

COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL HEARING BOARD

* * * * *

SLUDGE FREE UMBT, *
JIM AND DONNA DELLATORE, * EHB
MIKE AND DIANE ZIMMERER, * Docket No.
DEBRA AND TOM BODINE, * 2014-015-L
JOHN AND TRACY GORMAN, *
BOB AND TERRY SCHNEIDER, *
Appellants *

vs. *

COMMONWEALTH OF *
PENNSYLVANIA, DEPARTMENT *
OF ENVIRONMENTAL *
PROTECTION, AND SYNAGRO, *
a/k/a SYNAGRO *
MID-ATLANTIC, INC., *
Permittees *

* * * * *

DEPOSITION OF
TIMOTHY CRAVEN
September 30, 2014

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DEPOSITION

OF

TIMOTHY CRAVEN, taken on behalf of the Appellants herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Rhonda K. Thorpe, a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, at the offices of the Department of Environmental Protection, Northeast Regional Office, Two Public Square, Wilkes-Barre, Pennsylvania, on Tuesday, September 30, 2014, beginning at 1:05 p.m.

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WITNESS: TIMOTHY CRAVEN

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P R O C E E D I N G S

TIMOTHY CRAVEN, HAVING FIRST BEEN DULY
SWORN, TESTIFIED AS FOLLOWS:

EXAMINATION

BY ATTORNEY YEAGER:

Q. All right. Sir, we just met
briefly before we started for the first
time. My name is Jordan Yeager. I
represent the Appellants in this case,
and I'm just here to ask you some
questions. Have you sat for a deposition
before?

A. First time.

Q. Okay. It hopefully will be
relatively painless. I've shut the
spotlight off for now and the electrodes
in the seat are turned off. It's a
question and answer session. I'll be
asking you questions. If there's any
part of my question you don't
understand, just let me know.

A. Okay.

Q. Okay. If you need to take a

1 break at any time, let me know. The
2 most important rule is that when I ask
3 you a question, it's important that you
4 use words to answer rather than shakes,
5 nods, other mouth noises that people
6 make; okay?

7 A. Yes.

8 Q. And as part of the deposition
9 notice, we asked that each of the
10 deponents bring any documents that
11 hadn't already been produced. Do you
12 have any documents with you today?

13 ATTORNEY FERRENCE:

14 Oh, we've got the files.
15 It's on my desk. Sorry about
16 that.

17 ATTORNEY YEAGER:

18 That's all right.

19 ATTORNEY FERRENCE:

20 I told him to bring them
21 down and then ---.

22 A. These are the three files
23 that ---.

24 ATTORNEY FERRENCE:

25 Right.

1 BY ATTORNEY YEAGER:

2 Q. Okay. So you have the three ---
3 well, I generally call them red wells.
4 These are pink wells. And all totaled,
5 maybe about an inch thick or so?

6 A. Correct.

7 ATTORNEY YEAGER:

8 Michael, are you able to
9 represent that this is what was
10 produced by the Department in
11 response originally to the Right
12 to Know request?

13 ATTORNEY FERRENCE:

14 Yes, that would include
15 the documents in response to the
16 Right to Know request, and then
17 there would be a couple of
18 additional documents, I believe,
19 subsequent to the Right to Know
20 request that I described in my
21 request to your request for
22 production for documents when I
23 said you can come up and see the
24 additional files, because I
25 wasn't sure which ones you would

1 want or not want and that sort of
2 thing.

3 ATTORNEY YEAGER:

4 Okay.

5 ATTORNEY FERRENCE:

6 I don't think there's
7 many, though, to be honest with
8 you.

9 ATTORNEY YEAGER:

10 Okay. Well, I'm going to
11 put this aside for now rather
12 than take up time, and we'll come
13 back to that. And if there's ---
14 if we have a chance and I get a
15 break and I'm able to figure it
16 out, we'll deal with it then. If
17 not, we may just need to follow
18 up with some limited questions
19 afterwards. Okay.

20 BY ATTORNEY YEAGER:

21 Q. As part of the process in this
22 case, we had sent a document request to
23 the Department, and as part of that, did
24 you review your computer system for any
25 documents that might be on your

1 computer, including any e-mails that
2 wouldn't have been in the physical file?

3 A. Yes. I produced all e-mail
4 traffic or anything like that, phone
5 records, all of that, to Mike. And I
6 think that that was ---.

7 Q. Okay.

8 A. I mean, I gave that to you.

9 ATTORNEY FERRENCE:

10 That may be the
11 information that ---

12 ATTORNEY YEAGER:

13 Okay.

14 ATTORNEY FERRENCE:

15 --- we still have ---.

16 ATTORNEY YEAGER:

17 Okay.

18 ATTORNEY FERRENCE:

19 Again, offer to ---.

20 ATTORNEY YEAGER:

21 All right. We'll go

22 through --- yeah, we'll go

23 through that, then. Okay.

24 BY ATTORNEY YEAGER:

25 Q. Now, as part of this deposition,

1 I want to get some general understanding
2 about what you do; okay? But start by
3 telling me what your background is.

4 A. Okay. Again, I graduated from
5 Delaware Valley College with a degree in
6 agronomy and environmental science.

7 Q. Okay.

8 A. And I've been with the program
9 here as the biosolids coordinator, a
10 Soil Scientist II, since November 1st of
11 2004, I believe. So we're coming up on
12 ten years that I've been in the program.

13 Q. Same position?

14 A. Same position.

15 Q. Okay. And the title is Soil
16 Scientist II?

17 A. Yeah, from November 2004 to
18 November 2005, I was a Soil Scientist I.

19 Q. Okay.

20 A. And I got reclassified with my
21 experience and so forth, as a Soil
22 Scientist II in '05 then to current.

23 Q. And your degree from Del-Val is a
24 Bachelor's?

25 A. Bachelor's degree.

1 Q. And was that in '04?

2 A. I graduated from college in
3 December of 2002.

4 Q. Okay. What did you do between
5 December '02 and when you started with
6 the Department in '04?

7 A. I worked for an environmental
8 engineering firm.

9 Q. Which?

10 A. Earth Engineering out of the
11 southeastern part of Pennsylvania.

12 Q. And what were you doing for them?

13 A. I primarily did construction
14 inspections for foundations, concrete
15 testing, compaction testing and the
16 likes.

17 Q. Do you have any professional
18 certifications?

19 A. No professional certifications.
20 Well, I'm a sewage enforcement officer.
21 I don't know if that ---

22 Q. Okay.

23 A. --- would count as a professional
24 certification.

25 Q. You're not a geologist?

1 A. Not a licensed geologist.

2 Q. You're not an engineer?

3 A. That's correct.

4 Q. To be a sewage enforcement
5 officer, do you have to pass a test?

6 A. Yeah. There's academy and then
7 there's an exam.

8 Q. And how long ago did you get that
9 certification or ---?

10 A. I believe I've been certified
11 since 2005, May of 2005, May or June of
12 2005, I believe.

13 Q. Okay. Is there any continuing
14 education requirements for that?

15 A. Yes, there is.

16 Q. What are those requirements?

17 A. You have to obtain, I think it's
18 14 credit hours every cycle. Somewhere
19 around two years, I think, ---

20 Q. Okay.

21 A. --- is what a cycle is.

22 Q. Okay. And you've maintained your
23 certificate consistently since you got
24 it?

25 A. Yes. Uh-huh (yes).

1 Q. And do you utilize that in the
2 course of your job?

3 A. I do. I'm not only the
4 biosolids coordinator, but I'm also in
5 the 537 program where I'm dealing with
6 sewage enforcement officers across the
7 region. And so that side of things I do
8 as well on wastewater disposal.

9 Q. How long have you been biosolids
10 coordinator?

11 A. Since November 1st, 2004.

12 Q. Okay. Have there been any other
13 biosolids coordinators in the region
14 other than you since then?

15 A. No.

16 Q. And have you reported to Mr. ---
17 in the last couple years, I know you've
18 reported to Mr. Fritz.

19 A. Yes. Correct.

20 Q. How long has that been roughly?
21 Couple years?

22 A. Three or four years.

23 Q. Okay. As part of his
24 supervision, is there --- does he get
25 into the details of each of your reviews

1 and conduct his own review after you've
2 done one of a proposed project?

3 A. As far as a 30-day notice goes,
4 typically, no. I would go to him if I
5 had any specific issues. But it's my
6 job to review those regulations and to
7 make sure that the application sites
8 meet the --- meet the requirements. I
9 report back to him and say, hey, I went
10 out and looked at such-and-such farms
11 today and --- but he doesn't typically
12 review the file ---

13 Q. Okay.

14 A. --- before I send out an approval
15 letter or a denial letter or another
16 letter that would --- a deficiency
17 notice or something like that ---

18 Q. Okay.

19 A. --- where I need more
20 information.

21 Q. In the average year, how many of
22 these types of approvals from a 30-day
23 notice are you issuing, just a rough
24 estimate?

25 A. Six to 12, maybe.

1 Q. Okay.

2 A. Six to 10, 12, somewhere in
3 there.

4 Q. Okay. And now there's a general
5 permit; is that right?

6 A. That's correct.

7 Q. Okay. Do you make a
8 determination as to whether something is
9 appropriately classified under the
10 general permit or is that a
11 determination somebody else makes?

12 A. The way the program is set up is
13 that the wastewater treatment plant will
14 apply for a general permit.

15 Q. Right.

16 A. So ---.

17 Q. Go ahead.

18 A. Okay. So the wastewater
19 treatment plant applies for the general
20 permit. If that generator, that
21 wastewater treatment plant, falls within
22 my region, it's my job to review that
23 --- it's called a notice of --- NOI,
24 notice ---

25 Q. Right.

1 A. --- of intent. I review that, I
2 process all of that, but that's a
3 general permit. That's signed by my
4 program manager. So I would go through
5 that. I would go through that with my
6 program manager. Hey, these were the
7 issues I had with it, or if I send out
8 deficiency notices, I would --- I would
9 go through that process with him. When
10 you're talking about the land
11 application side of things, that's a
12 30-day notice. That's done under the
13 coverage of the general permit.

14 Q. Of the general permit, right.
15 Anywhere is --- are there any
16 limitations on projects being --- for
17 land application being covered under a
18 general permit?

19 A. Can you rephrase your question?

20 Q. If I want to apply Class B
21 biosolids ---

22 A. Uh-huh (yes).

23 Q. --- to the land, ---

24 A. Uh-huh (yes).

25 Q. --- are there limitations on

1 whether I can do that through a general
2 permit as opposed to an individual
3 permit?

4 A. Yes, there would be.

5 Q. Okay. What are those and who
6 makes that determination about whether
7 it can be processed under a general
8 permit or as an individual permit?

9 A. That goes back to the land
10 application permit, so --- or the land
11 application approval. The only
12 circumstance where the general permit
13 would not be acceptable to take place
14 would be is if it's an exceptional value
15 watershed. Now, there's a lot of other
16 things that go into that. Is it being
17 used as agriculture, beneficially reused
18 and so forth?

19 But if you're talking
20 specifically the general permit
21 question, then it would be the
22 exceptional value watershed. That's
23 where an individual permit would be
24 required. Now, there's also --- you
25 know, if the application site fell

1 outside of the traditional bounds of
2 what we looked at agriculture, typical
3 farming, then we could --- we could
4 always ask them to apply for an
5 individual land application permit.

6 Q. Okay. So who makes the
7 determination --- well, I had asked the
8 question more generally, about who makes
9 the determination about whether it fits
10 the standard for a general permit versus
11 an individual permit, and you said the
12 primary way it's kicked out of the
13 general permit realm and into the
14 individual permit realm is if it's
15 proposed for an exceptional value
16 watershed.

17 A. Yeah.

18 Q. Is that accurate?

19 A. I would make that determination.
20 I would --- you know.

21 Q. Okay.

22 A. Or the Applicant when it was
23 applied --- part of the 30-day notice,
24 you have to note --- you have to
25 classify, take Chapter 93 into

1 consideration. What's the stream
2 designation? Okay?

3 Q. Uh-huh (yes).

4 A. So when the Applicant applies,
5 they've gone through Chapter 93, they've
6 looked at the stream designation. I
7 review that to make sure that the stream
8 designation is correct as per Chapter
9 93.

10 Q. How do you do that?

11 A. I would evaluate as per what
12 Chapter 93 is and we have the
13 regulations that ---.

14 Q. Do you go and look at Chapter 93
15 and see whether it's a listed stream?
16 What do you do to determine whether a
17 stream is --- meets the standard for
18 exceptional value?

19 A. I would look at what documents we
20 have that reference that --- and that's
21 Chapter 93, to reference what that
22 classification is.

23 Q. Okay. So whether it's listed as
24 an exceptional value stream already?

25 A. Yeah, that's --- yeah, correct.

1 Q. Okay. Do you consider what its
2 actual quality is at the time of the
3 application being submitted?

4 A. We have an existing use part of
5 that Chapter 93 that we would look at to
6 evaluate. If there was any other
7 updated information, that's what we
8 would look at.

9 Q. If there was any other updated
10 information from what source? Where
11 would you look?

12 A. That existing use document.

13 Q. Okay.

14 A. And that's online.

15 Q. In the Department's system
16 already?

17 A. Uh-huh (yes). Correct.

18 Q. Okay. So you wouldn't --- you
19 don't do any actual analysis of the
20 water quality; correct?

21 A. I don't physically inspect water
22 quality. I'm not a biologist.

23 Q. Okay.

24 A. I'm a soil scientist.

25 Q. And so that's how you classify

1 --- that's how you think of yourself, as
2 a soil scientist?

3 A. That's correct.

4 Q. What does it mean to be a soil
5 scientist? What do you need to have to
6 be able to call yourself a soil
7 scientist?

8 A. Well, by definition, I think it's
9 15 credit hours of soils background to
10 be classified as a soil scientist with
11 the Department.

12 Q. Okay. And you don't require
13 Applicants to do any water quality
14 analysis; correct?

15 A. The regulations do not require
16 any water analysis for a 30-day notice.

17 Q. Okay.

18 A. Other than what I described
19 already with --- as far as Chapter 93
20 goes and what it's designated as in
21 Pennsylvania.

22 Q. And when you issue an approval
23 letter --- is that what you call those
24 letters?

25 A. It's an approval letter.

1 Q. Okay.

2 A. Uh-huh (yes).

3 Q. When you issue an approval
4 letter, do you have the ability to
5 impose conditions on the approval?

6 A. Yeah, I think that --- I think
7 that the regulations allow us to impose
8 more stringent requirements than ---.

9 Q. Than what?

10 A. Than what the regulations ---
11 than what the standard regulations are
12 allowed.

13 Q. Okay.

14 A. I don't know the chapter and
15 verse off the top of my head.

16 Q. Okay. Like what types of
17 conditions have you ---? Have you
18 imposed more stringent conditions than
19 the standard requirements set out in the
20 regs?

21 A. Could you rephrase the question?

22 Q. Well, you just told me --- the
23 way I understood your prior answer was
24 that you're allowed to impose conditions
25 on an approval ---

1 A. Uh-huh (yes).

2 Q. --- that go beyond the standard
3 requirements that are set out in the
4 regs.

5 A. Okay.

6 Q. And so I'm asking you if you've
7 ever done that?

8 A. As far as in an approval letter,
9 no, not that I recall.

10 Q. Okay. You have the ability to
11 have a monitoring --- have monitoring as
12 a condition of an approval?

13 A. The regulations --- there's
14 monitoring within the regulations in the
15 requirement for the land application.

16 Q. What monitoring is required?

17 A. There's recordkeeping and
18 reporting that needs to be done on an
19 annual basis as ---.

20 Q. I'm asking about the monitoring
21 itself. What monitoring is required?

22 A. Cumulative pollutant loading
23 rates.

24 Q. Okay.

25 OFF RECORD DISCUSSION

1 A. Pollutant loading rates. CPLRs,
2 that's what --- that's what they're
3 known as. Agronomic loading rates for
4 the farm itself. Then there's other
5 monitoring that's required for the
6 wastewater treatment plants.

