recall receiving that copy or being aware of this at that time.
Q. When is your first clear recollection of being made aware of this study?
A. I think it's very similar to before. Certainly I was aware when we made the submission. I cannot identify a particular time prior to that where I was definitively aware of it.
Q. Okay. The first awareness that you remember was December of last year, six months ago; right?
A. With specificity. I certainly believe there's a possibility I have seen it prior to that; but with specificity and definitiveness, in December.
Q. December of 2019; right?
A. Correct, as part of pulling together that submission.
Q. Right. Okay. And Dr. Marks and you looked through the study. You have it. You're in control. I just want you to verify a few things.
Whereas in her first study, she used the manual, the older stereology equipment and software, here, she used a modern, standard, up-to-date system.

Page 149

Can you verify that?
A. Let me see.
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) And she -- to be more specific, Dr. Marks reported in the second study she used one of the most widely used and accurate stereology systems currently available and the methodology was refined to further improve the accuracy of the cell count data.
A. Sir, can you direct me to that statement? That way I can read it.
Q. I'll try. And if it's easier, I can give control back. You know, I can make do if it's easier than having me scrolling.
THE VIDEOGRAPHER: And this is the videographer. I just wanted to inform you guys that I am not recording his scrolling, so --
MR. TILLERY: I understand that. Thank you very much. I understand the way we have it here.
THE WITNESS: I'm going to look at the Methodology section.
[Document review.]
Q. (BY MR. TILLERY) So, sir, it's page 27 of that document. You asked where this

Page 150

appeared?
A. Yes, sir, I am almost there. I was -- let me just read this statement so I can make sure I'm following what your question is, sir.
I do see the statement, sir.
Q. Yes. What do you see?
A. The present study used one of the most widely used and accurate stereology systems currently available and the methodology was refined to further improve the accuracy of the cell count data.
Q. And then if you look in the next page, referencing the older study, where it says: The failure to detect a significant degree of cell loss in the first study is likely to be attributable to differences in the stereology methodology, software and hardware used in the two separate studies.
Do you see that?
A. Sir, is that in section 6, or was that on that same page?
Q. That's in the same paragraph you were reading from.
A. Okay.
Q. Let's put that up on the screen. And

Page 151

that would be 116808. Put that in display mode, please, so that the Court and jury can see it.
All right. So we're looking at the paragraph. That's right, the last paragraph.
A. Yes, sir.
Q. Is that the one you were looking at?
A. Yes, sir.
Q. Okay. So let's go -- it's important. Let's go over it. With respect to the apparent cell loss observed in the substantia nigra paras compacta, the results from this present study differ from the findings of the previous study.
That's the one we talked about first; right?
A. Yes, sir.
Q. All right. Where 10-milligram per kilogram paraquat dichloride, dosed once weekly for three weeks, failed to produce any significant signs of nigrostriatal toxicity, with only a small 4% but statistically non-significant reduction in TH+ cells in the substantia nigra paras compacta.
The failure to detect a significant degree of cell loss in the first study is likely to be attributable to the differences in the stereology methodology, software and hardware used

Page 152

in the two separate studies. The present study used one of the most widely used and accurate stereology systems currently available and the methodology was refined to further improve the accuracy of the cell count data. These changes to the stereology hardware and software were implemented following a visit to the Parkinson's Institute in California and discussions with the DiMonte group.
This is in contrast with the original set up used in study XM7229 which relied upon counts being carried out using a non automated stage and used much older stereology software. Okay?
Do you see that?
A. I do, sir.
Q. Was this study reported to the U.S. EPA?
A. I do not believe this study was reported until December 19th when we submitted it.
Q. And what did the ruling of the PR -- strike that.
What was the decision of the PRF committee on this study?
A. It is my understanding, and based on

Page 153

my recollection, that the PRF committee decided, although it's -- I'm just giving you my understanding, that these data were consistent with the data that were already in the -- had already been reported in the publications.
Q. Okay. Can you explain to me, then, how the PRF committee did that without notifying your committee in the United States?
MR. WEIR: Object to form and foundation.
THE WITNESS: I do not have a definitive answer for that, sir. My understanding is that this study and the other studies were considered by the PRF committees, and they made a determination that it was not -- ultimately not a reportable situation.
Q. (BY MR. TILLERY) Yes, but you know that the standard protocol for all the time you've been at Syngenta was when a PRF committee votes and makes a decision, that goes up the chain to the people who make the final decision. They don't make the final decision; correct?
MR. WEIR: Object to form.
THE WITNESS: The decision is made by the PRF committee in consultation with the

Page 154

legal advice of the attorney on the committee.
Q. (BY MR. TILLERY) Are you telling me that the final decision about whether to report this is made by the PRF committee?
A. That is my understanding.
Q. Okay. So I'm going to represent to you that Dr. Botham testified last week and said PRF committee makes recommendations, and those go straight to the Americans, to the people here who have the reporting obligations to the EPA. And these decisions, whether it's decided to produce the documents in a 6(a)(2) report or not, are finally made by the 6(a)(2) committee in the United States.
Do you agree with that or not?
A. That is the process, yes, sir.
Q. All right. Is that the process today?
A. I believe that has been our process in the past and is our process today.
Q. All right. So -- and what is the difference in that process between a PRF approach committee and a PRF committee?
A. The PRF approach committee is the scientists that do an evaluation of the data, then they submitted it -- they submit to the 6(a)(2)

Page 155

committee who evaluates the information provided and then makes the determination on the follow-through.
Q. All right. So the -- it's not up to the PRF committee or the PR -- are you -- or strike that.
Are you distinguishing between a PRF committee and a PRF approach committee?
A. I'm concerned that maybe our -- we're saying the same thing with different words. The 6(a)(2) committee receives recommendation from the PRF committee, the approach committee, I believe it is, and that would be the scientist.
Once they fill out their analysis of the information, it's provided to the committee, and the committee then uses its process to evaluate the reportability of it.
Q. When you prepared for this deposition, you went through the 6(a)(2) reports on Syngenta's reporting on paraquat, didn't you?
A. I did review some 6(a)(2) reports, yes, sir.
Q. Did you see a reference to these studies in a committee report from a PRF committee?

Page 156

A. I did not see to these particular studies, to the one study that we did submit the PRF on. I did review that and the report and the determination leading up to the report.
Q. Yeah, let's make sure we're speaking the same language here.
Did you ever -- and let's look at the last one. This number; 25. This is the XM7258 report by Dr. Marks, June 2007.
Did the PRF committee ever make a decision and send that on to the 6(a)(2) committee?
A. I have not seen those documents. I do not know.
Q. Okay. You never saw it?
A. No, sir, I do not recall that I have ever seen those.
Q. And it isn't in the file either, is it, where you'd expect to see it?
A. I did not go looking for those, so I do not know, sir.
Q. Well, you just told me that you did in preparation for the deposition go through and look at the 6(a)(2) reports.
A. The 6(a)(2) reports that we submitted,

Page 157

I did review those. This particular one that I just referenced, for example, was the one we submitted I believe in 2007. I pulled the 6(a)(2) letter, and I reviewed the information in that. I would not and did not pull information on reports we did not submit.
Q. Okay. So you don't know if the PRF committee ever voted on this Louise Marks study. Is that what you're telling me?
A. I do not have knowledge on that.
Q. Okay. Had there been a PRF committee decision, one way or another, to report or not to report, the usual and ordinary practice at Syngenta would have been to send that on to the 6(a)(2) committee for final decision; correct?
MR. WEIR: Object to the scope and foundation.
THE WITNESS: The normal process is information is provided from the PRF committee to the 6(a)(2) committee, yes sir.
Q. (BY MR. TILLERY) Did you find evidence that that was done with respect to this study, study research report XM7258?
A. I did not go looking for that information. I do not know if it is there or it

Page 158

is not there. I did not review those files.
Q. So you, in preparation for this, have no idea whether that report was ever even filed; right?
A. I cannot speak definitively to that. I --
Q. All right.
A. I pulled --
Q. Go ahead. Sorry. I interrupted you, sorry.
A. No, sir. I -- for the 6(a)(2) reports that we filed, I did review those.
And for these studies that we ultimately submitted, I became much more aware of the content and the thought process behind them as we made additional submissions at the end of December.
Q. So let me ask you: Had you sat on a committee, a 6(a)(2) committee? You were on it in 2007; right?
A. I was -- at that time, being new in the role, I believe I was being informed, but I don't believe I actually sat on the committee in 2007. I think I was an ad hoc or being informed member. That's the best of my recollection.

Page 159

Q. So you're saying you now weren't present when this happened?
A. I do not recall being present in a 6(a)(2) meeting where any of this was discussed, no, sir.
Q. That's what I'm asking you. Are you telling me you weren't a member of any 6(a)(2) committee when you took this job over in 2006?
You weren't a member of the committee then, right? Or you were?
A. I was not an official standing member. I was an ad hoc person being advised of the discussions and deliberations going on. And that ultimately would have been submitted under my name and title. So, for example, these studies were done before I was in regulatory, or at least my awareness of, of I think the initial submission, but there's another paraquat-related one I pulled, Mr. Tillery, for example, of some information in a PowerPoint, and I was as a -- the regulatory person given the information to submit, but I was at best an ad hoc member on these committees.
I do not recall having any detailed interactions other than just being informed of the process and what was being

Page 160

discussed.
Q. Well, we're going to have to start over now, because I sort of remember a couple of hours ago you telling us that you started in regulatory in 2006, about October. The better part of a year before these studies were reported. That's what I remember you saying.
A. Yes, sir.
Q. We can look at the record to verify that, but is that what you remember?
A. That is correct, sir.
Q. And I also remember you saying you were a part of the 6(a)(2) committee when you took over that job.
A. I don't believe I -- if I said I was a full member, that would have been an incorrect statement. I did participate on an ad-hoc basis. I believe at the time of this submission, if I'm not mistaken, I did not make this submission that we were referencing on the AD558, which was one of the ones I pulled. I think that was submitted prior -- either prior to my position, but I do not think I made that initial submission.
Q. You didn't make what submission?
A. When we were talking about the --

Page 161

these studies here, I wasn't part of -- we reported 6(a)(2) advice for one of the Louise Marks studies, and I do not believe -- and that's the one I was referencing. I was -- I do not believe I actually made that submission. I believe it was submitted by another regulatory manager at that time.
Q. Right. But that's not a study we're even talking about right now, is it?
A. No, sir, it's part of this pack of studies.
Q. Right. And so you know that the studies were not submitted to the USEPA in 2007, don't you?
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) Don't you, sir?
A. I acknowledge the studies were not submitted to the EPA in 2007.
Q. All right. And you know that for sure because you're the guy who signed the submission on December 13, 2019, aren't you?
A. Yes, sir, that is correct.
Q. And you wouldn't have had to give them to the USEPA 13-and-a-half years later if they'd have been filed in the first place; right?