7 BY ATTORNEY YEAGER:

8 Q. Right. Is there any offsite
9 monitoring that's required?

10 A. Could you elaborate on what
11 offsite monitoring would be, like ---?

12 Q. Well, do you understand --- when
13 I say offsite, I mean not on the site
14 where the application is taking place,
15 let's say downstream.

16 A. Okay. Could you rephrase your
17 question? Could you restate your
18 question again?

19 Q. Are you able to require any
20 offsite monitoring as part of your
21 approval?

22 A. I don't know.

23 Q. Okay. Never done that?

24 A. I have never done that.

25 Q. So why don't you explain to me

1 what process you employ when you get a
2 30-day notice?

3 A. When I receive a 30-day notice,
4 the first thing I go through is make
5 sure that it's complete, make sure that
6 everything that's supposed to be
7 submitted is actually submitted, that
8 they're not missing anything. I then
9 would go through --- generally, I start
10 with an application. I'll start with
11 the adjacent landowner notification, the
12 tax map, make sure all of the adjacent
13 landowners were notified, make sure
14 that ---.

15 Q. How do you do that?

16 A. I would compare the addresses
17 that are submitted and --- with the tax
18 map that's submitted that shows all
19 adjacent landowners. Make sure that
20 what's being reported to me is correct,
21 that they didn't miss any of the
22 adjacent landowners.

23 Q. Based on what's being reported to
24 you?

25 A. Based on what's being --- yeah, I

1 don't go to the tax office and ---

2 Q. Okay. Go ahead.

3 A. --- look at tax maps. So I would
4 go through that and make sure that all
5 the adjacent landowners --- yeah, as the
6 tax map shows, are or have been sent
7 first class mail. And then I would go
8 through the rest of the submission, make
9 sure that the conservation plan is
10 there, make sure that a map was
11 included, make sure that the P-N-D-I,
12 the PNDI, was included, make sure that
13 it's a complete package.

14 Q. Right. That was the first thing.
15 Okay.

16 A. Oh, and then, I'm sorry, going
17 through and making sure all of those
18 were there. That's pretty much all I
19 can do in the office until I go out and
20 verify in the field what was actually
21 submitted.

22 Q. So what do you do?

23 A. So then I would go schedule a
24 field appointment, go out to the field.
25 I would evaluate the field for soil

1 conditions, make sure that we had
2 suitable soil, make sure that the slope
3 was 25 percent or less as per the
4 regulations, make sure --- isolation
5 distances we would evaluate. And so
6 that map that was submitted, that
7 application map that was submitted,
8 changes would be made to that in the
9 field to what we're actually seeing in
10 the field and observing.

11 Q. Okay. What else do you do?

12 A. If I would evaluate that --- you
13 know, look at what the conservation plan
14 that was submitted, make sure that that
15 was implemented. If a conservation
16 plan ---.

17 Q. I'm sorry, was implemented
18 already?

19 A. Yeah, is currently implemented
20 when I'm on the farm.

21 Q. Okay.

22 A. I can't speak for what was done
23 prior to when I was on the farm.

24 Q. When you get a 30-day notice,
25 it's not a conservation plan that we

1 plan to do in the future if we get our
2 approval. It's this is what we've done
3 already to make it --- to address any
4 conditions; is that right?

5 A. It would depend on the farm.
6 Some farms, the conservation plan was
7 just updated just for the land
8 application of biosolids and sometimes
9 the conservation plan was in place and
10 it was out of date, and the land applier
11 wanted to update it or the farmer wanted
12 to update it. So it depends. A
13 conservation plan can be updated at any
14 time.

15 Q. Okay. Well, you said when you
16 were out there, you make sure the
17 conservation plan was implemented.

18 A. Right.

19 Q. Sometimes that wouldn't be the
20 case.

21 A. Yeah. I've been out on farms
22 where a 30-day notice was submitted and
23 a conservation plan was not in place
24 that --- the same as what was submitted
25 in the 30-day notice.

1 Q. Okay. And what would you do in
2 that circumstance?

3 A. In that circumstance, I would
4 send a deficiency notice or --- you
5 know, that would have to be addressed
6 prior to me sending out an approval
7 letter.

8 Q. So the conservation plan needs to
9 be implemented prior to the approval?

10 A. I would say that's correct.

11 Q. Okay. What else?

12 A. If there were any other
13 deficiencies or any other things that
14 needed --- that had to get addressed
15 before the next step, either approval or
16 denial or a deficiency letter, we would
17 address those.

18 Q. Okay.

19 A. Then if the inspection was
20 complete and I didn't have any other
21 issues, I would come back to the office,
22 I would --- we have a whole computer
23 system, eFax, where we track all of this
24 stuff. Make sure that the farm is
25 entered into eFax, make sure all of that

1 paperwork is done. In conjunction with
2 doing all of that, putting together an
3 approval notice that I would eventually
4 sign and send to the Applicant. That
5 would then be published in the
6 Pennsylvania Bulletin as an action that
7 the Department took.

8 Q. Okay. How long does an average
9 site visit take?

10 A. It really varies.

11 Q. From what to what?

12 A. It could be a half hour or an
13 hour to a couple of hours.

14 Q. Okay.

15 A. It really varies on what issues
16 are there. If you have a 100-acre field
17 that doesn't have any buffers that
18 you're going to have or isolation
19 distances and soils are very similar, it
20 could be a half hour, it could be ---
21 you know, but if you have conditions
22 that are different, lots of terrain to
23 cover, lots of isolation distances, it
24 could be a couple of hours.

25 Q. Okay. And so you said --- I want

1 to go through some of those components
2 that you identified ---

3 A. Uh-huh (yes).

4 Q. --- when you're going out to the
5 field. Soil conditions, you want to
6 make sure that it's suitable soil?

7 A. Correct.

8 Q. What do you do on a --- do you
9 call it inspection or ---?

10 A. Uh-huh (yes).

11 Q. Okay.

12 A. That would be correct.

13 Q. Okay. What do you do on an
14 inspection to determine whether the
15 soils are suitable?

16 A. I would take generally a shovel
17 with me, and I would evaluate to make
18 sure that the seasonal high water table,
19 groundwater, is not --- is greater than
20 11 inches for a seasonal high water
21 table. I would take a tape measure with
22 me or a range finder with me. We would
23 then look at isolation distances. I
24 would take the map that, in this case,
25 Synagro supplied to me.

1 Q. I'm sorry. We're talking about
2 the soil --- are we still on soil
3 suitability?

4 A. Oh, I'm sorry.

5 Q. I want to break it ---.

6 A. That's fine.

7 Q. I'm trying to break it down.

8 A. That's fine. That's fine.

9 Q. So for soil suitability, you'd
10 put a shovel in the ground to determine
11 seasonal high water ---?

12 A. Yeah. I would be looking at
13 redoximorphic features. I would be
14 looking at ---.

15 Q. Redox --- help us out. Redox,
16 R-E-D-O-X?

17 A. X.

18 Q. Amorphous (sic), is that the
19 word?

20 A. Yeah, redoximorphic.

21 Q. Oh, amorphic. Okay.

22 A. Yeah.

23 Q. A-M-O-R-P-H-I-C?

24 A. Features or redox, in the soil
25 scientist community.

1 Q. And so put that in dumb lawyer
2 language.

3 A. We're essentially looking for ---
4 what happens is when water comes up into
5 soil, there's a lot of iron naturally in
6 soil. And so what it does, it comes up
7 and if water saturates that ground for
8 any given amount of time, you can get
9 redox features with --- I think it's
10 around 14 days' worth of saturation.

11 Q. Okay.

12 A. So it's not a lot of time. But
13 essentially what it does is when water
14 comes up, it takes the iron out of the
15 soil and puts it into solution.

16 Q. All right.

17 A. So it dissolves that iron. Then
18 when the water table drops back out,
19 what's left --- it leaves the iron
20 behind, like a salt stain.

21 Q. Okay.

22 A. It'll leave the iron behind and
23 essentially you would get these depleted
24 areas and these concentrations of iron.

25 Q. Okay.

1 A. That's what I'm looking for.

2 Q. Okay.

3 A. Whether we're dealing with
4 putting on for a biosolid land
5 application, 11 inches to a seasonal
6 high water table, or we're looking at 20
7 inches to a seasonal high water table
8 for an onlot septic system.

9 Q. Okay.

10 A. We're looking at redoximorphic
11 features ---

12 Q. Okay.

13 A. --- primarily as ---.

14 Q. Now, if you've got a 100-acre
15 site, ---

16 A. Uh-huh (yes).

17 Q. --- do you expect the site to be
18 consistent across that 100 acres for
19 whether you're going to find
20 redoximorphic features? Or might it be
21 different in different parts of the
22 site?

23 A. It depends on the site, depends
24 on the site.

25 Q. Could be different?

1 A. It could be different. It could
2 be very similar across the site. It
3 could be ---

4 Q. The only way ---.

5 A. --- very different.

6 Q. The only way you'd know is what?

7 A. By evaluating the soil on site.

8 Q. With the shovel test?

9 A. We also take in consideration ---
10 I would look at a soil survey.

11 Q. Okay.

12 A. But that's a tool that's not ---
13 that gives us an idea of what we might
14 find there. So if I'm looking at 100
15 acres and the soil survey has three
16 soils mapped here, ---

17 Q. Uh-huh (yes).

18 A. --- there's one soil down by the
19 wetland. There's another soil up on the
20 --- you know, on the side slope. And at
21 the top of a knob there's another soil.
22 Yeah, so that's a tool that we use, but
23 we really got to get out in the field
24 and we've got to punch some holes in the
25 ground ---

1 Q. Okay.

2 A. --- which is the easiest way
3 to ---.

4 Q. What else do you do to determine
5 soil suitability besides the shovel and
6 looking at the soil survey, if anything?

7 A. That was it.

8 Q. Is that it?

9 A. Yeah, that's ---.

10 Q. Okay.

11 A. Yeah.

12 Q. And for slope, you told me you're
13 looking to see whether it's 25 percent
14 grade or higher or less?

15 A. Less, yeah.

16 Q. And how do you determine that?

17 A. I use what's known as a
18 clinometer. Some people use an Abney
19 level, some ---.

20 Q. Yeah, I use an Abney.

21 A. Okay.

22 Q. No, I'm just kidding.

23 A. You could use a lock level, you
24 could use --- you know, there's a lot of
25 tools that you can use out there. I use

1 a clinometer.

2 Q. Okay. Can you spell that?

3 A. It's C-L-I-N-E-T-E-R (sic), I
4 believe.

5 Q. Okay.

6 A. Clinometer. Did I have an N in
7 there? It's clino-meter.

8 Q. Okay.

9 A. It's clino-meter.

10 Q. Okay. And so how do you go about
11 that on a site?

12 A. Okay. A clinometer --- now
13 you're going to get me to ---.

14 Q. That's okay.

15 A. Tongue-tied. A clinometer, you
16 need to have either somebody --- you
17 need to either have another person or
18 you need to have a pole somebody is
19 holding up. Generally, if I'm out there
20 during an inspection, there'll be the
21 individual or individuals who applied
22 for the farm to be used. And what you
23 do is you would reference --- on a level
24 ground, you would hold the device and
25 you would reference point either the top

1 of their nose, whatever zeros out, that
2 would be zero.

3 Q. Okay.

4 A. You could use a tape measure, you
5 could use a survey rod, anything that
6 you know where your reference point is
7 that that's ---.

8 Q. Okay.

9 A. You know, that's zero. So
10 preferably, you wouldn't want to be
11 standing a foot up grade from the person
12 that is --- you know, you're using the
13 site ---

14 Q. Uh-huh (yes).

15 A. --- because you're going to be
16 looking down or up at them, and you're
17 not going to be zeroing out. So you've
18 got to have that zero. Then they would
19 proceed or you would proceed to go down
20 slope. Or upslope, they would hold the
21 tape measure or the rod or if you knew
22 on the brim of their hat, that was zero,
23 and you would essentially look through
24 that device, and that's what you use to
25 determine slope.

1 Q. And are you only doing that in
2 places where you can judge from your
3 eyes that it might be close to that 25
4 percent threshold?

5 A. It depends. There's a lot of
6 times where you're out surveying and you
7 think that, okay, this is probably
8 somewhere around 15 percent, but I would
9 end up shooting slope just to make sure
10 that, hey, yeah, it's not really close,
11 but just to --- just to get an idea.
12 But if you've been on the site for any
13 given amount of time, it's pretty easy
14 to determine those areas that are
15 greater than 20 percent that you really
16 want to look at.

17 Q. Do you rely on any other sources
18 for slope calculation besides your own
19 use of the clinometer or the Abney level
20 or whatever it is you're choosing to
21 use?

22 A. There's a lot of sources out
23 there that would give you a range or an
24 idea. Even the soil survey classifies
25 slope, but it's such a broad range, and

1 every county is different. The best way
2 to evaluate slope is to go out there and
3 measure ---

4 Q. Okay.

5 A. --- in the field with an
6 instrument.

7 Q. And does it only matter whether
8 it's above or below that 25 percent
9 threshold? Or does it matter at all if
10 it's 23 or 22 or 20? Or is just whether
11 it's below --- above or below 25?

12 A. Does what matter?

13 Q. Well, in your review, do you care
14 if it's 22 or do you just care if it's
15 25 or over?

16 A. The regulations say 25 or
17 greater. If there's ---.

18 Q. The regulations say what about 25
19 or greater?

20 A. That application of biosolids can
21 only be approved if the Department in
22 writing approves that. So the
23 Department has the authority to go above
24 that 25 percent, but the 25 percent is
25 what's --- is what's in regulation.

1 Q. All right. So are you concerned
2 when you're out doing ---?

3 A. Yeah. This is why I measure
4 slope.

5 Q. I haven't finished my question.

6 A. Oh, I'm sorry.

7 Q. Are you concerned when you're out
8 doing an investigation about anything
9 other than whether it's above or below
10 that 25 threshold?

11 A. I would say yes. I mean, ---.

12 Q. Okay. So why would it matter to
13 you if it's 20 percent? Would that
14 impact your analysis, your approval at
15 all?

16 A. If it meets the requirements,
17 there's very ---.

18 Q. Meaning 25?

19 A. Meaning 25 percent. That's what
20 we look at. Now, there have been cases
21 where it's been less than 25 percent and
22 the site conditions --- if it's a convex
23 slope or if it's a concave slope where
24 things are concentrating in a certain
25 area and there's been --- we have

1 written out areas because slope is
2 becoming an issue, but typically it's 25
3 percent.

4 Q. What do you mean you've written
5 out areas because slope was becoming an
6 issue?

7 A. We've isolated ---.

8 Q. Can you be more precise about
9 that?

10 A. We've isolated those areas on a
11 map and given them a greater buffer.

12 Q. Meaning isolated the areas on a
13 map and give them a greater buffer,
14 you're saying don't apply sewage sludge
15 there?

16 A. Class B sewage sludge,
17 biosolids, yeah.

18 ATTORNEY FERRENCE:

19 Yes?

20 A. Yes. I'm sorry.

21 BY ATTORNEY YEAGER:

22 Q. And so what factors --- can you
23 describe any further what factors you
24 consider in isolating areas when it's
25 --- when the slope is less than 25

1 percent?

2 A. What are the surrounding
3 conditions? Those are what I would be
4 looking at.

5 Q. Like what characteristics are you
6 thinking about when you're talking about
7 the surrounding conditions?

8 A. So I would be looking at what are
9 all the other slopes doing in that area.

10 Q. Okay. So still focused on
11 slopes, on the grade of the terrain?

12 A. Sure, we're talking about slopes.

13 Q. Okay. That's what I'm asking.

14 A. Yeah.

15 Q. Just it's purely about the grade
16 and slopes?

17 A. Uh-huh (yes).

18 Q. Okay. Yes?

19 A. Yes. I'm sorry.

20 Q. Okay.

21 A. Sorry, yes.

22 Q. Okay. Why do you look --- why do
23 you care about soil --- when you say
24 soil suitability, what makes soil
25 suitable or not suitable?

1 A. Suitable for what?

2 Q. We're talking about the
3 application of Class B biosolids.

4 A. Right. I mean, the suitability
5 would be --- the program is for
6 beneficial reuse of biosolids. So we
7 want to make sure that the farmer is
8 beneficially reusing this material, so
9 we're looking --- we don't want
10 hydrosols or wet soils. Those aren't
11 the ideal farming situations, so we're
12 looking for soils that are suitable to
13 grow crops.

14 Q. Okay. Anything else you're
15 looking at when you're --- any other
16 reason why you're considering soil
17 suitability or anything else you mean by
18 soil suitability? Just whether it's ---
19 whether it's suitable for growing crops?

20 A. Yeah.

21 Q. Okay.

22 A. Yes.

23 Q. And the seasonal water table, its
24 status as hydric or wet soils is the
25 primary feature you're looking at in

1 determining that suitability?

2 A. I think that that would be
3 correct.

4 Q. Okay.

5 A. Yeah. Yes.

6 Q. Okay. So other than the slope
7 and the suitability of the soils for
8 growing crops, are there other features
9 that you are investigating when you're
10 out doing a field investigation, other
11 natural features?

12 A. Yes.

13 Q. What?

14 A. Streams.

15 Q. Okay.

16 A. We would be looking for
17 intermittent or perennial streams to
18 isolate those.

19 Q. Okay.

20 A. Surface water ponds, we'd be
21 looking to isolate those. Wetlands.
22 Anything that the PNDI, the P-N-D-I,
23 came back with it that asked for an
24 additional buffer on those. We would be
25 looking at buffering those areas.

1 Q. Okay. Intermittent or perennial?

2 Did you say perennial?

3 A. Uh-huh (yes).

4 Q. Okay. Yes?

5 A. Yes. Sorry.

6 Q. And anything else?

7 A. We would be looking at occupied
8 dwellings, trying to find wells, those
9 types of things.

10 Q. Anything else you can think of
11 specifically?

12 A. No.

13 Q. If you've got a field where
14 there's a proposal to apply Class B
15 biosolids, and it drains into an EV
16 wetland, how would you handle that?

17 A. If I got a proposal?

18 Q. Yeah.

19 A. That would be kicked back to an
20 individual land application permit.

21 Q. Okay.

22 A. So they would have to apply for
23 an individual land application permit.

24 Q. Why is that?

25 A. Because of the exceptional value

1 watershed.

2 Q. Okay.

3 A. The exceptional value watershed,
4 the general permit activity cannot take
5 place in an exceptional value watershed.

6 Q. Okay. And if a field drains into
7 an exceptional value wetland, it fits
8 that category?

9 A. It would be within that
10 watershed.

11 Q. Okay.

12 A. Correct.

13 Q. Okay. And why is that? Do you
14 know why is it that that is a trigger
15 for an individual permit?

16 A. I don't know why the regulations
17 were developed to separate HQ versus EV.

18 Q. Okay.

19 A. I don't know.

20 Q. And do you review individual
21 permits?

22 A. It depends. I would be in
23 contact with Central Office or Central
24 Office folks, whether or not that
25 individual permit should be issued by

1 the region or by Central Office. I have
2 not, in my ten years, reviewed any
3 individual permits for my approval or
4 anything like that.

5 Q. Okay. Do you do anything to
6 document the --- well, I'm sorry. Let
7 me go back to --- you said wells. Why
8 is it --- why are you looking for wells
9 when you're doing your inspection?

10 A. There's a 300-foot isolation
11 distance requirement, unless the
12 landowner signs a well isolation
13 distance waiver.

14 Q. Do you know why that's a
15 requirement?

16 A. It's a buffer. I don't know
17 exactly why EPA came up with 300 feet or
18 why DEP came up with 300 feet. I don't
19 know.

20 Q. Something to do with concern
21 about contamination of the water supply?

22 ATTORNEY FERRENCE:

23 Objection, speculation.

24 He's already said he didn't know.

25 ATTORNEY YEAGER:

1 Well, I'm making a
2 suggestion.

3 BY ATTORNEY YEAGER:

4 Q. Do you think that has anything to
5 do with it?

6 ATTORNEY FERRENCE:

7 Objection. Again, you're
8 asking for his opinion.

9 ATTORNEY YEAGER:

10 Yeah. He's the guy that
11 this Department depends on for
12 these reviews.

13 ATTORNEY FERRENCE:

14 To implement the
15 regulations ---.

16 ATTORNEY YEAGER:

17 Yeah.

18 BY ATTORNEY YEAGER:

19 Q. Do you have any idea why you're
20 looking for that?

21 ATTORNEY FERRENCE:

22 Let me ask you a question.
23 If you're driving a car, do you
24 know how to fix --- do you have
25 to know how to fix the motor?

1 ATTORNEY YEAGER:

2 No.

3 ATTORNEY FERRENCE:

4 Exactly.

5 ATTORNEY YEAGER:

6 If I am the one who's
7 responsible for fixing the motor,
8 I better understand how the
9 engine works.

10 ATTORNEY FERRENCE:

11 And if you're the one
12 who's supposed to follow the
13 regulations, you better know what
14 the regulation says.

15 ATTORNEY YEAGER:

16 Yes.

17 ATTORNEY FERRENCE:

18 You asked the reason why
19 the regulation states what it
20 states.

21 ATTORNEY YEAGER:

22 I'm asking if he has any
23 understanding as to why it's
24 important to keep 300 feet away
25 from a water well.

1 ATTORNEY FERRENCE:
2 And he said he didn't
3 know.

4 ATTORNEY YEAGER:
5 Okay.

6 BY ATTORNEY YEAGER:

7 Q. Is that true, that you don't
8 know?

9 A. I don't know where ---

10 ATTORNEY FERRENCE:
11 He can speculate.

12 A. --- the 300 feet came from.

13 BY ATTORNEY YEAGER:

14 Q. Okay. Forget about 300 feet
15 versus 100 feet. Do you have any
16 understanding as to what the
17 considerations are about the application
18 of sewage sludge, Class B biosolids, in
19 relation to water supplies?

20 A. I'm sorry. Can you restate the
21 question?

22 Q. Do you have any understanding as
23 to the basis for separation of Class B
24 biosolids from water supplies?

25 ATTORNEY FERRENCE:

1 If you don't know, it's
2 okay to say.

3 A. Yeah. I don't know.

4 BY ATTORNEY YEAGER:

5 Q. All right. When a PNDI hit shows
6 up, what do you do? Does that change
7 what you do at all?

8 A. I evaluate by reading what the
9 results are and making sure that those
10 results are --- that the responses of
11 those government agencies are taken into
12 consideration.

13 Q. And do those agencies that ---
14 identify specific steps that should be
15 taken or do they just say there's a
16 concern here?

17 A. Generally, those agencies would
18 state if there's going to be an impact.
19 They would say there's a potential
20 impact here. We need more information
21 on the project. If what's been provided
22 is enough information, they may only say
23 give us an extra buffer around these
24 wetlands. If you find any wetlands in
25 this area, give us an extra buffer and

1 that would satisfy any concerns that we
2 would have.

3 Q. Okay. If there's an endangered
4 species that's identified as associated
5 with a particular wetland, does that
6 affect the wetland's status as an EV
7 wetland?

8 A. I don't know.

9 Q. Okay. Is there somebody whose
10 job it is within the Department to
11 figure that out? If you get a hit back,
12 a PNDI hit back that says there's an
13 endangered species that we associate
14 with that wetland, is there anybody
15 whose job it is to figure out whether
16 that affects the status of the
17 watershed?

18 A. I don't know whose job that would
19 be.

20 Q. Okay. It's not yours?

21 A. No.

22 Q. Okay. And do you bring it to
23 anybody's attention when you find that
24 out?

25 A. I don't bring any of those to

1 anybody's attention.

2 Q. Okay. So it wouldn't get --- so
3 an application wouldn't get treated
4 differently in terms of how you're
5 processing it if there's an endangered
6 species identified in the watershed, in
7 terms of other than whether you might do
8 additional isolation areas or buffering?

9 A. That's correct.

10 Q. Okay. Do you ever require
11 wetlands delineations be done?

12 A. No.

13 Q. So how are the boundaries of a
14 wetland area determined?

15 A. When I'm doing an inspection?

16 Q. As part of this process.

17 A. Yeah. I mean, I would go out and
18 evaluate to make sure that we have
19 suitable soils. If we have suitable
20 soils greater than ten inches, that
21 would not be classified as a wetland.

22 Q. But sometimes what you're doing
23 when you're doing a --- you've talked
24 about isolation areas and you've talked
25 about buffers. As part of this process,

1 at times you're saying keep a certain
2 number of feet away from this
3 resource; ---

4 A. Uh-huh (yes).

5 Q. --- correct?

6 A. Uh-huh (yes).

7 ATTORNEY FERRENCE:

8 Yes?

9 BY ATTORNEY YEAGER:

10 Q. You can't say uh-huh.

11 ATTORNEY FERRENCE:

12 Yes?

13 A. Oh, yes. I'm sorry.

14 BY ATTORNEY YEAGER:

15 Q. So in order to say you have to
16 keep this number of feet away from this
17 resource, you need to know what the
18 boundary of the resource is; right?

19 A. Correct.

20 Q. Okay. So how do you determine
21 the boundary of the wetland?

22 A. So for example, I believe the ---
23 the Potomac Farm, for example, there was
24 a wetland that was not mapped previously
25 when it was submitted to us. We went

1 out. I evaluated the soils and
2 determined that those were of the hydric
3 soil nature, and we stepped out of that
4 area. I made sure that I had suitable
5 soil at the edge of that, and that's
6 where we marked the 300 feet off from
7 the edge of that.

8 Q. So you're, in effect, doing the
9 wetlands delineation to that extent?
10 You're saying work from here?

11 A. To that extent. It wasn't mapped
12 as a wetland, but we observed that in
13 the field that, no --- even though this
14 wasn't mapped as a wetland, we observed
15 that in the field that that was of
16 hydric conditions. Whether or not by
17 definition it was a wetland, I can't
18 say.

19 Q. Okay.

20 A. But it did have wetland grasses,
21 it did have hydric soils, so we just
22 isolated it.

23 Q. Okay. When you're doing the
24 various things that you've identified
25 that you do out during the

1 inspection, ---

2 A. Uh-huh (yes).

3 Q. --- are you --- I know you've got
4 an inspection report.

5 A. Uh-huh (yes).

6 ATTORNEY FERRENCE:

7 Yes?

8 BY ATTORNEY YEAGER:

9 Q. But besides that inspection
10 report --- which is just like a one-
11 sheet thing; right?

12 ATTORNEY YEAGER:

13 I am going to --- we'll
14 have this marked. So this is
15 Craven One.

16 (Craven Exhibit One marked
17 for identification.)

18 OFF RECORD DISCUSSION

19 BY ATTORNEY YEAGER:

20 Q. All right. So we've marked as
21 Craven One a document. It's got a Bates
22 stamp from our document production, page
23 48. And do you recognize this?

24 A. Yes.

25 Q. This is your 30-day inspection

1 report dated November 18th, 2013 for the
2 Potomac site; correct?

3 A. That's incorrect.

4 Q. Oh, I'm sorry. I was looking up
5 at the top.

6 A. Yeah. It's November 8th is what
7 --- oh, I'm sorry. I was looking at
8 date received.

9 Q. Okay.

10 A. I'm sorry. Yes, it is dated
11 November 18th.

12 Q. Okay. Oh, I see, it's got a date
13 received section as well, yeah.

14 A. Yeah, sorry.

15 Q. No, no, no, that's fine. So you
16 completed this; correct?

17 A. Correct.

18 Q. And that's your signature on the
19 bottom left?

20 A. Yep.

21 Q. And you get ---

22 A. Yes.

23 Q. --- the signature of the person,
24 the representative of, I'll call it the
25 Applicant, in this case, Peter Price?

1 A. Yes.

2 Q. And now that's dated at the
3 bottom a different date; correct?

4 A. That's correct.

5 Q. All right. So explain to me how
6 this --- how you complete this document?

7 A. So when I receive the document,
8 the notice of --- or the 30-day notice,
9 I start to fill out this inspection
10 report. It actually doesn't get signed
11 by us until we actually complete the
12 full inspection. So the inspection
13 may ---.

14 Q. Can I just interrupt for a
15 second?

16 A. Yes.

17 Q. Does inspection as you're using
18 it now mean more than site inspection?

19 A. Yes.

20 Q. Okay. Go ahead.

21 A. So I would start my inspection,
22 as I indicated previously in the
23 deposition here, that when I receive it
24 I make sure that everything is complete.
25 So that's when I would start to fill out

1 these check boxes. But some of it, I
2 can't complete until I would go out to
3 the field.

4 Q. Okay. And so we've got a number
5 of check-off boxes here. Those
6 correspond with check-off boxes on what
7 you received from the Applicant;
8 correct?

9 A. Correct.

10 Q. So this 11 inches from seasonal
11 high water table, when you check yes
12 there, that means that it's 11 inches or
13 greater?

14 A. Correct.

15 Q. Okay. And how is that --- for
16 purposes of this form, how is that
17 determined?

18 A. Well, when we go out to a site, I
19 mean, there's going to be --- let's
20 take, for example, the Potomac Farm.
21 There were areas that --- you know, on
22 the Potomac Farm that are not suitable,
23 that don't have 11 inches to a seasonal
24 high water table. So we write those
25 areas out, but for the purposes of the

1 inspection report, does part of the farm
2 or does the application where the ---
3 where the application of biosolids is
4 going to occur, the soils are 11 inches
5 or greater.

6 Q. Okay. So when I see a check off
7 here for the 25-percent slope, the 11
8 inches seasonal high water table, that
9 doesn't mean --- what you're saying is
10 that doesn't mean it doesn't exist there
11 or that it exists everywhere like this,
12 but that you have determined that the
13 application will only occur in areas
14 where those conditions are satisfied?

15 A. That's correct.

16 Q. Okay. And how does the approval
17 that you issue ensure that or direct
18 that?

19 A. That would be the site map that's
20 developed.

21 Q. You attach a site map to your
22 approval?

23 A. No.

24 Q. Okay. So who develops that site
25 map?

1 A. The Applicant would develop that
2 site map.

3 Q. With its original submittal?

4 A. The original submittal gets
5 submitted in the 30-day notice. We
6 would make amendments out in the field,
7 and then prior to application at any
8 given time, we've both made corrections
9 out in the field to our maps.
10 Typically, what would happen is that map
11 would then get a final correction prior
12 to application.

13 Q. How would we know what the final
14 approved map is?

15 A. The approved map with all of the
16 corrections is what's in the file.

17 Q. But there could be multiple
18 versions of the map in the file; right?
19 There would be in the file what was
20 originally submitted; correct?

21 A. Yes. Everything gets submitted.

22 Q. And that goes into the file?

23 A. But there's a date on it and
24 there's --- it's associated with that
25 submission.

1 Q. Okay. So in looking through the
2 file, how do we know that this map is
3 the final approval map?

4 A. It has my corrections on it. I
5 believe in this case we never received
6 anything above and beyond what Mr. Price
7 and I did out in the field to that.
8 Typically, like I said, what would
9 happen is Synagro would --- or in this
10 case, Synagro would do a final map, but
11 the farm became appealed, and I think at
12 that point Synagro didn't do anything
13 else. What was submitted was submitted,
14 and it meets the requirements, so I send
15 out my approval letter.