Page 162

MR. WEIR: Object to form.
THE WITNESS: Had they been filed in 2007, we would not have made a submission in 2019; however --
Q. (BY MR. TILLERY) So that means -- Go ahead, I'm sorry.
A. Yes. My understanding of that, just because trying to understand what was happening, is that the 6(a)(2) committee would have -- and I'm giving you my understanding, not having definitive first-hand knowledge that I'm aware of, that these studies would have been considered and were determined not to have new information, and they -- based upon the decision of the 6(a)(2) committee, and the advice, I guess, that they received working -- looking at these, the determination was made they were not relevant to be submitted at the time.
Q. So have you ever seen a 6(a)(2) report on these studies?
A. On these particular studies? I do not recall --
Q. Yes, the ones -- the ones that you submitted in December 2019, have you ever seen a 6(a)(2) report on any of those studies?

Page 163

A. I do not recall seeing those.
Q. All right. And have you ever seen the report of a PRF committee with respect to any of the studies that you submitted in December 2013?
A. The studies specifically -- sorry, in 2013, sir, or 2019?
Q. Strike the question.
Have you ever seen any minutes, reports, or any written indication of a determination by a PRF committee regarding any of the studies that you filed in 2019 regarding paraquat?
A. It is my recollection that when I reviewed the information on the one that was submitted in that time frame, there was a reference to these studies replicating information already in the published literature.
Q. So you remember there was a study, a PRF committee decision; right?
A. If my recollection is serving me correctly, that in the determination for the one that was submitted, these were also referenced.
Q. Okay. And can you direct us to where we would find that document or those documents? Because they've never been turned over to us.

Page 164

I'll represent that to you. Even though we've asked for all of those decisions.
A. My operating assumption is that they would have been part of the discovery process. I am not familiar as far as to -- I would have assumed that they were part of that process.
Q. The studies have a report date of 2007, but were actually conducted in 2003 to 2005. Would the PRF 6(a)(2) decisions have been made when the results were known or only after the reports were finalized?
MR. WEIR: Object to the foundation.
And Steve, I'd like to take a break at some point. I don't want to interrupt your flow but at some point when you get a chance, please.
THE WITNESS: And so in responding to the question, I believe the process would have been that new information would have been referred to the PRF committee by the testing scientists when they identified what they thought was information that needed to be confirmed -- considered by that committee.
Q. (BY MR. TILLERY) Whether or not the

Page 165

study was finalized and reported out?
A. I believe that to be the case. I believe that it's not a requisite that a study is completed before those considerations take place.
Q. So when is it that you think the PRF document that referenced the Marks studies was created?
A. I believe -- and I'm searching my memory. I believe that was submitted in May of 2007ish.
Q. Okay.
A. I believe.
Q. And then let me ask you something: If they made that decision, can you tell me why there was no report from the 6(a)(2) committee?
MR. WEIR: Object to the form, foundation.
THE WITNESS: I believe there was a report. It would have been Advice 558 that accompanied the submission of that letter, sir. The 6(a)(2) submission would have been made --
Q. (BY MR. TILLERY) You'll have to clarify that for us, sir.
A. Yes, sir. So the decision to submit would have been a decision determined by the

Page 166

6(a)(2) committee. The submission would have happened, and there is a -- you know, when those are -- decisions are made, there is a PRF recommendation that went to the 6(a)(2) committee that describes the information and why it is being meshed to the local 6(a)(2) committee for that potential submission.

It is in that --

Q. Go ahead.

A. I was going to say, that would be the record that I'm referencing when I mentioned the -- that I went back and reviewed that 2007 submission.

Q. Yeah, I'm talking about the ones that you say you never saw until December of 2019.

A. And what I said --

Q. Was there a 6(a)(2) report of a decision by a 6(a)(2) committee in the United States regarding those studies?

A. I do not recall seeing a specific 6(a)(2) report for those specific studies. The references to those studies I saw in that PRF determination for that earlier 2007, where the studies are referenced. I -- but just to be clear, I do not recall seeing, for example, for

Page 167

the study XM7229, I don't recall seeing a specific PRF committee report on that.

Q. And I mean to include everything you filed in your transmittal to the USEPA in December 2019 in response to my letter to your counsel.

Have you seen 6(a)(2) reports with respect to each of those studies?

A. I do not recall seeing 6(a)(2) reports for each of those studies.

Q. Have you seen 6(a) -- strike that.

Have you seen 6(a)(2) reports for any of those studies?

A. The three that were submitted, sir?

Q. The ones you submitted in December 2019, any of the ones you referenced, were there 6(a)(2) reports submitted?

A. I do not recall seeing any specific 6(a)(2) reports for each of those individual studies.

Q. All right. Now, before we take our break, did you ever see a specific PRF finding for each of those studies?

A. I do not believe or recall seeing a specific PRF recommendation or finding for each of

Page 168

those studies.

MR. TILLERY: All right. Let's take our break now.

THE VIDEOGRAPHER: We are going off the record at 2:46 p.m. Eastern.

(Recess taken, 2:46 p.m. to 3:08 p.m. EDT)

THE VIDEOGRAPHER: We are now back on the record at 3:08 p.m. Eastern Time.

Q. (BY MR. TILLERY) Sir, the last study that we looked at was the second Marks study, right? And that's XM7258.

You remember that?

A. (Witness nods.)

Q. That's the one that's on the screen. Okay?

A. I'm sorry, I need to reopen. I'm just seeing a new exhibit introduced on my screen, so let me open that up, sir.

Okay, I have the title page up.

Q. That study was reportable under 40 C.F.R. 159.158, wasn't it?

MR. WEIR: Reassert my standing objection on scope and foundation.

THE WITNESS: My answer would be

Page 169

that that was a determination made by the 6(a)(2) committee under the considerations with the counsel, so the determination on reportability was handled by that group.

Q. (BY MR. TILLERY) When was that decision made?

A. I'm not aware of a specific date on that, sir.

Q. Well, I mean, have you got a year?

A. I have not seen, to my knowledge, that information, so I couldn't give you a year, sir.

Q. Well, you know that you're the one that signed the documentation that filed it with the USEPA, aren't you?

A. For this particular, I believe these were the ones submitted in 2019, sir.

Q. Right. That's the one I'm talking to you about.

A. Okay.

Q. That was reportable. I said that was reportable.

A. I'm sorry, sir, I didn't understand the question, but no, these were not reported as 6(a)(2), sir.

Q. And so you didn't report them as

Page 170

6(a)(2), you just sent them along; right?
A. These were sent to Marianne Mannix, and as part of the paraquat registration review, and so that's who they were sent to, sir.
Q. All right. So you sent them to the same lady that you had your private meeting with last May of 2019; right?
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) Is that right?
A. I sent them to Marianne Mannix, the chemical review manager for paraquat.
Q. So you're unable to tell me whether XM7258 was reportable under 40 C.F.R. 159.158; is that correct?
A. That determination would have been made by the 6(a)(2) committee, and so I cannot speak to that determination.
Q. Well, you were on the 6(a)(2) committee.
A. Not when that particular report or not that I'm aware of when that particular report would have been evaluated, sir. I don't recall being on the committee at that time. If so, it was as an ad hoc member, but I don't have specific recollection of that report being discussed during

Page 171

a 6(a)(2) committee that I was engaged in.
Q. Well, what is an ad hoc member of the 6(a)(2) committee?
A. So similar to earlier in our questioning, sir, when a particular subject is brought to a 6(a)(2) committee, it involves the scientist, and often they will also reach out to other stakeholders, in this case, myself as a regulatory manager, who would be involved in a potential submission, to participate on that particular topic but not necessarily on all of the topics associated in a 6(a)(2) meeting.
Q. Right. Except you would be consulted when it involved a product that came under your jurisdiction; right?
A. Most likely I would have been in those conversations, although I don't have a specific recollection about these. These conversations may have taken place prior to my having a leader -- a responsibility to paraquat. I don't have a specific date when that study would have been reported or at least I do not recall a specific date when XM7258 was discussed at the 6(a)(2) committee or with the PRF committee.
Q. Were you on any committee at Syngenta

Page 172

in December 19th that decided to report these studies to the USEPA?
MR. WEIR: Object to the form. Do you mean December 2019?
Q. (BY MR. TILLERY) Excuse me, strike the question.
MR. TILLERY: Thank you, Counsel.
Q. (BY MR. TILLERY) Were you on any committee of Syngenta in December 2019 when the decision was made to report XM7258 study?
A. I would like to ask a question of my counsel just to check. Those were discussions that involved an attorney, and so I want to involve -- make sure that my answer doesn't compromise any privilege.
MR. WEIR: I'm happy to go off the record and discuss in a breakout room with him, Steve, or if you just want to rephrase, that's fine too.
MR. TILLERY: Well, I'm asking him do they have -- and if this wasn't the normal way of reporting, if they did this differently, he can tell me without divulging communications from outside counsel. I don't think we should do this in the middle of a standing question.