16 Q. Okay. Now you lost me. Does
17 that mean that the original submitted
18 map meets the requirements?

19 A. There's areas on that farm where,
20 yes, the original submitted map would
21 meet the requirements. There's areas on
22 that original map that we have made
23 corrections on that are in the file
24 that's corrected that meets the
25 requirements.

1 Q. Okay. I've got a lot of maps in
2 my file and --- so you brought the file
3 today, the three different site file.

4 A. Uh-huh (yes).

5 Q. So what I'll suggest is that we
6 take a break, go off the record for a
7 few moments and see if you can identify
8 which are the final approved maps from
9 looking at the physical file, DEP's
10 physical file, and let's have them
11 marked; okay? We'll get copies made.

12 ATTORNEY YEAGER:

13 Michael, can we get color
14 copies made?

15 ATTORNEY FERRENCE:

16 I think we can. I don't
17 know how easy that's going to be
18 because I'm not sure what we have
19 here, but I'll find out.

20 ATTORNEY YEAGER:

21 Okay. Obviously, I don't
22 deal with color copies.

23 BY ATTORNEY YEAGER:

24 Q. Yeah, so before we do that let me
25 ask you --- let me just ask you a couple

1 other questions and then we'll ---

2 A. Okay.

3 Q. --- take that break, and we'll do
4 that. We've had previously marked three
5 documents as Brunamonti One. Can you
6 identify what these are?

7 A. Yeah. These are what was ---
8 what's going to be in our file with the
9 correct isolation distances and the
10 buffers that we did when we were out in
11 the field. So you'll see my markings.

12 Q. There's red markings, there's
13 like red pen ---

14 A. Yep, that would be ---.

15 Q. --- on these?

16 A. That would be my --- right, that
17 would be what I isolated out in the
18 field. And then in this case, Pete
19 Price also made those same corrections
20 to his map. And that's what would be
21 --- he would then take his map back to
22 the office and submit an updated map to
23 me prior to application or even at the
24 time of application. And then I would
25 take that, and I would add that to the

1 file when he submitted that to me.

2 Q. Okay. What's the scale on these?

3 A. I'm not sure what's the scale of
4 this.

5 Q. Does it say on the document?

6 A. I do not see it.

7 Q. So when you're doing these
8 isolation areas and these buffer areas,
9 it's not precise; correct?

10 A. We would use what's known as a
11 range finder or a tape measure to
12 measure these things, but ---.

13 Q. So ---.

14 A. So oftentimes ---.

15 Q. Go ahead.

16 A. Oftentimes what happens is, is
17 this map is taken out into the field by
18 either Pete Price prior to them land
19 applying, or somebody from Synagro, in
20 this case, would go out. They would
21 actually put flags in the field
22 representing this, shooting with a range
23 finder or with a tape measure to make
24 sure that they actually met the
25 isolation distance. I would then come

1 out and I would compare what maps I have
2 to make sure that those isolation
3 distances are met.

4 Q. Anybody required to be a
5 surveyor, ---

6 A. No, there's no ---

7 Q. --- certifying maps?

8 A. --- requirement for a surveyor.

9 Q. Engineer?

10 A. No requirement for an engineer.

11 Q. And not only isn't it required in
12 the regs, you don't require it in
13 practice; correct?

14 A. That's correct.

15 Q. Engineered plans --- well, by
16 buffer, what do you mean? What's a
17 buffer?

18 A. The buffer would be the area in
19 red, that isolation distance from, i.e.,
20 a house or a well or a stream.

21 Q. It doesn't mean any changes in
22 the landscape, it just means space,
23 distance?

24 A. Changes in the land ---?

25 Q. Sometimes a buffer is an elevated

1 mound. Sometimes a buffer is planted
2 material that provides buffering.
3 Sometimes a buffer is simply 100 feet.

4 A. When I use the word buffer, I
5 mean isolation distance ---

6 Q. Okay.

7 A. --- from that feature.

8 Q. Okay. All right. So ---.

9 A. Like there's no isolation
10 distance from a slope, but if you have a
11 25 percent or greater slope, that's
12 buffered, that's isolated.

13 Q. Okay. So in what you're calling
14 the buffer area, you're simply saying
15 that's an area that we're not going to
16 allow the sludge to be applied?

17 A. That would be correct.

18 Q. Okay.

19 ATTORNEY YEAGER:

20 Why don't we take a break
21 and then we'll identify those
22 documents? Then we'll come back.

23 SHORT BREAK TAKEN

24 ATTORNEY YEAGER:

25 We'll go back on the

1 record.

2 BY ATTORNEY YEAGER:

3 Q. While we were off the record, Mr.
4 Craven, you went into each file. You
5 were able to quickly identify the plan
6 or the map from each that we're
7 referring to as the approved map. I was
8 earlier using the word final, and we've
9 agreed that we should be using the word
10 approved because it was the one that was
11 done that the approval was based on?

12 A. Correct.

13 Q. Okay. And what we saw was that
14 those were each to scale --- they each
15 had a scale on them to identify. And
16 they were similar to Brunamonti One in
17 that they had red lines drawn on them
18 with a red pen?

19 A. Correct.

20 Q. Okay. All right. Well, we're
21 going to have those marked and
22 exchanged, and we'll understand that
23 those that are being exchanged from the
24 deposition represents what you told us;
25 okay? I want to go back to Craven One.

1 Is there any other document that you
2 complete as part of your investigation
3 between the time that you get the 30-day
4 notice and when you issue the approval
5 that reflects what you've done out on
6 the site visit?

7 A. No, just those documents.

8 Q. Okay. So is there any way to
9 determine where you put shovel to earth?

10 A. I don't mark where I put shovel
11 to earth.

12 Q. Okay. And you don't record that
13 on a map or a plan and you don't record
14 it in any other document?

15 A. That was not recorded.

16 Q. Okay.

17 A. That's correct.

18 Q. And the same is true with regard
19 to your measurements of slope, not
20 recorded in any way?

21 A. That would be incorrect. I do
22 record when we have slopes over 25
23 percent, typically. I cannot recall
24 without looking at the map what I did on
25 --- I know Church --- Stone Church Farm

1 had some areas with slope, and I can't
2 remember if we just isolated those areas
3 or if I wrote actually greater than 25
4 percent on them, or if we just isolated
5 them. I can't recall.

6 Q. On the map?

7 A. On the map.

8 Q. Okay. And so the determination
9 on this Craven One, on 11 inches from
10 seasonal high water table, 3.3 feet from
11 regional water table, how are those
12 distances, those depths determined? You
13 told me, I think, about the first, about
14 the 11 inches.

15 A. Yeah.

16 Q. That's done by the shovel test?

17 A. Uh-huh (yes). We would look at a
18 shovel ---.

19 ATTORNEY FERRENCE:

20 Yes?

21 A. Yes. I'm sorry. Yes, the
22 groundwater --- really at three feet to
23 have groundwater would be saturated at
24 the surface. So I wouldn't expect to
25 see --- you know, unless that water was

1 saturated at the surface for long
2 periods of time where we saw redox at
3 the surface, I would not expect in my
4 experience to see groundwater greater
5 than 3.3 feet.

6 BY ATTORNEY YEAGER:

7 Q. So you're not actually measuring
8 that?

9 A. That's correct.

10 Q. Okay. How many times prior to
11 issuing your approval did you visit any
12 of these sites?

13 A. Once.

14 Q. And what time of year was it?

15 A. I believe it was December.

16 Q. Ground frozen?

17 A. I can't recall that the ground
18 was frozen, no.

19 Q. You don't recall ---

20 A. I don't recall.

21 Q. --- one way or another?

22 A. I don't recall.

23 Q. Okay.

24 A. I put a shovel in the ground, so
25 it wasn't frozen by our definition of

1 two inches greater than 72 hours because
2 that --- you can't put a shovel in the
3 ground, so ---

4 Q. Okay.

5 A. --- I don't believe the ground
6 was frozen.

7 Q. Okay. All right. I want to show
8 you what we marked as Fritz One. These
9 are two letters that apparently you
10 prepared; is that correct?

11 A. In conjunction with my supervisor
12 and my program manager, I believe so,
13 yes.

14 Q. Well, what were you responsible
15 for in there and what were they
16 responsible for?

17 A. I think I put it all together and
18 we reviewed it together.

19 Q. Okay. Did either of them make
20 any changes?

21 A. I can't recall.

22 Q. Do you recall any comments that
23 either of them made?

24 A. I can't recall any specifics.

25 Q. Okay. Is it a concern for you

1 when you're doing your inspection ---
2 and you call that whole period in that
3 30-day notice where you're reviewing the
4 30-day notice that's submitted your
5 inspection; correct?

6 A. Correct.

7 Q. Okay. Is it is all a concern for
8 you if there is interconnectivity
9 between wells that are located on the
10 site where application of biosolids is
11 proposed and water wells in which ---
12 from which people get their drinking
13 water?

14 A. There is interconnected --- I'm
15 not going to say there isn't
16 interconnectedness --- I mean, water is
17 connected.

18 OFF RECORD DISCUSSION

19 A. Where were we at?

20 BY ATTORNEY YEAGER:

21 Q. You said there is
22 interconnection, water is connected.

23 A. Yeah, I'm not going to say that
24 water is not connected. Groundwater
25 does have connections.

1 Q. Okay. So is that a concern for
2 you as you're going through the approval
3 process?

4 A. I think that the way the program
5 is set up and the way that the biosolids
6 regulations are implemented, that that
7 protects the groundwater.

8 Q. Such that it's not something you,
9 as the reviewer, needs to consider at
10 all?

11 A. Not something that would raise
12 any other flags than I believe that the
13 regulations protect groundwater as far
14 as the biosolid is applied at the
15 agronomic loading rate, that those
16 issues within the regulations, as long
17 as those are being addressed, I believe
18 that that protects groundwater.

19 Q. So because you have that
20 understanding about the design of the
21 program, am I right then that it's not
22 --- that if it's brought to your
23 attention that there is a specific
24 evidence of interconnection between a
25 water well of a neighbor and a well

1 where the application is proposed, that
2 that's not going to change what you do
3 in the approval process? Is that
4 correct?

5 A. Yes. And as I'll again state,
6 that I believe that the way the program
7 is implemented, that it's implemented to
8 protect surface water and groundwater.

9 Q. But you are authorized under the
10 law to look at the specific features of
11 a site and an area and impose site
12 specific conditions on an approval;
13 correct?

14 A. I guess if it was felt warranted,
15 like I referenced earlier, yeah, I guess
16 I could.

17 Q. But you've never ---?

18 A. No.

19 Q. Okay. When you're considering
20 the soil types, the soil
21 characteristics, if you've got soil that
22 you believe is --- that meets the
23 characteristics of being, quote,
24 unquote, suitable for crops, okay, but
25 it has a high propensity for runoff,

1 does that impact your consideration of a
2 site at all?

3 A. That's primarily what the
4 conservation plan is for, to minimize
5 soil loss from a given site. Water runs
6 downhill. We can't necessarily control
7 water from running downhill. It's going
8 to run downhill. A certain percent is
9 going to infiltrate. The more organic
10 matter you have on the surface, the more
11 things that that conservation plan calls
12 for can all slow that down. And we
13 don't want to encourage or concentrate
14 water. That's what the conservation
15 plan is for.

16 Q. Do you ever assess the adequacy
17 of the conservation plan?

18 A. My job is to make sure that the
19 conservation plan is implemented. I'm
20 not a certified planner. I don't claim
21 to be. As long as what's been submitted
22 is done by a certified planner and it
23 meets the requirements, that's the
24 certified planner's responsibility.

25 Q. Well, who determines whether it

1 meets the requirements?

2 A. The certified planner is the
3 person who is responsible for generating
4 and creating that conservation plan.

5 Q. Who determines whether the
6 conservation plan that the planner on
7 behalf of the Applicant submitted is
8 proper? Does anybody from the
9 Department do that or no?

10 A. Nobody from the Department
11 reviews that conservation plan for a
12 biosolid grant application site.

13 Q. Are there any dangers associated
14 with runoff of --- that has Class B
15 biosolids in it?

16 ATTORNEY FERRENCE:

17 Objection.

18 BY ATTORNEY YEAGER:

19 Q. Do you know?

20 ATTORNEY FERRENCE:

21 I think that's asking an
22 opinion of an expert. He's not
23 qualified to answer that
24 question.

25 BY ATTORNEY YEAGER:

1 Q. Do you know?

2 ATTORNEY YEAGER:

3 If he's not qualified,
4 he's going to be able to tell me
5 that he doesn't know. If he
6 knows, he can answer the
7 question.

8 ATTORNEY FERRENCE:

9 I'm just ---.

10 ATTORNEY YEAGER:

11 Yeah, I know.

12 ATTORNEY FERRENCE:

13 Just let him know if you
14 know or not.

15 A. Potentially, I guess.

16 BY ATTORNEY YEAGER:

17 Q. Okay. What are the potential
18 risks?

19 A. There could potentially be a risk
20 of surface water pollution if something
21 ran off of a site.

22 Q. Okay. So as part of your
23 approval, are you assessing whether
24 there will be runoff or not and/or the
25 extent of such runoff?

1 A. My inspection, I'm evaluating
2 that conservation plan. I can't
3 speculate how much rain is going to fall
4 tomorrow on the site. I can't speculate
5 if four inches of rain falls on that
6 site, what's that potentially going to
7 do?

8 Q. You can't?

9 A. I can't speculate, no.

10 Q. Can you determine through an
11 engineering review what will happen to
12 the biosolids on a site if four inches
13 of rain falls after it's applied?

14 A. Again, it'd be speculation of
15 what --- characteristics of organic
16 matter on the surface, how fast that
17 water fell. I can't speculate until
18 that event were to happen.

19 Q. Do you know whether engineers are
20 able to calculate runoff rates and flow?

21 A. Yeah. The conservation plan, as
22 I understand it, is designed on a
23 20-year storm.

24 Q. Okay.

25 A. So yes, there can be calculations

1 to determine how much water may
2 potentially come off of a site.

3 Q. Okay. But you're not reviewing
4 the adequacy of the conservation plan;
5 correct?

6 A. I stated that, yes.

7 Q. Okay.

8 A. Correct.

9 Q. So I'm asking you if there's any
10 consideration, as part of your approval,
11 of runoff?

12 A. There'd be no more consideration
13 than is the conservation plan
14 implemented, what are the slopes, those
15 types of things.

16 Q. Well, if the conservation plan is
17 implemented, but there is still runoff
18 coming off the site, does that matter at
19 all to you?

20 A. What matters is that the runoff
21 that's coming off of the site is clean
22 water. That's what we ---.

23 Q. Is clean?

24 A. Yeah. We don't want soil and
25 sediment and organic material. We want

1 to minimize all of that from leaving the
2 site. That's what the conservation plan
3 is intended to do. It's not intended to
4 stop water from running off of a site.
5 It's intended to conserve the soil
6 that's on the site, the organic matter
7 that's on the site. That's what it's
8 meant to do.

9 Q. Did you make any determination
10 with regard to any of these sites that
11 the conservation plan was ensuring that
12 the runoff was clean, as you've stated
13 it?

14 A. No more than that the
15 conservation plan was implemented at the
16 time of my inspections.

17 Q. How did you determine whether the
18 conservation plan was implemented?

19 A. Looking at the conservation plan
20 and making sure that --- I think that
21 these farms were --- or I think that the
22 Angle Farm was in no till. Didn't
23 appear to have any tillage on it,
24 appeared that soil surface was covered
25 with cornstalks, organic material, as

1 required by the conservation plan, I
2 believe. Looking for gullies, erosion,
3 those types of things.