Page 173

Q. (BY MR. TILLERY) Was there a formalized committee, like a 6(a)(2) committee or a PRF committee, in December of 2019 which made a decision to report XM7258 to the USEPA?
MR. WEIR: Mr. Dixon, I will note you should feel free to answer the question with factual information and as long as you're not revealing the content of attorney-client communications.
THE WITNESS: Thank you, Tom. We did have a group of people that were involved in the process of deciding to submit the information.
Q. (BY MR. TILLERY) Okay. Who were the people in the group?
A. The people in the group would have been myself, Phil Botham, Andy Cook, counsel, and I certainly would have -- my supervisor would have been involved or at least aware of the discussions.
Q. What was your supervisor?
A. I believe at the time it was John Abbott that -- who would have had awareness of our intention to submit these studies.
Q. And what caused you to submit the studies when you didn't submit them in 2007 or

Page 174

2005 or 2003 when they were done?
MR. WEIR: Again, Mr. Dixon, you can answer to the extent you're not revealing any attorney-client communications.
THE WITNESS: Okay. The determination to submit the studies was based upon the fact that the information was replicating information that was already out there. We had no objection to providing those to EPA.
Q. (BY MR. TILLERY) So -- and that was the basis for it. Did you record that somewhere?
A. Me personally? I don't believe I've recorded anything to that. I think that was part of the thought process behind submitting it was just to make sure EPA had this information.
Q. Okay. And you thought they should have it in 2019, but not in 2007; right?
MR. WEIR: Object to the form and foundation.
THE WITNESS: The determination was made to provide it in 2019 to essentially insure EPA has this information, and so we provided it.
Q. (BY MR. TILLERY) Yeah, let's go back to my question. You didn't have that same kind of

Page 175

analysis in 2007, did you? You didn't think they needed it then?
A. I don't recall --
MR. WEIR: Objection.
THE WITNESS: I do not recall the specifics of that, although it's my understanding that the information in 2007 was most likely considered through the 6(a)(2) committee and the decision on submission of those individual studies, in addition to the one that was, would have been evaluated.
Q. (BY MR. TILLERY) But you've never ever seen a report of that study being evaluated by a 6(a)(2) committee meeting, have you?
MR. WEIR: Object to form.
THE WITNESS: That particular study I do not believe I have seen the PRF committee indication on that. I do believe that study was referenced in another PRF indication that I did review in preparing for this deposition.
Q. (BY MR. TILLERY) Dr. Marks' findings in XM7258 were also relevant to the assessment of the risks or benefits of paraquat, weren't they?
MR. WEIR: Object to form,

Page 176

foundation, scope.
THE WITNESS: And this is certainly not an area where I am a toxicological expert. My understanding is that these data would have been evaluated for reportability. And if the committee would have determined them to be reportable, the -- they would have been reported.
MR. TILLERY: I move to strike your answer as unresponsive.
Q. (BY MR. TILLERY) Let's start over. Dr. Marks' findings in study XM7258 were also relevant to the assessment of the risks or benefits of paraquat, weren't they?
MR. WEIR: Same objections.
THE WITNESS: I do not believe I have the scientific or toxicological background to make a definitive answer on that, sir.
Q. (BY MR. TILLERY) Okay. Dr. Marks' finding of a statistically significant reduction in dopaminergic neurons in the substantia nigra of the Charles River black mouse was relevant to the assessment of the risks or benefits of paraquat in study 7258, wasn't it, sir?
MR. WEIR: Same objections.
THE WITNESS: Those

Page 177

determinations, sir, would have been made by our toxicological experts.
MR. TILLERY: Can you answer my question?
THE WITNESS: I believe the toxicological experts would have made that determination. I am not able to speak toxicologically definitive on that, sir.
Q. (BY MR. TILLERY) Can you say "yes" or "no" whether you can answer my question?
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) You're the corporate designee for Syngenta AG and Syngenta Crop Protection. Can you or can you not answer that question?
A. Please restate the question, sir.
Q. Dr. Marks' findings in XM7258 of a statistically significant reduction in dopaminergic neurons in the substantia nigra of the Charles River black mouse were relevant to the assessment of the risks or benefits of paraquat, weren't they?
MR. WEIR: Objection to form, foundation and scope.
THE WITNESS: I will give you my

Page 178

answer based upon my understanding of the science and in light of, in particular, recent conclusions by EPA that those studies conducted by the i.p. route are not relevant for human exposure, sir.

Q. (BY MR. TILLERY) Okay. So why did you turn them over in 2019? If they're not relevant, why in the world did you sign that letter?

MR. WEIR: Object to form.

THE WITNESS: Because they're -- we are being transparent with the agency, and we are providing the data, and the agency has the information, sir.

Q. (BY MR. TILLERY) Okay. So the information in 2007 wasn't something you wanted to be transparent about. Suddenly, after receiving a letter from me in December 2019, demanding reporting, you suddenly decided to be transparent? Is that what happened?

MR. WEIR: Object to the form, argumentative.

THE WITNESS: A determination was made to submit the studies. We did make that determination after receiving your letter. And it was to ensure the agency had full information

Page 179

related to these studies.

Q. (BY MR. TILLERY) Okay. Earlier we established that 40 C.F.R. Section 159.158 required Syngenta to report any of Dr. Marks' conclusions and opinions if "The information was relevant to the assessment of risks and benefits" of paraquat, because she was a Syngenta employee.

Do you remember us talking about that?

A. Yes, sir.

Q. We also talked about that same section, No. 159.158, in terms of a qualified expert.

Do you understand that? Do you remember?

A. Yes, sir.

Q. All right. So because Dr. Marks was a qualified expert, 40 C.F.R. 159.158 required Syngenta to report Dr. Marks' findings of a statistically significant reduction in dopaminergic neurons in the substantia nigra of the Charles River mouse, didn't it?

MR. WEIR: Object again to form, scope, foundation.

And if I could have a standing objection on scope.

Page 180

MR. TILLERY: Yes, can you.

MR. WEIR: Thank you.

THE WITNESS: That determination, sir, would have been made by the 6(a)(2) committee in consultation with the counsel.

Q. (BY MR. TILLERY) Can you answer it today?

A. And today, I would say that we would follow the process of having the information considered by the 6(a)(2) committee to make sure that it was either reportable or determined not to be. We would follow the same process today.

Q. But as the corporate designee for Syngenta, you cannot answer my question "yes" or "no," is that what you're telling me?

MR. WEIR: Object to form.

Q. (BY MR. TILLERY) I need an answer before I go over -- go on.

A. Sure. The answer is the same, sir, is that when we have information such as this, it is provided to the relevant team and committee to make the determination on whether or not it's reportable.

Q. Well, you're on that team now, right?

A. Not a standing member, sir.

Page 181

Q. Okay. But you've -- you're -- to the extent you're dealing with paraquat, they invite you to the meetings; correct?

A. Correct.

Q. So because she was, Dr. Marks was a qualified expert and an employee, Syngenta was required to report her findings of a statistically significant reduction in the substantia nigra of the Charles River mouse; correct? That's how you would vote as a member of that committee once invited in; correct?

MR. WEIR: Object to the form.

THE WITNESS: It would be dependent upon the legal advice given during that committee meeting, sir.

Q. (BY MR. TILLERY) Oh, so you -- the committee wouldn't make a decision, it would be the lawyer that would decide it; right?

A. The committee --

MR. WEIR: Objection --

THE WITNESS: Sorry, Tom.

The committee interacts with the lawyer to make sure that it's following the 6(a)(2) requirements.

Q. (BY MR. TILLERY) You don't have that

Page 182

lawyer here with you right now, do you?
A. No, sir.
Q. And you see I'm -- I'm limited to you being the designee. You're the guy I've got to ask the questions to, because I don't have the lawyer. I can't ask him.
So if you're voting, how are you going to vote?
It's relevant, isn't it? It should have been turned over.
MR. WEIR: Object to the form.
THE WITNESS: Sir, I rely on the determination that was made back when this -- these studies would have been evaluated. In the 2019 decision to submit, it was to ensure EPA had all of the relevant information. It's not my recollection in 2019 that these were -- the decision to submit went through a 6(a)(2) committee, but it was instead to ensure that the information was with the agency. A 6(a)(2) committee determination would have been conducted back at the time.
Q. Okay. But a 6(a)(2) determination you've never seen or heard of, right?
A. That -- I do not recall seeing

Page 183

specific to each of these studies, sir.
Q. All right. Now, it wasn't relevant in 2005, '6, or '7, when the study was done, was it?
There wasn't a finding of relevance to turn it over to the USEPA; correct?
A. That would have been a determination for the 6(a)(2) committee. We did not submit for these studies, and so that would be my understanding, they did not deem it as a relevant 6(a)(2).
Q. And it wasn't relevant in 2008, '9, '10, it wasn't relevant to turn over then either, was it?
A. I do not have a -- I do not believe it was.
Q. All right. It wasn't relevant in 2011, '12, '13, '14, '15, '16, '17, or '18, was it?
MR. WEIR: Object to the form.
Q. (BY MR. TILLERY) Was it?
A. I do not believe so, sir.
Q. All right. And it wasn't relevant for the first 11 months of 2019, was it?
A. No, sir.
Q. It became relevant in December 2019

Page 184

when I sent a letter. It suddenly became relevant, right?
A. I would --
Q. Is that when it became relevant?
A. I would even dispute the determination as relevance. The EPA has determined that studies that involve the i.p. injection are not relevant for human exposure.
MR. TILLERY: Move to strike your answer as unresponsive.
Q. (BY MR. TILLERY) It became relevant suddenly in 2019. That's when you sent it in. You signed the letter; right?
MR. WEIR: Object to form.
THE WITNESS: We made a determination in 2019 to submit the studies.
Q. (BY MR. TILLERY) All right.
A. We did not -- that does not accepting -- that is not stating its relevance. It's saying a decision to provide the data.
Q. A few minutes ago you said you did it to be transparent, because you --
A. Correct.
Q. -- thought that they might consider it relevant.