4 Q. Erosion onsite or offsite or
5 both?

6 A. It would be both.

7 Q. Okay. Did you see any erosion
8 offsite?

9 A. I did not observe any erosion
10 offsite from these fields.

11 Q. Did any of the neighbors point
12 out any erosion to you?

13 A. The only thing that was pointed
14 out to me was water runoff in the video
15 by the Zimmerers.

16 Q. Okay. Did you watch the whole
17 video?

18 A. We did not watch the whole video.
19 I watched part of the video. It was in
20 December and it was about 20 degrees
21 outside and we stood outside for two
22 hours explaining the regulations,
23 explaining what was going on out there.
24 And they showed us a clip of the video
25 on a small screen, probably --- you

1 know, a small video camcorder that we
2 watched, I don't know, 30 seconds, a
3 minute of it.

4 Q. Okay.

5 A. So I saw water running off of a
6 site.

7 Q. Okay.

8 A. I couldn't determine where that
9 was necessarily coming from or what was
10 going on in the background.

11 Q. Did you take a copy?

12 A. I did not take a copy.

13 Q. Did you ask for a copy?

14 A. I did not ask for a copy of that.

15 Q. Why not?

16 A. I didn't think to ask for a copy
17 of that.

18 Q. Well, did it concern you about
19 the extent of water runoff?

20 A. I don't know what the attenuating
21 circumstances were of that event or when
22 that event was or ---.

23 Q. And you wouldn't unless you
24 looked into it further; right?

25 A. Yeah. It was a rain event.

1 Obviously, you could hear thunder. It
2 was a rain event, but I couldn't ---
3 there was no other reason that I thought
4 I needed to look into that further. I
5 don't know what the other circumstances
6 were beyond when that video was taken or
7 what the weather was that day.

8 Q. Okay. And you didn't inquire?

9 A. No.

10 Q. The second letter that you have
11 there, the one to Mrs. DeGenaro, ---

12 A. Okay.

13 Q. --- you see there's a reference
14 to an artesian well? Second paragraph.

15 A. Okay.

16 Q. And then about three paragraphs
17 down from there you say your well has
18 been located on the required map for the
19 300-foot well isolation distance during
20 the Department inspection.

21 A. Okay.

22 Q. You see that?

23 A. I see that.

24 Q. You wrote that?

25 A. Yeah. This is by my signature,

1 yeah.

2 Q. Okay. Would that be reflected on
3 what we'd call the approved?

4 A. I'm not sure. We can take a look
5 at it. Here, I got my copies. Okay.
6 Now, I'm confused with what's going on
7 with maps. You got so many maps here
8 now.

9 Q. If it's long, it's probably the
10 same one; right? I thought we only had
11 one long one.

12 A. No, but this is the --- I don't
13 know what this is. I think that's a
14 photocopy, but it looks like --- yeah,
15 that's a photocopy.

16 OFF RECORD DISCUSSION

17 BY ATTORNEY YEAGER:

18 Q. It's probably all the same ---.

19 A. Oh, they're all the --- okay.

20 Q. We can go off the record for a
21 minute while you sort that out.

22 OFF RECORD DISCUSSION

23 A. The question was?

24 BY ATTORNEY YEAGER:

25 Q. Is her ---?

1 A. Sue DeGenaro's ---.

2 Q. Is her well marked?

3 A. Her well is not marked on this
4 map.

5 Q. Okay.

6 A. Just her house.

7 Q. Okay. So was what you had in the
8 letter incorrect?

9 A. It appears that way.

10 Q. Okay. Do you know where her well
11 is?

12 A. I believe her well was right next
13 to her house in the back between the
14 house and the farm field.

15 Q. There was a significant amount of
16 input from neighbors who were concerned
17 about this proposal; correct?

18 A. That would be correct, I think.

19 Q. Such that you brought it to your
20 supervisor's attention and then
21 ultimately to your boss' boss'
22 attention; correct?

23 A. Correct.

24 Q. And what did you understand their
25 primary areas of concern to be?

1 A. I think what was in these letters
2 addressed a lot of their concerns. I
3 can't recall off the top of my ---.

4 Q. The subject matters.

5 A. Runoff was a big one.

6 Q. Okay.

7 A. I know that that was a big issue.
8 Wells, those types of issues.

9 Q. Okay.

10 A. They had other, you know,
11 probably minor concerns, too, but I
12 think those were the big issues that I
13 recall.

14 Q. Okay. So can you tell me
15 anything further that you did, if
16 anything, to investigate, study, analyze
17 the runoff issues that they were
18 identifying, anything other than what
19 you've already described?

20 A. No.

21 Q. Okay. The additional red lines
22 that are on the approved maps, were
23 those marked by you ---

24 A. Yes.

25 Q. --- where we see the red?

1 A. That's my marking.

2 Q. Okay.

3 A. Correct.

4 Q. And as I understand it, that was
5 based on your site evaluation from the
6 shovel test and the slope analysis that
7 you did?

8 A. Correct.

9 Q. Okay. Do you have any
10 familiarity with the Delaware River
11 Basic Commission's regulations?

12 A. Very little.

13 Q. Have you ever utilized the DRBC's
14 water standards, water quality
15 standards, in your work?

16 A. With biosolids?

17 Q. Yes.

18 A. No.

19 Q. Do you know whether this site is
20 located within the DRBC's special
21 protection waters?

22 A. I don't know what --- how far
23 expanding the DRBC's special protection
24 watersheds go or ---.

25 Q. You don't know?

1 A. I don't know, yes.

2 Q. Okay. And as I understand from
3 your answer before about having never
4 applied the DRBC's water quality
5 standards in the consideration of
6 biosolids, that whether it was or wasn't
7 in the special protection waters
8 wouldn't change how you would handle an
9 application; correct?

10 A. That's correct.

11 Q. Have you ever had any role in
12 determining whether an application
13 should be referred to the DRBC?

14 A. With biosolids?

15 Q. With biosolids.

16 A. No.

17 Q. What about outside of biosolids?

18 A. Yeah. The 537 program, yes.

19 Q. Okay. And how do you go about
20 --- in that context, how do you go about
21 understanding whether it's something
22 that should be referred or shouldn't be
23 referred?

24 A. I have a very limited capacity as
25 a soil scientist with referring things

1 as planning modules would go. But I
2 know that there is a mechanism. I don't
3 know exactly how that mechanism works.
4 I just know that during planning
5 meetings that's come up, that, hey, DRBC
6 has to be contacted. But I don't know
7 what the specifics are of contacting
8 DRBC or ---

9 Q. Okay.

10 A. --- getting them involved.

11 Q. Or what the triggers are?

12 A. Or exactly what the triggers are,
13 yeah. I'm not 100-percent sure.

14 Q. Okay. Who would you turn to if
15 you had questions about that, Fritz?

16 A. Darryl Fritz and Mike Brunamonti.

17 Q. Okay.

18 A. Yeah.

19 Q. Had you done other projects in
20 Upper Mount Bethel before?

21 A. Biosolids?

22 Q. Yeah.

23 A. No.

24 Q. Okay. These sites, would you
25 agree that these are --- that each of

1 these sites is at a --- and I might not
2 use the right verbiage, but that they're
3 at kind of a high elevation in that area
4 relative to the surrounding properties?

5 A. They're elevated above some of
6 the properties, but at a high elevation,
7 I ---.

8 Q. Relative to the surrounding
9 properties.

10 A. Yeah. Some of them, yeah, it
11 depends which way the slope goes. But
12 some of the break towards property lines
13 and some of them break away into
14 wetlands and other parts not near
15 residential ---.

16 Q. I was talking about other
17 properties generally, not simply ---

18 A. Oh, okay.

19 Q. --- residential.

20 A. Okay.

21 Q. These are high points in the
22 topography; correct, each of these
23 sites?

24 A. They have high points on them.

25 Q. Yeah.

1 A. Yeah.

2 Q. Okay. Do you look at any data
3 --- as part of your investigation,
4 inspection, do you look at any data
5 beyond what the Applicant provides you?
6 Do you look at other sources?

7 A. I look at the application to see
8 if the application meets our
9 regulations. If it meets all of our
10 regulations, I don't know what ---.

11 Q. In order to determine whether it
12 meets the regulations, do you look at
13 outside data sources?

14 A. The only thing that I would, you
15 know, possibly look at would be soil
16 survey to get an idea of what might
17 potentially be there before I go out
18 there.

19 Q. Okay. Did you do that in this
20 case?

21 A. I can't recall if I did or
22 didn't.

23 Q. Okay. I want to go back, and I
24 apologize if I asked --- I've asked
25 around this question before, but does

1 --- is there a relationship between the
2 permeability of the soil and runoff?

3 ATTORNEY FERRENCE:

4 You know, I'm going to
5 object to that question. That
6 sounds like a question for an
7 expert.

8 ATTORNEY YEAGER:

9 He's a soil scientist.

10 ATTORNEY FERRENCE:

11 But he's a fact witness in
12 this case. You can answer that
13 question, Tim?

14 A. Yeah. There's always a
15 correlation to, you know, actually what
16 a percolation rate or what a hydraulic
17 conductivity rate is to what specific
18 soil is there.

19 BY ATTORNEY YEAGER:

20 Q. I was asking about relationship
21 between those features of the soils and
22 runoff. In other words --- go ahead.

23 A. Yeah. I mean, if soil has
24 water-holding capacity and capacity to
25 infiltrate --- so that's going to be a

1 direct correlation to what can actually
2 be infiltrated into a given soil.

3 Q. And what can't will leave by way
4 of runoff?

5 A. Potentially.

6 Q. What else will happen to it if it
7 doesn't infiltrate or leave by way of
8 runoff?

9 A. Well, it could be absorbed into
10 organic matter that's on the surface. I
11 mean, there's a lot of other
12 circumstances that would go into play
13 with that.

14 Q. Okay. When you were considering
15 for this site the isolation zones, ---

16 A. Uh-huh (yes).

17 Q. --- did you consider the
18 relationship between the soil
19 suitability and slope? In other words,
20 not just look at the slope, but consider
21 the relationship between slope and soil
22 suitability combined?

23 A. If the soils met the
24 requirements, the 11 inches to a
25 seasonal high water table, and meets the

1 slope, that's the extent of what I would
2 look at that relationship.

3 Q. Okay. All right. When you say
4 meets the slope, it is ---?

5 A. Less than 25 percent.

6 Q. Less than 25 percent?

7 A. Right.

8 Q. Okay. So if it's less than 25
9 percent and it's --- and it meets the
10 standard that you identified for
11 suitable for crop, then it's not an area
12 of concern for you?

13 A. Correct.

14 Q. Okay. Do you remember any of
15 your dialogue with Sue DeGenaro?

16 A. Other than I spoke with her on
17 the phone several times, no specifics.

18 Q. Okay. If I asked you that about
19 each of the neighbors, would you
20 remember the specifics of any of them?

21 A. Not really.

22 Q. Okay. What you heard from ---
23 did you do anything additional in your
24 review, in your approval process, to
25 address any of the concerns that they

1 raised other than what you've told us
2 about in terms of this response letter
3 and talking to your supervisor and your
4 supervisor's supervisor?

5 A. Can you repeat the question?

6 Q. Did you do anything additional in
7 your inspection process, in your review
8 process, as a result of the information
9 that you received from the neighbors?
10 And I'm not talking about ---

11 A. Yeah.

12 Q. --- the fact that you responded
13 to them.

14 A. I don't think I did anything
15 different than what I would do to review
16 every file.

17 Q. Okay. So did you hear from them
18 after your site visit?

19 A. I can't recall if their letters
20 came in after my site visit or not. I
21 can't recall if I did or didn't.

22 Q. All right.

23 A. I know that in the spring --- I
24 believe sometime in the spring maybe one
25 or two of the Appellants had called me

1 and I just deferred them to, I think,
2 speak with the representation and to
3 talk with my counsel, but no details,
4 nothing that I recall.

5 Q. Okay. If you had done a review
6 of the --- if you had looked at the soil
7 survey, would that have been documented
8 anywhere that you had done that?

9 A. I wouldn't document that.

10 Q. You wouldn't print out what your
11 review showed?

12 A. No, unlikely.

13 Q. You have the ability to run maps
14 from the soil survey?

15 A. You can, yeah.

16 Q. Do you do that as part of your
17 review?

18 A. Not typically.

19 Q. Did you do that in this case?

20 A. No.

21 Q. Why not?

22 A. There was very little need to.
23 I'm going to go out and evaluate the
24 soil. I went out and evaluated the
25 soil. The soil survey is just a guide.

1 It's a tool that soil scientists will
2 use to give them a potential reference.
3 But it does not replace going out to the
4 field and actually evaluating what's
5 there on the site.

6 Q. And I apologize if I asked
7 before. With regard to each site, do
8 you remember how many shovel tests you
9 did with each?

10 A. I cannot remember.

11 Q. Okay. And you didn't document it
12 in any way?

13 A. I did not document where I put a
14 shovel in the ground.

15 Q. Or how many you did?

16 A. Or how many I did. Correct.

17 Q. And in terms of impacts to the
18 watersheds from this activity, my
19 understanding from what you said earlier
20 is you rely on the regulations and the
21 program itself, and that you don't do
22 anything beyond making sure each of the
23 categories in the regulations are
24 followed to consider the impacts on the
25 watershed?

1 A. That would be correct.

2 Q. And do you do anything, then, to
3 consider cumulative impacts?

4 A. Absolutely.

5 Q. What do you do to consider
6 cumulative impacts?

7 A. On an annual basis, CPLRs, as
8 they're known, cumulative pollutant
9 loading rates. CPLRs are submitted for
10 each specific field with ---.

11 Q. That's after an approval?

12 A. That would be after ---.

13 Q. I'm talking about as part of the
14 approval.

15 A. Oh, the only time we would look
16 at cumulative pollutant loading rates
17 prior to an approval if there was ---
18 biosolids or sewage sludge at some other
19 time in the past was land applied on
20 that field. But if nothing was land
21 applied on it, we wouldn't look at
22 cumulative pollutant loading rates.

23 Q. Okay. So if you have a stream
24 that's receiving runoff from all three
25 of these sites, the Allegheny, for

1 example, you weren't doing anything to
2 determine whether that --- whether the
3 health of that stream would be impacted
4 by having this activity at each of ---
5 at all three sites at the level
6 proposed?

7 A. No more than what the regulations
8 require as far as conservation plan,
9 land applying at the agronomic loading
10 rate. All of that is meant to protect
11 groundwater and surface water, so ---.

12 Q. When we were talking --- when I
13 was asking about the soil survey, is
14 that the NRCS?

15 A. Yes.

16 Q. Okay. There's different levels
17 of data that you can get out of the
18 NRCS; right?

19 A. Yes.

20 Q. Describe what those different
21 levels are, if you could.

22 A. They'll give you a range or an
23 idea of what specific soil --- soil
24 series is there in a given area. You
25 can do layers, look at anything from,

1 you know, prime agricultural land to
2 whether or not these areas are generally
3 suitable for onlot sewage disposal.
4 There's a wide range of information that
5 --- they help to provide an idea of
6 what's out there.

7 Q. And one of those is suitability
8 for application of Class B biosolids;
9 right?

10 A. I believe that they reference
11 biosolids in the sense of these soils
12 are typically suitable or unsuitable,
13 but I don't know where they came up with
14 those standards. I'm not sure what the
15 methodology was to come up with those or
16 how --- we don't correlate those,
17 anything with NRCS as far as what the
18 regulations say.

19 Q. You keep on referring to the
20 regulations. Do you have a --- is your
21 job, as you understand it, limited to
22 determining whether there's --- first of
23 all, which regulations are we talking
24 about? What do you call it, Chapter
25 what?

1 A. 271, subchapter J.

2 Q. Okay.

3 A. When I refer to the regulations.

4 Q. Okay. So it's your job to
5 determine ---

6 BRIEF INTERRUPTION

7 ATTORNEY YEAGER:

8 Bless you.

9 BY ATTORNEY YEAGER:

10 Q. --- consistency with those
11 regulations, or does it go broader to
12 determine whether what's being proposed
13 will have an adverse impact on the
14 environment, public health, safety and
15 welfare?

16 A. My job is to --- as I understand
17 it, is to implement the regulations as
18 they have been developed. And I believe
19 that those regulations protect the
20 environment, protect the welfare and
21 health of those residing in the
22 Commonwealth.

23 Q. Are you aware of whether there
24 were any birds protected under the
25 Migratory Bird Treaty Act that were

1 identified as being associated with any
2 of these tracts?

3 A. No more than what the PNDI would
4 come up with.

5 Q. Which was what?

6 A. The PNDI?

7 Q. No, what did the PNDI come up
8 with?

9 A. I can't recall off the top of my
10 head ---

11 Q. Okay.

12 A. --- what the hits were for the
13 PNDI.

14 Q. So if you find out that there's a
15 bird that's protected under the
16 Migratory Bird Act, Bird Treaty Act,
17 that's associated with the sites, does
18 that change your review at all?

19 A. If any of the agencies had an
20 issue with the Migratory Bird Act as you
21 stated, they would --- that would be
22 their opportunity to let us know that,
23 hey, we have an issue with this and we
24 need to isolate the land application of
25 biosolids from this specific area or we

1 need more information.

2 Q. What if you get information
3 beyond the PNDI about a bird that's
4 protected under the Migratory Bird Act?

5 A. The regulations require the PNDI
6 to be done. That's all that I would
7 look at, to review ---

8 Q. So if you got ---

9 A. --- as far as ---.

10 Q. --- additional information, you
11 wouldn't do anything further?

12 A. The regulations don't require ---

13 Q. That's not my question.

14 A. --- us to do anything different.
15 No, I don't think I would do anything
16 different. I would look at what the
17 regulations said.

18 Q. Okay. And wouldn't do anything
19 more than the minimum of what's
20 required; is that right?

21 A. The ---.

22 ATTORNEY FERRENCE:

23 Objection. He's not ---.

24 ATTORNEY YEAGER:

25 Are you objecting because

1 I'm restating what he said?

2 ATTORNEY FERRENCE:

3 I don't think you restated
4 what he said, unless I missed it
5 while I was taking a note here.
6 I thought you asked him a
7 question.

8 ATTORNEY YEAGER:

9 I did.

10 ATTORNEY FERRENCE:

11 You did or did not?

12 ATTORNEY YEAGER:

13 I did.

14 ATTORNEY FERRENCE:

15 Okay. What is your
16 question? If he's not ---.

17 BY ATTORNEY YEAGER:

18 Q. You're not going to do anything
19 more than the minimum of what the
20 regulations require; is that right?

21 A. I explained my job is to
22 implement the regulations. The PNDI is
23 required. That's what's required to
24 protect endangered and threatened
25 species. I evaluated the PNDI that was

1 submitted and those results.

2 Q. Once you get a conservation plan
3 --- I'm sorry. Once you receive
4 information from an agency that's
5 responding to a PNDI hit, do you have
6 any follow-up communication with that
7 agency?

8 A. I typically don't. If the
9 Applicant does not respond and there's a
10 requirement for more information or
11 something like that, I would ask the
12 Applicant, hey, follow up on this, where
13 is this information? And I would get
14 the additional information needed so
15 that we could move on from --- and clear
16 any issues with the PDNI.

17 Q. Okay. I'm not going to --- I'm
18 not going to have this marked at this
19 point. I just want you to take a look
20 at this. It's a letter dated May 2nd,
21 2014.

22 A. Okay.

23 Q. And it's got a Bates number of
24 SYN-0144.

25 OFF RECORD DISCUSSION

1 BY ATTORNEY YEAGER:

2 Q. Have you ever seen that before?

3 A. I can't recall. No, I don't
4 believe I've seen this since May 2nd,
5 2014.

6 Q. This was after the approval;
7 correct?

8 A. Yeah. May 2nd, 2014 was after
9 the approval.

10 Q. Okay. So you wouldn't know
11 whether there was any response to it;
12 correct?

13 ATTORNEY FERRENCE:

14 Can we go off the record
15 for one quick second?

16 ATTORNEY YEAGER:

17 Sure.

18 OFF RECORD DISCUSSION

19 ATTORNEY YEAGER:

20 This is a letter from Eric
21 Rosenbaum of Rosetree Consulting
22 to --- I'm sorry, I handed you
23 --- to the PA Fish and Boat
24 Commission dated May 2nd, 2014,
25 noting that --- referring to a

1 PNDI review showing a potential
2 endangered, sensitive species.
3 And the letter has one item for
4 which we asked the PA Boat
5 Commission to provide additional
6 information. Are there
7 management practices that can be
8 implemented on the farm to reduce
9 the impact of farming operations
10 on the endangered species with an
11 attached conservation plan?

12 And so my question was
13 whether there had been any
14 response --- whether he would
15 know whether there was any
16 response to that.

17 ATTORNEY FERRENCE:

18 Okay.

19 A. I don't know. I mean, I know
20 that when I --- when I reviewed the
21 30-day notice, the PNDI that was
22 submitted there, any questions that came
23 --- any hits or potential hits that came
24 up were responded to. So I'm not really
25 sure what this is in reference to.

1 Yeah. It's from Eric Rosenbaum
2 regarding Upper Mount Bethel, PA Boat
3 and Fish Commission, but other than
4 that, I don't know if it's another farm,
5 I don't know if it --- I don't know what
6 it's ---

7 BY ATTORNEY YEAGER:

8 Q. Well, when you ---.

9 A. --- referring to.

10 Q. Okay.

11 A. I'm sorry.

12 Q. No, no, that's all right. When
13 you say that it --- and I don't want to
14 misstate your language, but you were
15 under the impression that whatever hits
16 had been identified before had been
17 addressed. Is that fair?

18 A. I believe so, correct.

19 Q. What did you base that on?

20 A. The PNDI that was submitted and
21 those responses that were attached with
22 the PNDI that are in the file.

23 Q. Okay. All right. Can I have
24 that back?

25 A. Yeah.

1 Q. You can hold on to ---.

2 A. Did we get a --- okay.

3 ATTORNEY YEAGER:

4 Can we have this marked?

5 A. Can I get a break real quick?

6 ATTORNEY YEAGER:

7 Yeah, sure.

8 SHORT BREAK TAKEN

9 ATTORNEY YEAGER:

10 All right. So we're back
11 on. We've had marked as Craven
12 Two a document that says
13 environmental evaluation
14 worksheet.

15 (Craven Exhibit Two marked
16 for identification.)

17 ATTORNEY YEAGER:

18 It's a form from the US
19 Department of Agriculture,
20 Natural Resources Conversation
21 Service. And the client is
22 identified as Paul Smith, Ron
23 Angle and Synagro. Am I
24 pronouncing it right?

25 OFF RECORD DISCUSSION

1 BY ATTORNEY YEAGER:

2 Q. And this has a Bates number of
3 SYN-109 to 116. Do you know what this
4 is?

5 A. I'm not sure. It's part of a
6 conservation plan, I believe.

7 Q. I'm going to represent to you
8 that this was not in the file that we
9 received from the Department.

10 A. Yeah. It's not in my file.

11 Q. Okay. Why not? Do you know?

12 A. I'm not sure what document this
13 is that's part of the --- this could
14 have been his calculation.

15 Q. Is this a document you regularly
16 --- type that you regularly review as
17 part of your approvals?

18 A. No, I think this might --- I'm
19 not speculating what this ---.

20 Q. Yeah, if you don't know and if
21 it's not a document you regularly ---.

22 A. It's not a document I regularly
23 use.

24 Q. Okay. All right. Then I won't
25 ask you anything further about it.

1 A. Okay.

2 Q. If I wanted to figure out --- you
3 mentioned cumulative pollutant loading.

4 A. Correct.

5 Q. Is there a quantitative number
6 assigned? How do you determine whether
7 you've exceeded the allowable cumulative
8 pollutant loading?

9 A. Okay. In our regulations, we
10 have pollutant loading rates ---

11 Q. Right.

12 A. --- for the specific pollutants
13 that are looked at. That's what we base
14 everything on, is whether or not you've
15 reached that cumulative pollutant
16 loading rate.

17 Q. When you are approving a project,
18 are you approving it with the idea that
19 it's not going to exceed the CPL?

20 A. CPLR.

21 Q. CPLR, loading rate, okay.

22 A. Yes, that would be correct.

23 Q. How do you come to --- what
24 input, what data do you need to be able
25 to conclude that a project as proposed

1 won't exceed the CPLR?

2 A. That information is what the
3 treatment plant is providing to, in this
4 case, the Applicant.

5 Q. Okay.

6 A. So on a regular basis, depending
7 on what the treatment plan is and how
8 much they're processing, they're
9 sampling for pollutants. They're
10 sampling for, you know, pathogen
11 reduction, invector traction reduction.
12 But in that, they have --- they then
13 provide that pollutant sampling, along
14 with all the other sampling to, in this
15 case, Synagro or the ---. Synagro gets
16 that information and then that's what
17 they use to develop and to input into
18 their cumulative pollutant loading rate
19 calculation. Then I would review that
20 at the end of the year. I get an annual
21 operating report that reviews how much
22 of any given pollutant was land applied.

23 Q. That's helpful, but what I
24 understood from that is about after the
25 fact. So after there's been an approval

1 and after there's been a land
2 application?

3 A. That's correct.

4 Q. That's what you've described as
5 how --- the process of figuring out
6 whether it's exceeded the rate, the ---
7 right?

8 A. Correct.

9 Q. Okay. But what I asked you
10 originally was about --- as part of the
11 approval process, you're not going to
12 approve something that would exceed the
13 rate; right?

14 A. Right. You're not going to a
15 land application permit --- you're not
16 going to get a general permit to process
17 biosolids if you don't already meet the
18 stringent pollutant loading --- the
19 pollutant numbers in the table as well.

20 Q. But not just that you don't in
21 what you're doing now, but that in what
22 you're proposing to do won't put you
23 over the limit; right?

24 A. Well, there's a proposed ---
25 potentially, eventually, you could get

1 there. I mean, that's why we do this
2 calculation every year.

3 Q. I'm trying to figure out what you
4 do as part of the review process prior
5 to an approval.

6 A. Approval of the farm?

7 Q. For application ---

8 A. Well, ---

9 Q. --- of biosolids.

10 A. --- I don't look at cumulative
11 pollutant loading rates except for the
12 fact that if biosolids were previously
13 applied onto that farm, if sewage
14 sludge ---

15 Q. Do you look at ---?

16 A. --- was applied to that farm.

17 Q. Do you look at the --- how
18 frequently the sludge is going to be
19 applied and in what concentrations as
20 part of the approval process?

21 A. I don't look at what's going to
22 be potentially land applied because I
23 don't know. I don't know until the
24 material has gone to the farm and land
25 applied. In this case, Synagro,

1 oftentimes, you know, they might land
2 apply on a field this year, but might
3 not land apply on it for two or three
4 years later. So I don't know until ---.

5 Q. As the --- I'm sorry, I didn't
6 mean to interrupt.

7 A. I don't know until they're out
8 there and they're utilizing that farm.

9 Q. But you're not granting them
10 unlimited approval to apply as
11 frequently as they want in whatever
12 concentrations they want, are you?

13 A. No.

14 Q. Okay. So the approval that
15 you're granting them, is it with a
16 specific information about how
17 frequently it's going to be applied, so
18 that you can be sure as part of your
19 approval that it won't exceed the rate?

20 A. Correct, it would be --- when
21 they submit an application, they submit
22 all of the sources and sampling from
23 those sources. They also --- the
24 agronomic loading rate, those types of
25 things all go into what limits Synagro,

1 how much they could land apply.

2 Q. If they don't give you sampling
3 from all those sources, you can't do
4 that assessment; correct?

5 A. I think that would be incorrect.

6 Q. How could you do that assessment
7 if you don't know the concentrations of
8 what's coming out of the different
9 plants that ---?

10 A. Well, there's a permit that those
11 facilities have to maintain or receive.

12 Q. Yeah.

13 A. Okay. So it's not Synagro's
14 responsibility to make sure that they're
15 meeting those requirements. It's the
16 treatment plant --- it's the Permittee's
17 responsibility to meet those
18 requirements. Those facilities are in
19 --- they might not all be in my region.
20 I might not see them all. Okay? So if
21 it's in the southeast region, it's the
22 southeast region's responsibility to
23 make sure that their biosolids that's
24 being produced meets their requirements.

25 Q. But you get from the --- you get

1 sampling information from the Applicant
2 as part of the application?

3 A. I believe Synagro submitted all
4 of the sampling information for the
5 facilities that are approved in the
6 30-day notice.

7 Q. Is that a requirement for you,
8 that they submit sampling from all the
9 facilities approved in the 30-day
10 notice?

11 A. I don't recall that that's a
12 requirement. I'm not sure.

13 Q. So if you don't have that
14 sampling information from all the
15 facilities, you can't certify that the
16 rate won't be exceeded; correct?

17 A. I think that's incorrect because
18 we do get an annual operating report
19 that shows the sources that went to that
20 specific ---.

21 Q. That's after the fact. I'm
22 talking about as part of your approval.

23 A. I'm explaining to you how the
24 program works. I'm not ---.

25 Q. I'm trying to understand, as part

1 of your approval process, how you do the
2 math, if at all.

3 A. No, we don't do the math because
4 we don't know what sources are going to
5 that specific field.

6 Q. Okay.

7 A. That's correct.

8 Q. And you don't require --- so you
9 don't require the submittal of sampling
10 from each of the source facilities;
11 correct?

12 A. That would be correct.

13 Q. And you don't require the
14 Applicants to tell you how frequently
15 they're going to apply the sludge;
16 correct?

17 A. That's correct.

18 Q. So you have no way of doing that
19 math as part of the approval process to
20 know whether the CPLR will be exceeded;
21 correct?

22 A. Hypothetically, yes.

23 Q. Well, practically. You don't
24 have the input ---

25 A. Yeah, I don't ---.

1 Q. --- to do the math?

2 A. Right, yeah. Yeah.

3 Q. Do you know whether Synagro
4 prepared NRCS land application of
5 municipal sewage sludge maps?

6 A. Can you repeat that question?

7 Q. We talked about the NRCS;
8 correct?

9 A. Yes.

10 Q. And we talked about the different
11 mapping ability that that has; ---

12 A. Yes.

13 Q. --- right? And one of that ---
14 part of that mapping ability is the
15 ability to map whether the land is ---
16 and I'm blanking on the phraseology.
17 But there's a suitability component to
18 that mapping software and database for
19 whether it's suitable for land
20 application of municipal sewage sludge?

21 A. Do I know if Synagro went onto
22 NRCS? No, I ---

23 Q. Okay.

24 A. --- don't know.

25 Q. And you don't --- and you didn't

1 do that analysis?

2 A. That's correct.

3 Q. So you don't know what that
4 analysis would show?

5 A. That's correct.

6 Q. Okay. You told me about the
7 determination about the seasonal high
8 water table. That was where you did
9 your shovel test; right?

10 A. Correct.

11 Q. The regional groundwater table,
12 how is that determination made about the
13 depth?

14 A. Again, I restate what I had said
15 before, that if you have ground that is
16 not saturated or if you have suitable
17 soil to 11 inches, you're not going to
18 see a regional groundwater table at
19 three feet.

20 Q. Okay. When you were at the
21 properties surrounding the sites, did
22 you see any visible sign of erosion?

23 A. I did not see any visible signs
24 of erosion during my inspections.

25 Q. There was a reference in a letter

1 from the Zimmerers about springs on
2 their property. Do you recall that?

3 A. I don't recall that.

4 Q. Did you ever make any effort to
5 locate any springs?

6 A. I did not look at any springs on
7 the Zimmerer property.

8 Q. Okay. Did you make any effort to
9 locate any springs anywhere?

10 A. Only what was visible from the
11 farm really, the fields, what was
12 located on the map prior to us going out
13 there as well, but I did not go off of
14 the farm fields to look for any other
15 springs.