Page 185

Are you changing your testimony?
A. No, sir, I'm --
Q. Were you changing --
A. No, sir, I'm not -- no, sir, I did not say it was transparent because it was relevant. I was saying it was to be transparent, but I did not connect those two.
MR. TILLERY: Let's go to this exhibit. What number is that?
(Dixon Deposition Exhibit 10 marked.)
MR. TILLERY: We're going to go to deposition Exhibit No. 10.
Q. (BY MR. TILLERY) Now this, if I'm reading the correct one, and I hope I am, is another Louise Marks study dated 2007, again. And this is an investigation reporting Paraquat-Induced Dopaminergic Neurotoxicity in the Charles River C57 Black Mouse: The Neurochemical and Neuropathological and Neurobehavioural Effects of Increasing Dosing Frequency of (Paraquat).
Do you see that?
A. Yes, sir.
Q. This is XM7371.
And I'm just going to send you to the

Page 186

conclusion, which is at 0911. And just see if you can follow along. I'm trying to move through these more quickly, Mr. Dixon. Okay?
A. Yes, sir. Will this document be advanced, or should I be advancing it?
Q. I think she's trying. Can you go to 0911 to the conclusion page for him to see it?
Please read that to yourself, and then I'll ask you a couple of questions about it.
A. Yes, sir.
Q. All I'm going to do is ask you to confirm the accuracy of my statements. Okay? Go ahead.
A. Thank you.
[Document review.]
A. I've read the paragraph, sir.
Q. All right. In this study, Dr. Marks also found that paraquat induces loss of dopaminergic neurons in the same part of the brain we've been talking about, which is referenced as the -- in here, if you see it, the SNcp, or the substantia nigra portion of the brain; correct?
A. Correct.
Q. Do you understand the substantia nigra is the part of the brain where most of the

Page 187

dopamine-producing neurons are located?
A. Yes, sir.
Q. And you understand that the purpose of dopamine is to control or help control and facilitate control of physical movement of the body?
MR. WEIR: Object to the foundation and the scope.
Q. (BY MR. TILLERY) Okay. I'm just trying to get some background, so if you understand the significance of this. Okay?
A. Yes, sir.
Q. So you would understand that a compromise of the dopaminergic neurons could result in the lack of production or reduced production of dopamine; right?
MR. WEIR: Same objections. And can I get another standing objection on this line of questioning?
MR. TILLERY: Yes, you can.
MR. WEIR: Thank you.
THE WITNESS: Okay. That would --
Q. (BY MR. TILLERY) Do you understand that?
A. Yes, sir, that would appear to be a

Page 188

logical conclusion.
Q. All right. And did you understand that that's one of the hallmark components or diagnostic criteria of Parkinson's disease?
A. I do have that understanding that dopamine plays a key role in Parkinson's disease. I'm certainly not well-versed in the toxicology of it, but I do have familiarity with it from a family member who has had that particular disease outcome.
Q. Okay. Now, Dr. Marks confirmed her earlier study and demonstrated that paraquat, "induces nigral, but not striatal, toxicity." Right? In the earlier study. We talked about it.
A. Yes, sir.
Q. And that finding is, "Information regarding unreasonable adverse effects on the environment of the pesticide," isn't it?
A. That determination was made by our experts, and so I would defer to the determination made by the 6(a)(2) committee relevant to that.
Q. You wouldn't -- so we can move on in these and come up to an understanding of how you can address these, you're unable to answer my question. Would that be a fair statement?

Page 189

A. I'm not a toxicological expert on this area, so I would defer on the determinations by the tox experts on the implications of these reports.
Q. Okay. So is Nina Heard a tox expert?
A. No, sir, not that -- not to my knowledge.
Q. Okay. Is the attorney you referred to, is he a toxicological expert?
A. No, sir.
Q. Okay. So who on the 6(a)(2) committee today is a toxicological expert?
A. It would depend on the particular compound that's being considered, because it would be a tox-specific person; our tox experts in the area of paraquat would be Phil Botham primarily.
Q. So you'd reach out to Phil Botham; right?
A. I believe the report would have come in from the tox experts to the 6(a)(2) committee with their recommendation.
Q. Okay. So they would control, then? Right?
MR. WEIR: Object to the form.
THE WITNESS: They would make

Page 190

recommendations, sir. The 6(a)(2) committee would ultimately make a determination on the final reportability.
Q. (BY MR. TILLERY) And I think you told me earlier in the deposition, you'd never seen any experience at any time since you've been associated with this process where the 6(a)(2) committee has reached a result that's different from the recommendation of the PRF committee; is that a correct statement?
A. It's a correct statement. I do not recall such a time.
Q. Okay. Would you agree that FIFRA Section 6(a)(2) obligated Syngenta to report this study and Dr. Marks' finding to the EPA?
A. I would not agree with that, sir.
Q. Okay. And Dr. Marks' finding was relevant to the assessment of the risks or benefits of paraquat, wasn't it?
A. I believe that was a determination that would have been made by the science experts in the 6(a)(2) committee, sir.
Q. Not by you?
A. No, sir, I do not make scientific determinations. I rely on the experts in the

Page 191

fields to do that.
Q. So you'd talk to Dr. Botham and you'd talk to the lawyer; right?
A. We would certainly have interactions with the science experts such as Dr. Botham and other relevant members in the science teams.
Q. Well, who besides Dr. Botham would you go to?
A. Members of the health science team could be involved. Dr. Botham is an expert. Andy Cook is an expert.
Q. Okay.
A. Nick Sturgess is an expert in this area.
Q. Nick Sturgess doesn't work for the company anymore, though, does he?
A. No, sir, but at the -- he's an expert in the area, and if that's -- if he was available, that would be a person to ask questions around this type of information, sir.
Q. Okay. Because Dr. Marks was a qualified expert, 40 C.F.R. Section 159.158 required Syngenta to report this particular finding in this third study. And that's for purposes of the record, XM7371, to the USEPA;

Page 192

correct?
A. I would not agree with that. I would defer to the determination made by the experts in the 6(a)(2) committee and the advice that that committee made, sir.
Q. Okay. And they apparently for 15 years or so, 14 years, did not think so, but then in 2019 in December thought they should be turned over, right? Because this study was one of them you turned over to USEPA after my letter, right?
MR. WEIR: Object to the form.
THE WITNESS: In the -- the 2019 submission was not pushed through a 6(a)(2) process. It was -- we were made a -- a straight submission to the chemical review manager at EPA handling paraquat, Marianne Mannix.
Q. (BY MR. TILLERY) Let me ask you: Was this one of the studies you turned over?
A. I believe it was. There was, I think --
Q. Okay.
A. My recollection is there was three studies that were submitted in 2019.
Q. And this was one of them, right?

Page 193

A. I believe so, sir. I do not have exact memories on the study numbers, but there -- I believe there was four studies, Marks studies, one that was submitted in 2007, a 6(a)(2) advice on that, and then the remaining studies, the remaining three were the ones we submitted in December '19, sir.
MR. TILLERY: Right. I move to strike your answer as nonresponsive.
Q. (BY MR. TILLERY) Was the study we just referenced of Dr. Marks one of the studies you reported to the USEPA in December 2019?
A. Sir, I believe so, but I would need to confirm that XM7371 was that study. I believe it was, sir.
Q. All right. Now, let's go to the next exhibit is No. 11.
(Dixon Deposition Exhibit 11 marked.)
Q. (BY MR. TILLERY) Deposition Exhibit No. 11.
And this is another exhibit we'll go through. I'll try --
Actually --
A. I have the document up, sir.

Page 194

Q. All right. Can you tell us the title of the document and the document study number?
A. Yes, sir. It's a Paraquat Dichloride Hydrate, Investigating the Time Course and Reversibility of Dopaminergic Cell Loss in the Charles River C57 Mouse Following Administration of 1,1-dimethyl-4,4-bipyridinium (Paraquat), XM7480/Research Report.
Q. And if you can, sir, go to -- we'll pull up for you 2792, which is the page with Executive Summary of the findings of the study.
Have you seen this study before, sir?
A. I believe I have, sir.
Q. And when was the first time you saw this study?
A. Could we go to the introduction so I can make sure which one of the Marks studies this is, sir?
Q. Yes, we sure can. You need to know the executive summary?
A. The executive summary or the introduction. Either way.
Q. Okay. Let's see where that is. Hold on.

Page 195

A. With the four studies, it's hard for me to keep them straight without reading that introduction, sir.
Q. Of course.
Let's go to 2792.
A. Okay, thank you.
Okay.
Q. And if you'd look at that particular page, Study Design, Results, and Conclusion, I'll just ask you some general questions about it.
A. Okay, sir.
[Document review.]
Q. Under Study Design, the purpose of the study was: To investigate the time course and potential reversibility of the nigral dopaminergic cell loss observed in the substantia nigra over a period of 3 months after administration of paraquat dichloride to the C57BL6j black mouse; right?
A. Yes, sir.
Q. And then the next paragraph tells how Dr. Marks did the study; right?
A. Yes, sir.
Q. Do you know of any study in the scientific literature where a scientist like

Page 196

Dr. Marks investigated the time course and potential reversibility of nigral dopaminergic cell loss?
MR. WEIR: Objection. Steve, can I have my standing objection on foundation and scope again, please?
MR. TILLERY: Yes.
THE WITNESS: No, sir, Dr. Tillery, I'm not familiar with a study such as that, to the best of my knowledge.
Q. (BY MR. TILLERY) So what I'm trying to figure out is, when we looked at these DiMonte and Cory-Slechta references early on in this deposition, do you know if they had ever investigated the time course and potential reversibility of the nigral dopaminergic cell loss?
A. I do not know the -- if they did that or not, sir.
Q. Do you know if MacCormac or any of the other scientific investigators who had published around 1999 and early 2000s had ever conducted such a study?
A. I don't believe I have any recollection or knowledge of that, sir.

Page 197

Q. Okay. Now, the results are listed under 1.2, aren't they?
A. Yes, sir.
Q. And it says: The concentration of striatal dopamine or its key metabolites -- and then states a word that I can't pronounce. Perhaps you can help me on that.
A. Dihydroxyphenylacetic acid?
Q. Perfect.
(DOPAC) or homovanillic acid (HVA) was not significantly altered, nor was there any change in dopamine turnover at 7, 28 or 90 days after dosing. Administration of 10 milligrams per kilogram paraquat dichloride, once a week for 3 consecutive weeks, resulted in a statistically significant reduction -- gives the numbers -- in dopaminergic cell number in the substantia nigra pars compacta 7 days after the final injection. At the later time points of 28 and 90 days post dose, the degree of cell loss was similar to that observed at 7 days post dose...
Okay?
A. Yes, sir.
Q. Do you see that?
A. I do.