16 Q. Other than looking at what's
17 listed under Chapter 93, did you make
18 any effort to determine existing use of
19 any of the waterways?

20 A. No.

21 Q. Was there proposed onsite
22 biosolids storage for Potomac and
23 Sunrise? Do you remember?

24 A. Can I reference the maps?

25 Q. Sure.

1 A. For Potomac and Sunrise, yes,
2 there were proposed storage areas made
3 note on both of those maps.

4 Q. Do you know what a BMP is?

5 A. Best management practice.

6 Q. Do you get into BMPs at all for
7 biosolids?

8 A. No more than what would be in the
9 conservation plan and making sure, if
10 there was a BMP that was spelled out in
11 the conservation plan, that it was
12 implemented.

13 Q. Okay. What did you do to
14 determine whether whatever was in the
15 conservation plans for these sites was
16 implemented?

17 A. Looked through the conservation
18 plan when I was onsite and made sure
19 that that matched what was going on in
20 the real --- in the conditions when I
21 observed them ---

22 Q. Okay.

23 A. --- in December.

24 Q. And no engineering plans
25 submitted as part of the conservation

1 plan?

2 A. I don't believe there any
3 engineering plans submitted with the
4 conservation plan. That's correct.

5 Q. Did you consider local zoning or
6 local comprehensive (phonetic) plan ---?

7 A. No.

8 Q. Do you have any familiarity with
9 blue spotted salamanders?

10 A. No.

11 Q. Did anyone make any effort to
12 pinpoint habitat of blue spotted
13 salamanders?

14 A. That's what the PNDI was for
15 and ---.

16 Q. So just the letter that you got
17 from the agency?

18 A. Yeah.

19 Q. Do you know what the Natural
20 Heritage Inventory is?

21 A. I don't know any specifics about
22 it. I don't know ---.

23 Q. Okay. Is that something you
24 consider at all, the information from
25 Natural Heritage Inventory?

1 A. I don't believe so.

2 Q. You have a note about raising the
3 pH before the first application?

4 A. Correct.

5 Q. Why is that?

6 A. That's at our discretion,
7 depending on what kind of biosolids
8 they're going to land apply. In this
9 case, Synagro was going to come in and
10 land apply lime-stabilized biosolids.
11 Sometimes the lime has the potential
12 already in the biosolids to raise the pH
13 to 12. And so we have a --- we have
14 that in our regulations, that we can
15 allow them up to six months to raise the
16 pH, but understanding what the
17 circumstances were with, you know, the
18 phone calls that we had, the letters on
19 this. I didn't even hesitate. I said
20 the pH has got to be raised to six
21 before you guys land apply.

22 Q. I apologize. I don't understand
23 what the benefit of raising the pH is.

24 A. The benefit of raising the pH is
25 we want to make sure that the farmer is

1 getting the maximum yields from what
2 crop he's growing. If this was a tree
3 farm --- let's say this was a Christmas
4 tree farm that Ron Angle had here. The
5 Christmas trees or evergreens like a
6 more acidic soil. So they would like a
7 pH of five. But most of your typical
8 crops that you plant, your corn, your
9 soybeans, your wheat, your hays, those
10 like a more neutral or even a little bit
11 basic --- they thrive in those. So the
12 way the regulations, from what I
13 understand, were developed was to make
14 sure that the farmer is utilizing the
15 biosolids the best possible, to the
16 maximum benefit to the farmer to get the
17 most amount of yield. And so they
18 require that soil pH and that's --- if
19 they didn't have that requirement and
20 the farmer was just disposing of the
21 material, he's not getting the yields,
22 he's not getting --- you know, he's not
23 showing us evidence or documentation
24 that he's trying to grow the best crop.
25 Q. So it's about greater yield for

1 the farmer, not about greater protection
2 for the neighbors?

3 A. Yeah, there would be no ---
4 whether the soil pH is 5.5 or seven,
5 it's not going to matter to the
6 neighbors.

7 Q. Okay. Was there any discussion
8 about widening a berm to direct water
9 toward a wooded area and away from the
10 Zimmerers' property?

11 A. From what I recall when we were
12 out on the site, there on --- I believe
13 it's Price Lane, I believe. Let me
14 reference that. Yeah, Price Lane. I do
15 believe that Diane took us up to the
16 field there where the field meets the
17 road and talked to us about potentially
18 putting in a diversion swale. I didn't
19 object to that, but at the same time,
20 that would have been a discussion that
21 Synagro had with the property owner. As
22 long as the fields meet the
23 requirements, as the conservation plan,
24 that would be something that the
25 landowner and Synagro could discuss. I

1 can't --- I wouldn't require a berm
2 there because it met the conservation
3 plan, but if that was something that the
4 landowner and Synagro discussed and ---
5 I wouldn't be objective to it.

6 Q. If it was agreed on between the
7 Applicant and the neighboring
8 landowner ---.

9 A. I don't think it was agreed upon.

10 Q. Okay. While you were there, it
11 wasn't?

12 A. No. It was talked about just to
13 the discussion that I had with you, that
14 we talked about it, but there was no
15 agreement that I heard that this shall
16 be put in.

17 Q. Give me just one second. Do you
18 know what top --- what the trace
19 tolerable level of soil loss means?

20 A. I know that that's T --- and I
21 think that that's T in the Russell ---
22 the Russell calculation. I think that's
23 the input, and it's different on each
24 soil, what the allowable soil loss is on
25 a given field in a given year.

1 Q. In looking at the conservation
2 plan, if it says that this practice has
3 not been applied to the operation, that
4 means it's not a component of the
5 conservation plan?

6 A. I'm not sure. Can you repeat
7 that question?

8 Q. If, in the conservation plan,
9 there's a note that says this practice
10 has not been applied to the operation,
11 what does that mean? Do you know?

12 A. I imagine --- I'm guessing, I'm
13 not reading it. But I'm guessing that
14 that means that that practice has not
15 been put into practice in that field.

16 OFF RECORD DISCUSSION

17 BY ATTORNEY YEAGER:

18 Q. Were the soil conservation plans
19 --- was the soil conservation plan the
20 same for each site?

21 A. I do not recall them being the
22 same, but I don't --- I don't recall.

23 Q. Okay. Are you required to have
24 the Applicant signature on the PNDI hit,
25 the PNDI results?

1 A. I don't know if it's a
2 requirement or not. I reviewed the PNDI
3 to make sure that it was the proper
4 acreage, the date, so forth, and that
5 that that matched up with the map that
6 was submitted.

7 Q. When the Applicant submits
8 information from the NRCS system and it
9 provides a description of the different
10 soil that's found on the site, do you
11 review that?

12 A. It depends. I may look at it
13 briefly.

14 Q. So if it reports that soils have
15 a seasonal high water table at zero
16 inches, is that something that you ---
17 that impacts your analysis at all?

18 A. Again, I go out to the field and
19 evaluate the field. I understand what
20 you're looking at there as far as the
21 conservation plan goes. There's lots of
22 soil series, and one of those soil
23 series may be one of the wetland soils.
24 So it's very possible that what you're
25 looking at does say zero for one of the

1 soils. And that would be a --- that
2 would certainly be an area that we would
3 buffer. But it's not that --- that plan
4 that you're looking at isn't just soils
5 where the land application of biosolids
6 is going to be. That goes across the
7 whole property.

8 Q. How do you know?

9 A. Well, ---.

10 Q. Isn't it based on how it's --- on
11 how you pull it up in the NRCS system?
12 Can't you outline the sections that you
13 want?

14 A. I believe that you can, yes.

15 Q. And when you submit it, don't you
16 just submit it for the sections that you
17 want to apply for?

18 A. You can. I don't know what was
19 --- I don't know what was submitted in
20 that case.

21 Q. Well, did you look at it?

22 A. Again, I might have briefly
23 glanced over it to get an idea of what
24 was there.

25 Q. Okay. But you didn't depend on

1 this in identifying additional buffer
2 areas ---

3 A. No, I ---.

4 Q. --- or isolation areas?

5 A. I depended on going out to the
6 field and doing an inspection.

7 Q. Okay. And so if there are soils
8 that are identified here as having a
9 potential runoff class of very high,
10 that wasn't something that you would
11 consider as part of your review?

12 A. The conservation plan would
13 address those types of issues.

14 Q. Well, you don't actually know
15 that because you don't assess the
16 adequacy of the conservation plan;
17 correct?

18 A. That's the planner's
19 responsibility.

20 Q. But the Department doesn't review
21 what the planner has submitted ---

22 A. No, the Department ---.

23 Q. --- for adequacy?

24 A. That would be correct.

25 Q. What was the plan --- was there a

1 plan for cover crops?

2 A. I can't recall if the
3 conservation plan had cover crops in
4 that. I can't recall those specifics.

5 ATTORNEY YEAGER:

6 Can you mark that, please?

7 Michael, this is the
8 correspondence on the PNDI hits.

9 ATTORNEY FERRENCE:

10 Oh, okay.

11 ATTORNEY YEAGER:

12 I'm not ready for it,
13 though.

14 ATTORNEY FERRENCE:

15 Oh, okay.

16 ATTORNEY YEAGER:

17 Or one of the PNDI hits, I
18 should say. Here you go.

19 ATTORNEY FERRENCE:

20 Okay.

21 OFF RECORD DISCUSSION

22 BY ATTORNEY YEAGER:

23 Q. Sir, I'm showing you a document
24 that we've had marked as Craven Three,
25 which is a November 25th, 2013

1 correspondence from the Pennsylvania
2 Fish and Boat Commission to Rosetree
3 Consulting.

4 (Craven Exhibit Three
5 marked for
6 identification.)

7 BY ATTORNEY YEAGER:

8 Q. This has our Bates number 144.
9 It's a two-page letter. You were
10 referring earlier to some correspondence
11 that flowed from the PNDI review. Is
12 this one of the letters that you were
13 talking about?

14 A. I believe so. I would have to
15 look in the file to make sure, but I
16 believe so.

17 Q. Okay. Did the Department require
18 anything further of the Applicant as a
19 result of this correspondence?

20 ATTORNEY FERRENCE:

21 What's the date on here?

22 A. November 25th, 2013. Nothing
23 more than I believe --- I'm not sure
24 which farm this is. Oh, this is the
25 Potomac. Nothing more than just giving

1 more buffer to --- giving the buffer to
2 these wetlands. And I think you can see
3 that marked on the map where we gave, I
4 believe, the 300-foot buffer to those
5 wetlands. This area ---.

6 BY ATTORNEY YEAGER:

7 Q. Hold on just a second. I want to
8 mark what we're talking about.

9 A. That's fine.

10 ATTORNEY YEAGER:

11 Let's mark this as Four,
12 but I want to make sure we got
13 the sets.

14 (Craven Exhibit Four
15 marked for
16 identification.)

17 A. That's my original.

18 ATTORNEY YEAGER:

19 Okay. So why don't we put
20 this ---.

21 A. I don't want to mark that.

22 ATTORNEY YEAGER:

23 Why don't we put that
24 away. Peter, can I ask you ---?

25 MR. PRICE:

1 I got it.

2 ATTORNEY YEAGER:

3 Thanks.

4 OFF RECORD DISCUSSION

5 ATTORNEY YEAGER:

6 So we've marked --- this
7 is Craven Four.

8 BY ATTORNEY YEAGER:

9 Q. And Craven Four is the approved
10 plan for the Potomac site; correct?

11 A. Correct.

12 Q. And this shows a red pen marking
13 and it shows --- I'm really bad with
14 colors but --- to me it's not red, it's
15 kind of a pinkish ---

16 ATTORNEY FERRENCE:

17 Pinkish.

18 BY ATTORNEY YEAGER:

19 Q. --- area that's already shaded.
20 That's what you got --- the pinkish area
21 is what you received as part of the
22 submittal from the company?

23 A. Yes.

24 Q. Okay. And the red pen mark is
25 what you added?

1 A. Correct.

2 Q. So the pinkish area --- when you
3 say the buffer, that's --- there's
4 nothing --- that's in what you received
5 already; correct?

6 A. That's correct. You can see by
7 the map Synagro already --- I believe
8 that there's another document that asked
9 for the 300-foot isolation distance to
10 --- giving them an extra buffer. And
11 this, I don't believe, is that document
12 because I don't see any distance spelled
13 out in there. But I believe that
14 Synagro, when they mapped this, they
15 mapped the wetland, they gave that
16 buffer. You can see the buffer to the
17 other wetland on what would be --- well,
18 there's one on the west side, there's
19 one on the east side.

20 Down in the lower corner or in
21 the southern part of the map here next
22 to the development, there was an area
23 circled in red. And that was the area
24 that we tested and saw seemed to have
25 hydric conditions and seemed to appear

1 to be a wetland. And then we came out
2 of that and we buffered the edge of that
3 where we had suitable soil. We buffered
4 that 300 feet. So that's what you see
5 is the hashed red penned area.

6 Q. Okay. The blue line is surface
7 water; correct, if you look in the key?

8 A. Yeah, if you look in the key. I
9 believe that if you look on a map,
10 though, if you look on an aerial, that's
11 not necessarily indicative to surface
12 water as it is a wetland area.

13 Q. Now, when I see the sections on
14 the upper left and the right side where
15 it says wetland, ---

16 A. Yep.

17 Q. --- and I see a blue line, that
18 doesn't purport to reflect the
19 boundaries of the wetland area, does it?

20 A. That would be an estimation, I
21 believe. I believe if you look at ---
22 Synagro's 300-foot isolation distance
23 was around the edge of that tree line,
24 is what they followed. Neither Synagro
25 or I recall walking down into the woods

1 and finding that boundary. I believe
2 they marked the wood line ---

3 Q. Okay.

4 A. --- as the 300-foot --- giving it
5 an actual --- you know, a greater buffer
6 than what's shown on this map.

7 Q. So if you look, you see where
8 number --- where there's an area that's
9 outside of the field boundary to the
10 north --- I'm sorry, to the southwest of
11 segment four, section four?

12 A. Yeah.

13 Q. This area (indicating)?

14 A. Yeah.

15 Q. Did you shovel test over there at
16 all?

17 A. I believe we shovel tested most
18 of the fields that I ---.

19 Q. I'm asking ---.

20 A. Specifically, can you point on a
21 map where?

22 Q. Yeah, outside of the field area.

23 A. Oh, in the woods?

24 Q. Yeah.

25 A. No, I did not test in the woods.

1 Q. Okay. So as soon as we go off
2 the field in the area beyond what's
3 called the field boundary, you didn't
4 test at all?

5 A. I did not test outside of the
6 field boundary.

7 Q. Okay. So you don't know what the
8 boundaries of the wetlands or hydric
9 soils are southwest of area four, for
10 example?

11 A. My recollection of these woods is
12 it's steep down to the wetland.

13 Q. Okay.

14 A. So yeah, my professional
15 experience, there's not wetlands on
16 slopes. They would be at the bottom of
17 the slope.

18 Q. Okay. Greater runoff concerns,
19 though, when you've got steep slopes;
20 right?

21 A. It's wooded. It's heavily
22 vegetated. Is there runoff? Yeah,
23 there would still be runoff.

24 Q. Okay. Did you do any of your
25 slope measurements off --- outside of

1 the field boundary?

2 A. No.

3 Q. If you wanted to understand
4 offsite impacts, wouldn't you have to do
5 that?

6 A. It's the application site that
7 I'm looking at.

8 Q. You're not looking at offsite
9 impacts?

10 A. I said I'm looking at the
11 application site. I'm not looking at
12 --- I'm not looking at other areas that
13 we're not land applying on --- or that
14 aren't being proposed to be land applied
15 on.

16 Q. The way you have the file set up,
17 you have a different file for each of
18 the sites; correct?

19 A. Correct.

20 Q. So you have some documents that
21 show up --- you make a copy of it so
22 you've got a --- it's the same document,
23 but you've got it in each file; is
24 that ---?