Page 198

Q. Do you know of any study existing in the scientific literature that had conducted its science that way and had resulted in those findings?
A. I personally do not have a recollection of any specific study that was conducted with those specific parameters.
Q. Okay. Then in the Conclusion section, it says: Three weekly injections of 10 milligrams per kilogram paraquat dichloride, when administered to the Charles River male C57BL6j mice, resulted in a statistically significant dopaminergic cell loss in the substantia nigra pars compacta. The statistically significant loss of dopaminergic cells observed at 7 days after the last of 3 weekly injections of 10 milligrams per kilogram paraquat dichloride, did not show any signs of progression.
The degree of injections at 10 milligrams per kilogram paraquat dichloride did not show signs of progression [sic]. The degree of cell loss was found to be less severe at 90 days but the counts were still statistically significantly lower than in control animals. Three weekly injections of 10 milligram per

Page 199

kilogram did not produce a statistically significant reduction in the concentration of striatal dopamine in the key metabolites.
Now, if you'd go to the next paragraph. Go down just a little.
These results support the findings of two previous studies. And these are the two we just referenced, XM7258 and XM7271 [sic], 7-day, and demonstrate that paraquat, when administered to C57BL6j mice (Charles River supplied) would appear to be capable of inducing nigral but not striatal toxicity.
When was the first time you saw that study?
A. If this is the study I believe that we submitted the 6(a)(2) on, I don't recall a specific first time seeing it, but I am aware that there was a 6(a)(2) submission related to it. But I cannot tell you the first time I recall seeing it specifically, sir.
Q. Okay. Did you see this study or any reference to it before 2019?
A. Oh, yes, sir. I believe so, sir.
Q. How would you have seen it?
A. I believe this study -- and if I'm

Page 200

recalling correctly, sir -- had -- we submitted a 6(a)(2) because it had a debatable new finding as the 90 days, I think on the number of injections, and that information, I believe, was communicated to EPA when we were introducing our research program in the 2010 and '13, '17 time periods.
Q. Why didn't you put the other studies at the same time in the hands of the USEPA?
You're filing these papers with the USEPA. Why not just send along the other studies she did? To be transparent? To inform them? Why didn't you do that?
MR. WEIR: Object to form.
THE WITNESS: My understanding was the view that these other studies merely replicated information that was already available in public literature, and as such was not new information. The study here did involve a new finding with the fact that you had a different dose regimen at 90 days leading to the outcome.
Q. (BY MR. TILLERY) So the others became relevant in 2019; right?
MR. WEIR: Object to the form.
THE WITNESS: The studies were not relevant based upon EPA's determination that i.p.

Page 201

dosing is not appropriate for these type of studies; however, we submitted them to ensure a complete record.
Q. (BY MR. TILLERY) Oh, so now we're adding a reason. Now it's a complete record. What record did they complete?
A. We --
MR. WEIR: Object to the form, argumentative.
THE WITNESS: We were providing these additional studies, as you referenced in your letter, we provided them to EPA, to the chemical review manager to ensure they had awareness of these additional studies. We also indicated at that time, sir, these studies replicated information, if my memory is correct, that was already in -- did not represent new findings but instead replicated information that had already been published and I believe EPA was even present at in 2003 for presentations on, sir.
Q. (BY MR. TILLERY) Let's talk about one of those presentations. You have presentations with USEPA; right?
A. Yes, sir.
Q. And actually you've had some of those

Page 202

yourself, haven't you?
A. Yes, sir, 2010 and -- was the first one where we introduced our intention to go down and do these additional studies.
Q. And then you had a presentation in 2013, didn't you?
A. Yes, sir.
Q. Okay. Let's go to Syngenta 00469778.
A. I have the presentation up, sir.
(Dixon Deposition Exhibit 12 marked.)
Q. (BY MR. TILLERY) All right. You remember this, didn't you?
A. I do, sir.
Q. Did you actually create this slide set?
A. I was part of the creation of the slide set. It was a team event, sir.
Q. And if we can, since you're familiar with it, if we can just go to the relevant pages and we'll display the first page, please.
I think this is an 85-page document, it says. Do you see that? One of 85?
A. Yes, sir.
Q. And this is Plaintiffs' Exhibit

Page 203

No. 12.
And again, for the record, it's Syngenta 00469778.
What is this document?
A. Sir, it was our informing EPA of our paraquat research -- oh, this is the 2013. I'm sorry, I had assumed it was the 2010. We had introduced the fact that we were going to be doing a research program in 2010. This represented an update that we gave the agency on the status of the program in 2013.
Q. Okay. And so this is a presentation that several people from Syngenta made to the USEPA; right?
A. Correct.
Q. Was it open to the public?
A. No, sir. This was a meeting just between Syngenta and the EPA.
Q. So where did you have this, at the EPA's office?
A. That is correct.
Q. Was there any public announcement of the meeting?
A. Not that I'm aware of, sir.
Q. Who called the meeting?

Page 204

A. We would have requested the meeting.
Q. Okay. And you would have requested it to explain to the USEPA what you were doing with paraquat; right?
A. Correct. To provide an update of the information that has occurred since our 2010 first introductory meeting.
Q. And would -- strike that.
You were listed as the first person for --
A. That is correct.
Q. -- this group; right?
A. Yes, sir.
Q. And Jerry Wells, Jerry Wells was there. He's from Syngenta; right?
A. He is, sir.
Q. Kersten Mewes? Right?
A. Correct.
Q. Charles Breckenridge?
A. Correct.
Q. And Nick Sturgess.
A. Correct.
Q. Were they all present? All right.
A. Yes, sir.
Q. Okay. And who gave the presentation?

Page 205

A. It was a combination, sir. If I recall the flow, I did the introductory slides, and then the science presentation was primarily driven by Nick Sturgess on the animal models and Charles Breckenridge with respect to epidemiological information.
Q. Okay. Now, who at the USEPA attended the presentation?
A. Wow. I don't have a definitive recollection of that. I would have certainly anticipated Marianne Mannix would have been there. Most likely Kelly Sherman. And representatives of, I would believe from HED, but I do not have those names memorized, sir.
Q. How many people from USEPA attended?
A. I do not have a firm number, but I would have anticipated if there would have been multiple people from EPA, I just do not recall the --
Q. Does multiple mean 10? 50? 100?
A. Certainly not 50. Much closer, more like to the 10 number. But I would have certainly assumed it was 10 or less.
Q. Okay. Now let's go to slide 8, which is at 9785.

Page 206

And this is a portion of this PowerPoint which talks about the effect of intraperitoneal dosing of paraquat in the C57BL6J male mouse, by Nick Sturgess; right?
A. Yes, sir.
Q. And that's exactly the same mouse that we've been talking about for the last couple of hours in all of the studies of Dr. Marks; right?
A. I believe that is the same mouse. It's the Charles River black mouse. So that should be the same.
Q. Okay. And Syngenta LP is one of the United Kingdom Syngenta entities; right?
A. I'm not sure about that, sir.
Q. Well, Dr. Sturgess was from Syngenta LP.
A. Yes, sir, he -- Dr. Sturgess is a Syngenta employee.
Q. And he gave the presentation on the company's research with paraquat in the mouse, didn't he?
A. Correct.
Q. Okay. And who is Dr. Sturgess?
A. I believe Nick is retired now, but he was one of our toxicological experts and had a key

Page 207

role as one of the lead scientists doing this work.
Q. And Dr. Sturgess was Dr. Marks' direct supervisor at Syngenta CTL when she was conducting research with exactly that same type of mouse, wasn't he?
MR. WEIR: Objection, foundation. Object to scope as well.
THE WITNESS: I don't believe I was aware of that fact, sir. It's a possibility, I just did not know that Nick had a -- Nick's role with respect to leading a team or what people would be reporting to him.
Q. (BY MR. TILLERY) So you didn't know that he was Dr. Marks' direct supervisor; right? So I just told you?
A. I don't believe I was ever aware of that until you just said that, sir.
Q. All right. So I'll submit to you that in the testimony of Dr. Botham, he indicated that Dr. Sturgess was Dr. Marks' direct supervisor; okay? I'll submit that to you.
A. Sure. I accept that.
Q. Okay. So Dr. Sturgess certainly knew about the studies, the four studies conducted by

Page 208

Dr. Marks with paraquat in the black mouse; right?
MR. WEIR: Object to foundation, scope.
THE WITNESS: I certainly believe Nick was aware of all of the studies done by Dr. Marks.
Q. (BY MR. TILLERY) Okay. But he didn't make any report to the USEPA about Dr. Marks' studies in this presentation, did he?
A. I do not believe there is a reference to those studies in this presentation.
Q. Or any time before, to your knowledge; right?
A. To my knowledge, I am not aware of him making any reference to EPA any time before.
Q. Are you aware that -- I don't know if you noticed, in the studies that we just went through, that Dr. Marks' reports all indicated that Dr. Sturgess is listed as her supervising researcher.
A. I did not pick up on that fact until you mentioned it. But if he was her supervisor, then certainly he should have been on the reports.
Q. And it would show that on the report. If you want to look at them to verify my

Page 209

statement, I'm happy to let you see them, but I submit to you that's what they said.
A. That seems very plausible and possible to me, sir. I'm okay with that.
Q. All right. Now let's go to slide 9, which is 0469786.
A. Correct.
Q. Now, this says the Effect of i.p., intraperitoneal, that stands for, right?
A. Yes, sir.
Q. Dosing of paraquat in the -- again, the C57BL6 mouse; right?
A. Correct. But it does also say the rat there, too.
Q. Right. And it gives them a summary, the EPA, of this literature, and it says: Over the last decade, a number of research groups have produced a series of publications using the i.p. dosing of paraquat animals, but also rat -- and it talks about DiMonte group, Cory-Slechta group, and it used C57BL6 mouse model and i.p. dosing of PQ, typically 3-week doses, three biological endpoints were examined; neuropathological, we talked about earlier, which is a loss of dopaminergic neurons, substantia nigra pars compacta; neurochemical;

Page 210

neurobehavioural.
Let me ask you: You were there. You helped present this. If the USEPA knew all of this, why did Syngenta have to update them on the public literature?
MR. WEIR: Object to form.
THE WITNESS: And I'm not sure I'm quite following your question, Mr. Tillery, about updating them on the public literature.
Q. (BY MR. TILLERY) I think you said you thought that these scientific studies were out there known, understood.
A. That is correct.
Q. What was the purpose -- so you -- you think they forgot about them?
A. No, sir, but when you --
MR. WEIR: Object to form.
THE WITNESS: No, sir, as part of having a meeting or a science discussion with EPA, you lay the foundation of the work you're doing, and this is giving some historical context for that work, sir.
Q. (BY MR. TILLERY) Oh, okay. All right. Well, let's to go slide 10, which is 469787.

Page 211

Now, this is Effect of i.p. Dosing of paraquat in the C57BL6J Mouse; right?
A. Yes, sir.
Q. Syngenta reported to the USEPA that it had conducted studies in an attempt to replicate the findings of the paraquat mouse model in the reported literature.
Isn't that what Dr. Sturgess said?
A. That is correct.
Q. So Dr. Marks' four studies at Syngenta CTL very clearly set out right in front of them that they were an attempt to replicate the findings of the paraquat mouse model in the reported literature. It says right in the studies, doesn't it?
A. I agree that's what they say, sir.
Q. Okay. But Syngenta -- look at that document. Syngenta did not report Dr. Marks' studies to the USEPA during this presentation, did it?
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) Did it?
A. My recollection is that Dr. Marks' studies were not brought up during this meeting.
Q. You left them out.

Page 212

Now, were you part of the decision? Were you part of the group of people who decided to pull back that information from the USEPA?
MR. WEIR: Object to form.
THE WITNESS: There was a -- I certainly was part of the team that evaluated putting together the slide deck for EPA. There was a series of discussions of how to prepare the slide deck. So I was certainly in those discussions. To answer your question, yes, I would have been part of the discussions in building the slide deck and planning the presentation.
Q. (BY MR. TILLERY) And did you take a position about whether or not Dr. Marks' studies should be reported to the USEPA?
A. I did not take such a position one way or another, sir.
Q. Did you know at that time whether Dr. Marks' studies have even been conducted?
A. I believe I was aware of the one that there was a 6(a)(2) on -- and I think through that, tangentially aware that there had been the other studies. So, yes, I believe I did have awareness of the other studies but also an

Page 213

understanding that the other studies were viewed to essentially be repeating what was already in the literature.
Q. Well, how can you say that in view of that document that's on the screen right now?
A. Because the purpose of this meeting was to update them with the studies that had been conducted since that time.
Q. Well, you didn't tell them about this. You never told them about them before.
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) They didn't know about these studies -- you have said this several times in this deposition -- until December 2019.
So show me where in this meeting to update them in -- when did you have this meeting? In December 2013? 21st of February, 2013, when you had that meeting, show me where you reported Dr. Marks' studies.
MR. WEIR: Object to form.
THE WITNESS: It is my recollection that the -- Dr. Marks' studies were not presented at this meeting. That's my recollection, sir.
Q. (BY MR. TILLERY) And you had a

Page 214

meeting in 2010.
Do you remember that one?
A. Yes, sir.
Q. And you told them you were going to do all of these things, and you were going to do the science; right?
MR. WEIR: Object to form.
THE WITNESS: Correct.
Q. (BY MR. TILLERY) You did not report Dr. Marks' studies in that meeting with USEPA in 2010, did you?
A. To the best of my recollection, those studies were not mentioned during that meeting.
Q. Okay. Now, let's go to slide 25. 469802.
This is Effect of i.p. Dosing of paraquat in the C57BL6j Mouse - Summary of study findings.
Do you see that?
A. Yes, sir.
Q. And this is referencing the neuropathology, neurochemistry, and stereology, and it's the report of the study findings Syngenta had done; is that right?
A. Correct.

Page 215

Q. Okay. And it shows at the very bottom. Look at that. The apparent loss of TH+ neurones in the initial study (WIL 639058) when paraquat was administered at three times 15 milligrams per kilogram was not reproducible. Right?
A. Correct.
Q. Syngenta reports that the loss of dopaminergic neurons in a WIL study with paraquat was not reproducible.
That's what you told them; right?
A. That is correct.
Q. So Syngenta had conducted a paraquat mouse study at WIL Research Laboratories; right?
A. Those were done at the WIL Research Laboratories, yes.
Q. And in at least one of the studies, paraquat caused a loss of dopaminergic neurons after 15-milligram dose.
Did you know that?
A. That's what is stated right there in that bullet, yes, sir.
Q. All right. Now let's go to --
A. And that study was submitted to the EPA, sir.

Page 216

Q. Strike that.
And you, at this point in time, in all of this discussion, you never mentioned Dr. Marks' study, in this presentation, on this slide either, did you, sir?
MR. WEIR: Object to form.
THE WITNESS: To the best of my recollection, Dr. Marks' studies were not discussed at this forum.
Q. (BY MR. TILLERY) Okay. Let's go to 469804.
This is Paraquat i.p. mouse model: Syngenta studies and the published literature.
Do you see that?
A. I do, sir.
Q. Syngenta presented to the USEPA in this study, information about the company's research with paraquat in the mouse, didn't it?
A. Correct.
Q. And how that research compared to the public literature; right?
A. Correct.
Q. But at no time did Syngenta present Dr. Marks' studies with paraquat in the intraperitoneal injection to the mouse model in

Page 217

the presentation that it did here, did it?
A. To the best of my recollection, no.
Q. And it looks here, it says: In our studies, there was no consistent statistically significant stereological evidence of a loss of TH+ neurons in the substantia nigra following PQ treatment.
And that statement is absolutely completely flatly wrong when it comes to the study results that Dr. Marks did, isn't it?
MR. WEIR: Object to form.
THE WITNESS: Sir, this statement was based upon the studies that we were presenting to EPA at that meeting.
Q. (BY MR. TILLERY) Right. So if you leave out the studies that find the opposite thing, of course. What I'm saying is if you factor in the studies you had in your files that your own scientists did and that you kept from public eye, that statement was absolutely misleading at the minimum, wasn't it?
MR. WEIR: Object to form.
THE WITNESS: And, sir, I disagree that it was misleading. That statement was specific to the information being presented to EPA

Page 218

at that time. Those studies --
Q. (BY MR. TILLERY) Did you present Dr. Marks' studies?
A. No, sir, not at that meeting to the best of my recollection.
Q. If you presented Dr. Marks' studies, would that statement have been right?
MR. WEIR: Object to form.
THE WITNESS: I believe if we had presented Dr. Marks' studies, that statement would have had to been modified.
Q. (BY MR. TILLERY) It wouldn't have been used because there was no evidence that was consistent with it if you brought in Dr. Marks' studies; right?
MR. WEIR: Object to form.
THE WITNESS: And so the purpose of this --
Q. (BY MR. TILLERY) Would you answer my question? Let me withdraw the question.
Would you agree with me that you were not being transparent with the USEPA on that day?
MR. WEIR: Object to the form.
THE WITNESS: I would disagree,

Page 219

sir.
Q. (BY MR. TILLERY) Okay. Would you agree with me today -- strike that.
Do you think today, in retrospect, after everything you know about this whole thing and how it's developed, that that was a good idea to hide those studies from the USEPA at that time?
MR. WEIR: Object to form.
THE WITNESS: I disagree that those studies were hidden, sir.
MR. TILLERY: Okay.
THE WITNESS: I think those studies were evaluated through the 6(a)(2) process and a determination was made that they were not reportable at the time, and so they were not submitted, but there was not a -- I would not agree with the characterization they were hidden.
Q. (BY MR. TILLERY) Well, by not turning them over, you were able to say you had no consistent statistically significant stereological evidence of a loss of TH+ neurons in the substantia nigra following PQ treatment; right?
MR. WEIR: Object to form.
Q. (BY MR. TILLERY) Is that right?
A. That statement was based upon the

Page 220

studies being presented to the EPA at this meeting, so the statement was addressing the information that was being presented to EPA. It is accurate for that information.
MR. TILLERY: Let's go to slide 469822.
Q. (BY MR. TILLERY) We're on the same meeting here, aren't we? When you see this. The same meeting?
A. Yes, sir.
Q. Take a look at this one.
A. Okay. May I have a moment, please?
Q. Sure. Please.
[Document review.]
A. Okay, I've read that.
Q. So you see the first paragraph that says: Hatcher concluded paraquat differs from MPP+.
Do you see that?
It's in that -- its ability to enter the dopamine neuron, inhibit complex 1, activate particular cell-death pathways.
You see all of that, right?
A. I do, sir.
Q. Now, let's go down to the bottom.

Page 221

Syngenta studies on paraquat show that high doses of paraquat administered either by i.p. or oral routes, one, do not affect striatal dopamine concentrations or dopamine turnover;
Two, do not reduce the number of dopaminergic neurons in the substantia nigra pars compacta;
Three, do not kill dopaminergic neurons in the substantia nigra.
So in this slide, Syngenta is reporting to the USEPA that the administration of paraquat did not reduce the number of dopaminergic neurons in the substantia nigra in its studies; correct?
A. These would be in the studies that were being presented in the meeting which were the ones we introduced in 2010, and we were giving the updates. So that statement is referencing the studies that were being presented at this meeting, sir.
Q. Where does it say that in that slide? Where does it say that?
A. It does not say that in the slide, sir.
Q. It says Syngenta studies on paraquat.

Page 222

Doesn't it?
A. I acknowledge it says that, sir.
Q. Okay. Syngenta studies on paraquat show that high doses of paraquat administered either by i.p. or oral routes did not reduce the number of dopaminergic neurons in the substantia nigra pars compacta. That's what it says, doesn't it? We agree on that?
A. We do.
Q. Okay. And can we also agree that three of Dr. Marks' studies with paraquat in the i.p. mouse model did show reduced -- statistically significant reduction of number of dopaminergic neurons in the substantia nigra pars compacta; right?
MR. WEIR: Object to scope.
Q. (BY MR. TILLERY) Right?
A. That was the conclusions of those studies, but that was not the information being covered by this slide presentation, so it's not -- those -- that statement that you're reading, sir, there, was based on the studies being presented to EPA at that meeting.
MR. TILLERY: I move to strike your answer as unresponsive.

Page 223

Could you read back the question to him, please?
(Whereupon, the following testimony was read by the court reporter.)
"QUESTION: And can we also agree that three of Dr. Marks' studies with paraquat in the i.p. mouse model did show reduced -- statistically significant reduction of number of dopaminergic neurons in the substantia nigra pars compacta; right?"
(End of readback.)
THE WITNESS: And my answer to that, sir, is the study reports do make those statements.
Q. (BY MR. TILLERY) Thank you.
A. For the Dr. Marks' studies.
Q. Yes. Now let's go back to the first page.
This is the title page again, right? For Exhibit 12.
A. That is correct, sir.
Q. So Syngenta wanted to keep the USEPA updated on its paraquat research program; right?
A. Correct.
Q. Dr. Breckenridge's i.p. study of

Page 224

paraquat in the black mouse was discussed in this presentation, wasn't it?
A. The -- yes, sir, I believe, if I'm following the question correctly, Dr. Breckenridge and the rest of the research group working in, I believe, in conjunction with Dr. Smeyne.
Q. Did FIFRA 6(a)(2) require Syngenta to report Dr. Breckenridge's study to the USEPA?
MR. WEIR: Object to scope.
THE WITNESS: I am not aware that there was a 6(a)(2) submission related to that, sir.
Q. (BY MR. TILLERY) Okay. Do you want to answer my question?
A. Sure.
Q. Did FIFRA 6(a)(2) require Syngenta to report Dr. Breckenridge's study to the USEPA?
MR. WEIR: Same objection.
THE WITNESS: I do not have a definitive answer on that, sir.
Q. (BY MR. TILLERY) Well, let's assume it didn't, okay?
You wanted to report it to the USEPA anyway, didn't you?
A. We did, sir.

Page 225

Q. Because you wanted to keep the USEPA updated on your paraquat mouse model research; right?
A. That was the intention of the meeting, sir.
Q. Dr. Minima's oral study on paraquat in the black mouse was discussed in this presentation too, wasn't it?
A. It was.
Q. Did FIFRA 6(a)(2) require Syngenta to report Dr. Minima's study to the USEPA?
MR. WEIR: Object to scope.
THE WITNESS: Not to the best of my understanding, sir.
Q. (BY MR. TILLERY) But you reported it anyway, didn't you?
A. We reported --
MR. WEIR: Object to form.
THE WITNESS: -- and published it.
Q. (BY MR. TILLERY) Okay. Because you wanted to keep the USEPA updated on your paraquat mouse research; right?
A. Correct.
Q. Dr. Marks' studies were not discussed in this presentation, right?

Page 226

ny knowledge, they were

sentation to the USEPA;

not --

MR. WEIR: Object to form.

THE WITNESS: I do not recall a presentation to EPA where they were discussed.

Q. (BY MR. TILLERY) And that's because you didn't want the USEPA to know about her research; correct?

MR. WEIR: Object to form.

THE WITNESS: I do not agree that that was a motivating factor. The purpose here was to provide the agency with these research data that were done working with Dr. Smeyne, I believe.

Q. Okay. Let's go to the next exhibit, No. 13.

MR. WEIR: Can we take a quick break before you move to another document?

MR. TILLERY: Very quick -- a very quick break, because I want to finish this. I don't want a break in the middle of this exhibit. Okay? So as long as we can finish it. I can finish it in -- let's come back at 3:30, or 4:30

Page 227

your time. Okay?

MR. WEIR: Yeah, that's fine.

MR. TILLERY: All right. Thank you.

THE VIDEOGRAPHER: We are going off the record at 4:22 p.m. Eastern.

(Recess taken, 4:22 p.m. to 4:34 p.m. EDT)

THE VIDEOGRAPHER: We are back on the record at 4:34 p.m. Eastern.

Q. (BY MR. TILLERY) We are pulling up Plaintiffs' Deposition Exhibit No. 13 at this point, sir, and that's Syngenta 00955314.

(Dixon Deposition Exhibit 13 marked.)

THE WITNESS: I have the exhibit open.

Q. (BY MR. TILLERY) All right. I'll let you take a look at that.

A. Is there a particular page, sir, you would like me to look at, sir?

Q. There will be. You're familiar with this as well, aren't you?

A. Yes, sir.

Q. Did you help create this?

Page 228

A. I did.

Q. Okay. And you, again, were the lead for the Syngenta group of folks who attended the meeting; right?

A. I coordinated the meeting. I wouldn't necessarily say I was the lead, but I did reach out to EPA to request the meeting and did the introductory slides at the beginning of the meeting, sir.

Q. And who did you reach out to?

A. It would have been Marianne Mannix, sir.

Q. Is she your kind of contact at EPA?

A. Yes, sir. With respect to paraquat entered into registration review and as the chemical review manager, she would be the primary person I would speak to and have communications with with information related to the potential registration review activities.

Q. And if you had a 6(a)(2) report to file, where would you file that with USEPA?

A. I believe it goes into a 6(a)(2) mailbox, sir.

Q. Okay. Have you ever done that before?

A. We have submitted 6(a)(2)s, yes, sir.

Page 229

Q. You have yourself?

A. Yes, sir. The process is typically that once the letter is prepared and agreed upon and I sign off, it is then submitted to the agency.

Q. How many 6(a)(2)s have been filed by Syngenta with respect to paraquat?

A. Sir, I don't have a specific number off the top of my head. I can tell you the nature of the 6(a)(2)s that I have submitted while working with paraquat.

Q. But I'm just -- I'm talking about the number of them.

A. Sir, I don't have a specific number that I can point you to. I do know that I have submitted multiple 6(a)(2) reports.

Q. And those you have to file for every time your product kills somebody too, right?

A. That is correct, sir.

Q. So every time somebody's killed by ingesting it, you send it in. So there would be quite a lot of those; right?

A. Not quite a lot, sir. In my time, as the regulatory manager in the US, I would estimate 10 to 12. And with the majority of those,

Page 230

especially during the registration review period, they were sent in through the 6(a)(2) window as well as copied to Marianne Mannix.
Q. And this was after you doubled or tripled the amount of the emetic in the product; right?
A. There have been deaths after that, yes, sir.
Q. Right. So --
A. May I add to that answer, sir?
Q. I'll get back to it, sir.
A. Okay.
Q. You'll have a chance to raise this.
A. Okay.
Q. So you understand that there's a registry of deaths caused by ingestion of paraquat maintained by Syngenta; right?
A. That is correct, sir.
Q. Where do you keep it?
A. It is actually contracted through an organization that was called Prosar, and now I believe it's referred to as ProPharma.
Q. And where is that data maintained?
MR. WEIR: Object to the scope. Can I get a standing objection on scope here?

Page 231

MR. TILLERY: Yes, sir.
MR. WEIR: Thank you.
THE WITNESS: As far as the specific information where the data is retained, I know when I access it, there is a web portal, and that's how I access the information.
So the records, I believe, are retained on a database that's maintained by that ProPharma organization. That's the best of my understanding of where that resides, sir.
Q. (BY MR. TILLERY) Where is ProPharma located?
A. I do not know the specific address, sir.
Q. And how long have they been in charge of the database?
A. I believe ProPharma, and before that Prosar, goes back, I want to say to 2001 or '2, sir.
Q. And who had the database before that?
A. I do not know, sir.
Q. How far back does the calculation or assemblage of death data extend?
A. As far as the ProPharma database, I believe I have seen records dating back to

Page 232

approximately 2001, perhaps 2000ish, in that time frame, sir.
Q. So who kept the data for all of the folks who died in the '60s and '70s and '80s and '90s?
A. I do not have an awareness of how that data was maintained back during those time frames, sir.
Q. Now, first, before we get started, this document marked as Plaintiffs' Deposition Exhibit 13, is a PowerPoint of a USEPA meeting; right?
A. Yes, sir.
Q. You attended along with John Abbott, Charles Breckenridge and Nick Sturgess; right?
A. Correct.
Q. And you were involved in putting this presentation together along with whom?
A. It would have been the individuals on the slide, and there may have been other contributors, but the key people would be the individuals on the slide there.
Q. All right. And if we go to 5315. This is the agenda for your meeting, isn't it, sir?

Page 233

A. That is correct, sir.
Q. And you gave the introduction?
A. Correct.
Q. Right?
Where did you have the meeting?
A. It was at EPA, sir. One Potomac Place.
Q. And again, how many people were there from the EPA?
A. I don't have a firm recollection, but my estimate would be between four to ten.
Q. Okay. And the second part of this was Paraquat Registration Review Status.
A. Correct.
Q. So you were talking to them about the review status?
A. That is correct, sir.
Q. Okay. Was that part of the reason for the meeting?
A. Certainly, yes, sir, to at least cover that as its relevant to the situation with paraquat.
Q. And you were taking what position with respect to paraquat's reregistration?
A. This is an ongoing process, sir, as

Page 234

part of FIFRA, and through that process, obviously there is interactions with EPA on different elements. So in there and at this meeting, to my recollection, I believe we would have gone through -- and it's probably on the next slide, but information related to the potential DCI as well as there could be information in here with respect to the human health mitigation activities.

Q. Okay. As we continue on, it says: Considerations By Other Regulatory Agencies. And who is assigned? Monte Dixon --

A. Correct.

Q. -- right?

So you did the Introduction, the Paraquat Registration Review Status. You did the Considerations By Other Regulatory Agencies; right?

A. Correct.

Q. And then the Results of Syngenta's Research Program, the Animal model was Nick Sturgess, and Epidemiology was presented by Charles Breckenridge; right?

A. Correct.

Q. And then there was a discussion, right?

Page 235

A. Correct. Yes, sir.

Q. How long did this meeting last?

A. My recollection is approximately one hour to maybe an hour and 20 minutes.

Q. Now, if we can, can you tell me where in this outline there's a reference to Dr. Marks' studies?

A. I do not recall that there is a reference to Dr. Mark's studies in this outline.

Oh, in this -- I'm sorry, in the outline, I'm sorry, sir. I misheard your question. I thought it was the whole presentation.

There is no reference in this outline to Dr. Marks' studies.

Q. Is there any in the whole presentation?

A. To my recollection, I do not believe there is.

Q. Okay. So up through in the oral presentation, was there any reference to Dr. Marks' studies?

A. I do not recall there being any reference in the oral presentations to Dr. Marks' studies.

Page 236

Q. And I mean to include all of the speakers, you, John Abbott, Charles Breckenridge, Louise Marks' direct supervisor who signed on as the supervisor for all of her studies, Nick Sturgess, none of you spoke one single word about Dr. Marks' studies; correct?

A. To the best of my --

MR. WEIR: Object to form.

Q. (BY MR. TILLERY) Go ahead.

A. Yes, to the best of my recollection, none of us spoke to Dr. Marks' studies.

Q. Now, let's go to slide 53.

Okay? What is this slide?

A. It appears to me, sir, to be speakers' notes. That is -- on PowerPoints, there is an option to include speakers' notes, and that's what this appears to be to me.

Q. And if you look at the top of that speakers' notes, it says: Studies Conducted on Paraquat in Sensitive Strains of Mice At Maximum Tolerated Doses.

Then it says: Syngenta has sponsored and published a number of animal studies investigating the potential effects of maximum tolerated doses of paraquat on neurochemistry,

Page 237

stereology, neuropathology endpoints in dopaminergic systems of the most sensitive strain of animal (male C57BL6J mice); correct?

A. Correct.

Q. And then it says -- take a look at that. There are No Effects of Paraquat in Animal Models.

Right?

A. That's what is stated there, sir.

Q. That's not true, from your history, was it?

MR. WEIR: Object to form.

Q. (BY MR. TILLERY) You knew that wasn't true when you said it, didn't you?

A. I don't -- specifically, I don't know that that statement was said to EPA. But that statement is clearly stated on that slide.

Q. Well, what does that mean? Of course, it's on the slide. We can all see it. We're not blind here. What I'm trying to tell you is, that statement is a lie, isn't it?

MR. WEIR: Object to form.

Q. (BY MR. TILLERY) You lied to the EPA.

MR. WEIR: Same objection.

THE WITNESS: Sir, I do not know

Page 238

that that statement was actually spoken at EPA. The purpose of speaker notes is to prompt the speaker as they are going through presentations. I have no confirmed recollection that that specific sentence was said. It may have been said. I do not recall that -- if it was specifically said or not, sir.

Q. (BY MR. TILLERY) Well, who gave this part of the presentation?

A. I believe -- if you could go up one slide for me, I believe this is still in the animal models, and if so, it would have been Nick Sturgess, as Charles would have handled the epidemiological. This looks actually like it's epidemiological, so this would have been in the part of the presentation that Dr. Breckenridge would have made.

Q. So you're gleaning that from slide 52?

A. Yes, sir, only because of, in the X axis of slide 52, and also the title, it makes references to epidemiology, and Charles was there as our expert in epidemiology.

Q. Okay. So slide 52 of 95 tells you it was Dr. Breckenridge who presented the talk based upon the speaker notes existing on slide 53;

Page 239

right?

A. Correct.

MR. WEIR: Object to form.

Q. (BY MR. TILLERY) All right. Let's go to slide 53. Next page.

Now, let's assume that, in fact, he followed his speaker notes and he actually said what's on the slide. Okay?

Are you with me?

A. Yes, sir.

Q. That statement was not true, was it?

MR. WEIR: Object to form.

THE WITNESS: I would say that statement does not reflect some of the conclusions in other studies as it is written.

Q. (BY MR. TILLERY) Okay. And let's go to the next one.

We have consistently found that paraquat does not reduce dopamine levels or increase dopamine turnover in the striatum.

That statement was not true, was it?

MR. WEIR: Object to form, foundation.

THE WITNESS: And I do not agree

Page 240

with the conclusion there, sir. I believe the results of the studies that had been presented in 2013 through this reflect that statement.

Q. (BY MR. TILLERY) Okay. That doesn't mention anything about studies in 2013, however, does it?

Why won't you answer my question?

A. Sir --

Q. Let's look at the statement. It says --

A. Okay.

Q. -- we have consistently found that paraquat does not reduce dopamine levels or increase dopamine turnover in the striatum.

Now, let me ask you: Is it a fact that Syngenta had consistently found that paraquat does not reduce dopamine levels?

A. That was the conclusion --

MR. WEIR: Objection -- excuse me, Mr. Dixon. Just give me a moment to get my objections in. Object to foundation and scope, please.

Q. (BY MR. TILLERY) What was your answer?

A. That is the conclusion of the

Page 241

scientists, sir.

Q. Well, no, I'm asking you. The scientists get their chance to answer my questions later. I'm asking you now, okay?

That statement was not true based upon your review of Dr. Marks' studies, was it?

A. That statement --

MR. WEIR: Same objections.

THE WITNESS: That statement was based upon the purpose of the presentations, which was to update the agency on the research. So it was not geared at the Dr. Marks' studies, but the purpose of this presentation, which was following up on the 2013 presentation.

Q. (BY MR. TILLERY) Now, you know what you told me was just a bunch of baloney. Now, you know that. Now let's try -- you're under oath, sir.

Do you understand the significance of this? Of what you're saying and the fact that you're under oath?

A. I do.

Q. I said do you. Because if you don't, we can stop and have this taken before the Court. Because I think you're not telling me the truth

Page 242

right now. Okay? So let's go back to my deposition, knowing full well that we're taking this case extremely seriously, because of the number of people who are dying all over the country. Okay? Now, that's my prelude. I'll start my question.

The statement: We have consistently found that paraquat does not reduce dopamine levels or increase dopamine turnover in the striatum was not correct, was it, sir?

MR. WEIR: Object to the form.

THE WITNESS: I believe the statement is correct in the context of the information being presented at that meeting, sir.

Q. (BY MR. TILLERY) The statement, the next statement, does not -- we -- strike that.

There Are No Effects of Paraquat in Animal Models, that title. And he says below it: We have consistently found that paraquat does not reduce the number of TH+ neurons in the substantia nigra pars compacta.

That statement was not correct either, was it?

MR. WEIR: Same objection.

THE WITNESS: I believe that

Page 243

statement is correct in the context of the information that was being presented to the EPA.

Q. (BY MR. TILLERY) If you include Dr. Marks' studies, was it correct?

MR. WEIR: Same objection.

THE WITNESS: Dr. Marks' studies did have statements that they did find reductions in the substantia nigra or the neurons or however it was phrased as we reviewed them. I acknowledge the point that you raise there.

Q. (BY MR. TILLERY) So what I'm trying to get is a straight answer to my question. If you include Dr. Marks' studies, that statement was not correct, was it?

MR. WEIR: Same objection.

THE WITNESS: If the statement was meant to include Dr. Marks' studies, then it would not seem consistent with what is stated there.

Q. (BY MR. TILLERY) Can you say whether it was correct or truthful or not? Are you able to say that on the record?

MR. WEIR: Same objection.

THE WITNESS: Okay. My view of it, based upon what I'm reading here, is that if we were to include the Dr. Marks' studies, then

Page 244

that first statement would not be correct as written.

Q. (BY MR. TILLERY) All right. Now let's move on. There Are No Effects of Paraquat in Animal Models. That's the title we're under.

He also says: We have consistently found that paraquat does not cause neuronal cell death in the substantia nigra pars compacta.

Do you see that?

A. I do.

Q. If you include Dr. Marks' studies, that statement is also not true. Is that right?

MR. WEIR: Object to form.

THE WITNESS: With the provision that we include Dr. Marks' studies, that statement would not be consistent with her conclusions.

Q. (BY MR. TILLERY) It would not be true, would it, sir?

MR. WEIR: Same objection.

THE WITNESS: I would agree that is not what her conclusions are.

Q. (BY MR. TILLERY) Okay. And also we have consistently found that paraquat does not activate microglia ...

Page 245

Let's stop there.

A. Sir, because I am not very expert in this area, I do not understand or do not have a good understanding of which studies had impact on the microglia, so I'm not able to definitively answer that. I apologize.

Q. That's no problem. That's not a problem, sir.

Syngenta reported to the USEPA that it has consistently found that paraquat does not reduce the number of TH+ neurons, didn't it?

MR. WEIR: Object to form.

THE WITNESS: That was the reports based upon the study programs that we were presenting.

Q. (BY MR. TILLERY) And some Syngenta studies did not find paraquat reduced the number of TH+ neurons in the substantia nigra; right?

A. I'm afraid I don't have enough familiarity to speak definitively to that, sir.

Q. What about the Breckenridge study? Do you know what its findings were in terms of reduction of the number of TH+ neurons?

MR. WEIR: Object to the form.

THE WITNESS: If I recall, sir, I

Page 246

believe there was one dosing regimen in the study that I believe ended in '58, where at one dose level I believe there was an effect there.
Q. (BY MR. TILLERY) In the Minima study, did it find anything about the reduction of the number of TH+ neurons?
MR. WEIR: Same objection.
THE WITNESS: Sir, I don't know the answer to that. I know the overall context of the Minima study but not the specific details.
Q. (BY MR. TILLERY) What about the Smeyne study? Did it make findings regarding the reduction of TH+ neurons in the substantia nigra?
MR. WEIR: Same objection.
THE WITNESS: Very similar to my last answer, I have a high level awareness of the Smeyne study, but not the specifics of the individual findings, so I can't speak to that, sir.
Q. (BY MR. TILLERY) Dr. Marks' second study found a reduction in TH+ neurons in the substantia nigra, didn't it?
MR. WEIR: Same objection.
THE WITNESS: I would have to go back to see the study, but if that was one of the

Page 247

conclusions, then I would say yes.
Q. (BY MR. TILLERY) Okay. And her third study did as well, right?
MR. WEIR: Same objection.
THE WITNESS: Yes, sir, and the same answer, it's based on what was in the conclusion.
Q. (BY MR. TILLERY) And No. 4 as well, the fourth one, same thing, right?
MR. WEIR: Same objection.
THE WITNESS: Same answer, sir.
Q. (BY MR. TILLERY) And one of Dr. Breckenridge's studies found a reduction in the TH+ neurons in the substantia nigra at the 15-milligram dose, didn't it?
A. I believe that is correct, sir.
Q. Okay.
MR. TILLERY: Well, your counsel advised that we should conclude by this time. So I'm about to break away to a new topic. We're not finished with the deposition, but he advised that you would like to conclude at 5:00 p.m. Eastern Time. So I'm honoring that commitment to do so, if that's okay. At this point, we will work together with Syngenta's counsel to resume at a

Page 248

date that we agree to at a later time, so the deposition is suspended.
Do you understand that, sir?
THE WITNESS: Yes, sir.
MR. TILLERY: All right. Thank you.
MR. WEIR: Before we end, just again, note for the record as I did on Monday, I do anticipate having redirect for the witness. And I understand my opportunity will come at the conclusion of Mr. Tillery's questioning, and for the record, we object to the use of the deposition until we have a chance to do redirect.
MR. TILLERY: Again, we would honor any kind of -- whatever those restrictions are, but to the extent that we file expert reports in the interim, those expert reports, I don't know that they would, but may or may not have references to these depositions, so -- just as I've indicated in the past.
All right. Thank you very much. Good night, sir.
THE VIDEOGRAPHER: This concludes today's portion of the videotaped deposition of Montague Dixon. We are going off the record at

Page 249

5:00 p.m. Eastern Time.
(Time noted: 5:00 p.m. EDT)
--o0o--

CERTIFICATE

I, DEBRA A. DIBBLE, RDR, CRR, Notary Public, do hereby certify:

That MONTAGUE DIXON, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by such witness;

That pursuant to FRCP Rule 30, signature of the witness was requested by the witness or other party before the conclusion of the deposition;

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand on 7-6-2020.

_____

Debra A. Dibble
Registered Diplomate Reporter
Certified Realtime Reporter
Notary Public
My Commission Expires 5/3/2023

I HEREBY CERTIFY that I have read this transcript of my deposition, and that this transcript accurately states the testimony given by me, with the changes or corrections, if any, as noted.

X _____
MONTAGUE DIXON

ERRATA SHEET FOR THE TRANSCRIPT OF:
CASE NAME: Hoffmann v. Syngenta
DEP DATE: June 24, 2020
DEPONENT: MONTAGUE DIXON

Pg.	Ln.	Now Reads	Should Read	Reason

X _____
MONTAGUE DIXON