25 A. No, that's incorrect.

1 Q. Oh, okay.

2 A. There's three separate
3 applications filed.

4 Q. Okay. It may be the same
5 document used in each?

6 A. For example?

7 Q. For example, I don't know. I'm
8 asking you. Might it be the same
9 document used? If you don't know,
10 that's fine.

11 A. I don't know.

12 Q. All right.

13 A. Yeah. There's three separate
14 applications filed, so I'm not ---.

15 Q. The soil --- well, this is the
16 --- I'll just show you the cover page
17 for the soil --- for the soil
18 conservation plan.

19 ATTORNEY GOLDSTEIN:

20 What's the Bates number?

21 ATTORNEY YEAGER:

22 This one is 223. It says

23 Angle 123.

24 A. Okay.

25 BY ATTORNEY YEAGER:

1 Q. Do you know whether it's the same
2 one for each if it says that? Does that
3 tell you anything?

4 A. I'm not sure if --- I can't
5 recall if what was submitted was the
6 whole plan for each farm or if the part
7 for each specific farm was taken out and
8 then put into that. I can't recall
9 whether the whole plan was submitted for
10 all three farms or whether Potomac was
11 taken out, Sunrise was taken out and
12 Stone Church was taken out and submitted
13 separately. I can't recall.

14 Q. Okay. We're going to --- I'm
15 going to look at page 261, which is the
16 other Fish and Boat Commission letter
17 from the file, 261 to 262.

18 ATTORNEY FERRENCE:

19 What's the date of that
20 letter?

21 A. November 25th.

22 ATTORNEY FERRENCE:

23 Same date?

24 A. Yeah, same date.

25 OFF RECORD DISCUSSION

1 BY ATTORNEY YEAGER:

2 Q. Are you familiar with what we've
3 marked as Craven Five?

4 (Craven Exhibit Five
5 marked for
6 identification.)

7 A. It appears that it was --- it was
8 submitted also with the Sunrise package
9 for the Sunrise farm. I've probably
10 seen it with that package.

11 BY ATTORNEY YEAGER:

12 Q. What species was of concern with
13 this?

14 A. I can't recall. One of the other
15 letters would have --- could have been
16 more specific on it.

17 Q. We're going to mark 246 to 250.
18 This is the PNDI review.

19 (Craven Exhibit Six marked
20 for identification.)

21 ATTORNEY YEAGER:

22 All right, Michael. Here
23 you go.

24 ATTORNEY FERRENCE:

25 Okay. Thanks. This is

1 the PNDI?

2 ATTORNEY YEAGER:

3 Yeah, it's the review
4 report.

5 ATTORNEY FERRENCE:

6 Okay.

7 OFF RECORD DISCUSSION

8 BY ATTORNEY YEAGER:

9 Q. Does this tell you what the
10 species is?

11 A. No, it doesn't, but I believe the
12 US Fish and Wildlife Service response
13 might have had what the species is. All
14 I can tell you is that the Fish and Boat
15 Commission responded by saying, given
16 the nature of the proposed project, the
17 immediate location of the current status
18 and nearby element (phonetic)
19 occurrence, no adverse impacts are
20 expected to this species of special
21 concern. But I'm not sure. I think
22 it's on the US Fish and Wildlife Service
23 one.

24 Q. Well, we'll have to --- let's see
25 if we can locate that in the file.

1 A. Okay.

2 ATTORNEY YEAGER:

3 Michael, I didn't --- I
4 don't believe we have that
5 document from the Feds.

6 ATTORNEY FERRENCE:

7 Okay.

8 ATTORNEY YEAGER:

9 So if we could look for
10 that?

11 ATTORNEY FERRENCE:

12 Sure.

13 ATTORNEY YEAGER:

14 And it's possible I just
15 don't have it marked, but ---
16 okay.

17 ATTORNEY FERRENCE:

18 It was in our file;
19 correct, Tim?

20 A. It should be.

21 ATTORNEY FERRENCE:

22 Okay.

23 A. If it was submitted, I
24 believe ---.

25 ATTORNEY FERRENCE:

1 I'll get you a copy.

2 ATTORNEY YEAGER:

3 Okay.

4 ATTORNEY FERRENCE:

5 I'll locate it.

6 ATTORNEY YEAGER:

7 Why don't we mark the
8 other approved plans just so that
9 we've got a clear record on them?
10 Julie, can I ask you to ---?

11 ATTORNEY GOLDSTEIN:

12 Sure. I'll grab them.

13 OFF RECORD DISCUSSION

14 ATTORNEY YEAGER:

15 So we'll mark as --- I'm
16 sorry.

17 ATTORNEY FERRENCE:

18 These are approved maps;
19 right?

20 ATTORNEY YEAGER:

21 Approved maps.

22 ATTORNEY FERRENCE:

23 Okay.

24 ATTORNEY YEAGER:

25 I'm handing it to you.

1 ATTORNEY FERRENCE:

2 Okay.

3 ATTORNEY YEAGER:

4 I've just handed you Stone
5 Church.

6 ATTORNEY FERRENCE:

7 Okay. Stone Church would
8 be Craven Seven?

9 OFF RECORD DISCUSSION

10 (Craven Exhibit Seven
11 marked for
12 identification.)

13 ATTORNEY YEAGER:

14 And then Sunrise. So
15 Sunrise will be Eight.

16 (Craven Exhibit Eight
17 marked for
18 identification.)

19 OFF RECORD DISCUSSION

20 ATTORNEY YEAGER:

21 All right. I just want to
22 make sure the record is clear.
23 So what we've marked as Seven is
24 the approved map for Stone Church
25 and what we've marked as Eight is

1 the approved map for Sunrise.

2 ATTORNEY FERRENCE:

3 Correct.

4 A. Correct.

5 BY ATTORNEY YEAGER:

6 Q. Okay.

7 A. Did we not mark Potomac?

8 Q. We did. We had done that
9 earlier.

10 A. Oh, okay.

11 OFF RECORD DISCUSSION

12 BY ATTORNEY YEAGER:

13 Q. And if there were wells
14 identified for each of these sites,
15 those wells would be reflected on these
16 maps?

17 A. Typically, we try to identify all
18 of the --- all of the wells. If we
19 cannot identify the well, if we can't
20 visually see it without going onto the
21 property, we would give that property
22 line a 300-foot buffer, well isolation
23 distance. That's typically what
24 happens.

25 Q. Is there a difference between

1 buffer and isolation distance?

2 A. They're the same.

3 Q. Okay.

4 A. I'm sorry.

5 Q. That's okay. I just want to make
6 it clear. That's for offsite wells?

7 A. Or any onsite potable drinking
8 water wells that the landowner did not
9 give consent to isolate.

10 Q. Okay.

11 A. I misspoke. Consent to waive
12 that well isolation distance waiver.

13 OFF RECORD DISCUSSION

14 ATTORNEY YEAGER:

15 All right. We're going to
16 mark Bates page 287 to 289 as
17 Craven Nine.

18 (Craven Exhibit Nine
19 marked for
20 identification.)

21 ATTORNEY YEAGER:

22 And that's one of the
23 30-day notice forms.

24 ATTORNEY FERRENCE:

25 I'm sorry. Craven Nine is

1 what? What is that again?

2 ATTORNEY YEAGER:

3 It's one of the 30-day
4 notice forms.

5 ATTORNEY FERRENCE:

6 Okay.

7 ATTORNEY YEAGER:

8 I'm handing it to you.

9 ATTORNEY FERRENCE:

10 Okay. And that's for
11 which farm or doesn't it really
12 matter?

13 ATTORNEY YEAGER:

14 It doesn't. This is Stone
15 Church.

16 ATTORNEY FERRENCE:

17 Okay.

18 BY ATTORNEY YEAGER:

19 Q. Okay. Can you walk me through
20 what you do with this when you get it or
21 what you did with this when you got it?

22 A. I open up the package to make
23 sure --- Attachment A obviously has to
24 be there, location. Yeah, so Permittee
25 information. Most of that's pretty

1 standard stuff that Synagro submits ---
2 in this case, Synagro. Then I look at
3 the site information. I'll start to put
4 this information into eFax and develop
5 the site and the facility and all of
6 that whole process. Included in that,
7 GPS coordinates, make sure that the site
8 is where they say it's at. Then I'll go
9 through --- and I have my checklist that
10 I start, my inspection report that I
11 start, that coincides when I start to
12 look at this. Make sure that the
13 consent agreement is there, make sure of
14 everything that's supposed to be there
15 in the inspection report. Go through,
16 make sure that if manure would be
17 generated, something of that nature,
18 that, okay, now I have to make sure that
19 a manure management plan is there.
20 There's other stuff that would have to
21 be required. That wasn't required in
22 this case because there's no other
23 manure being generated at these three
24 farms that I'm aware of.

25 Go through, make sure the

1 conservation plan was submitted. I
2 really don't know if it's implemented
3 until I go out to the site. And take a
4 look that the map is submitted as far as
5 all of the A through K --- or A through
6 J. Those things are made note on the
7 map. Again, we might find stuff during
8 our inspection that would change some of
9 those items that we were unaware of
10 before. Look at the stream, make sure
11 that that designation is appropriate.
12 Make sure that they've got all their
13 boxes checked. Make sure they signed
14 and ---.

15 Q. You said make sure they have all
16 their boxes checked. So if a box isn't
17 checked, do you follow up with them?

18 A. Yeah. I mean, I make sure that
19 if they check a box --- that if they
20 check a box that the manure management
21 plan is there, that there's a manure
22 management plan.

23 Q. Okay.

24 A. So yeah, I'm just verifying that
25 what they say is submitted is actually

1 there.

2 Q. Okay. But not verifying the
3 accuracy of what they've checked off?

4 A. Not at that time necessarily.

5 Q. Okay. Now, there's a requirement
6 to --- is there a requirement to attach
7 a Natural Resource Conservation Service
8 map as reflected in the --- on the
9 second page where it says additional
10 attachments? Is that part of the
11 requirements?

12 A. Yeah, if you read the --- I
13 believe it's in the instructions for the
14 30-day notice, and it's also in the
15 regulations. It can also be E&S,
16 erosion and sedimentation control plan.
17 It doesn't necessarily have to be a
18 conservation plan as what was submitted,
19 but ---.

20 Q. I wasn't asking about a
21 conservation plan. I was asking about
22 the ---

23 A. I thought you asked the NRCS ---.

24 Q. --- map.

25 A. That's submitted in the

1 conservation plan.

2 Q. Okay. Any requirements about
3 what needs --- which data from the NRCS
4 system needs to be delineated on the
5 map?

6 A. I'm not sure what the
7 requirements --- that the conservation
8 plan or that the planner has to put in
9 for the conservation plan. I'm not a
10 planner, not --- I don't have a license
11 to write conservation plans.

12 Q. Okay. Do the regs have specific
13 requirements for what needs to be in a
14 conservation plan?

15 A. I believe there are regulations
16 which talk about a conservation plan. I
17 don't know if they're all encompassing
18 or if the NRCS has regulations above and
19 beyond what the Department has. I'm not
20 sure.

21 Q. And do you know whether Chapter
22 --- there's a reference here to Chapter
23 93.

24 A. Uh-huh (yes).

25 Q. Do you know whether Chapter 93

1 incorporates the DRBC standards at all?

2 A. I don't know what our regulations
3 --- when they were developed or how they
4 correlate with DRBC. I don't know how
5 DRBC affects our regulations.

6 Q. So when you're reviewing this,
7 you're not able to review it for
8 compliance with any DRBC standards;
9 correct?

10 A. I'm reviewing this, whether it's
11 in compliance with our --- with the
12 regulations.

13 Q. Well, I asked you ---.

14 A. With Pennsylvania's regulations.

15 Q. Yeah, but I asked you whether
16 Pennsylvania's regulations incorporate
17 the standards for the DRBC, and you
18 don't know whether they do?

19 A. I can't answer that. I don't
20 know.

21 Q. So you can't determine whether
22 any application is consistent with the
23 standards set out by the DRBC; correct?

24 A. That'd be correct.

25 Q. Is it your job overall to

1 determine compliance with Chapter 93?

2 A. Yes.

3 Q. Okay.

4 A. That that site is not exceptional
5 value to that extent, or whether it's
6 --- what the stream classification is.

7 Q. Are you modifying? Are you
8 saying what the stream classification
9 is?

10 A. What the classification is of
11 that stream, that's what --- that's as
12 far as I'm looking at Chapter 93.

13 Q. Okay. I'm going to mark Bates
14 page 326.

15 ATTORNEY FERRENCE:

16 Craven Ten?

17 ATTORNEY YEAGER:

18 Here you go, Michael.

19 ATTORNEY FERRENCE:

20 Craven Ten?

21 ATTORNEY YEAGER:

22 Yes.

23 (Craven Exhibit Ten marked
24 for identification.)

25 OFF RECORD DISCUSSION

1 BY ATTORNEY YEAGER:

2 Q. Looking at Craven Ten, this is
3 for Stone Church.

4 A. Okay.

5 Q. There's a marking on the ---
6 there's kind of three different --- or I
7 think there's five different parcels
8 here. But there's a couple different
9 fields and there's a rectangular field
10 toward the --- on the bottom half of the
11 map. And if you will --- and you see
12 there's some white lines that run
13 through that ---

14 A. Yes.

15 Q. --- on the map. This is a bad
16 copy. It's a black-and-white ---.

17 A. Where are you looking, at this
18 field (indicating)?

19 Q. Yeah. There's a marking there.
20 There's a line that goes across from ---
21 if the top of the page is north, ---

22 A. Yeah.

23 Q. --- that goes roughly west to
24 east, east to west, ---

25 A. Okay.

1 Q. --- but it kinds of dips down,
2 slightly U-shaped.

3 A. Okay.

4 Q. Do you see there's a symbol on
5 that line?

6 A. Okay.

7 Q. Looking at the map legend on the
8 second page, ---

9 A. Okay.

10 Q. --- that appears to say wet spot.

11 A. Okay.

12 Q. Do you see that?

13 A. I do.

14 Q. Is that something that you recall
15 identifying when you reviewed these ---
16 the submittal from Synagro?

17 A. I do not recall any wet spots in
18 that field when we went out and did our
19 field evaluation or review.

20 Q. Well, I'm asking about when you
21 reviewed the documents right now.

22 A. Yeah. Again, as I'll restate,
23 when I see the conservation plan --- if
24 this was submitted in the conservation
25 plan, which I'm assuming that it was, I

1 don't typically go through them page by
2 page. You know, if I'm looking through
3 it, I'll buzz through it. Something
4 like that would not jump out at me
5 typically. I would go out and evaluate
6 the field to make sure that those soils
7 are suitable.

8 Q. Okay. All right. This is page
9 342 to 246.

10 A. I'm sorry.

11 Q. And this is the PNDI review
12 report for Stone Church.

13 ATTORNEY FERRENCE:

14 This will be Craven 11?

15 ATTORNEY YEAGER:

16 Yeah.

17 (Craven Exhibit 11 marked
18 for identification.)

19 OFF RECORD DISCUSSION

20 BY ATTORNEY YEAGER:

21 Q. Are you familiar with this?

22 A. It appears to be familiar. It
23 appears to be the same PNDI that was
24 submitted with the 30-day notice
25 package.

1 Q. And did you do anything to
2 ensure ---

3 ATTORNEY YEAGER:

4 Here you go, Michael.

5 BY ATTORNEY YEAGER:

6 Q. --- that the avoidance measures
7 that were noted on this form were
8 addressed?

9 A. I believe we did.

10 Q. What did you do?

11 A. I believe that we isolated those
12 areas that those agencies requested, and
13 those responses are not attached in this
14 Craven 11 exhibit. I don't know where
15 those response are.

16 Q. Yeah, we're getting there.

17 A. Okay.

18 Q. But everything for some reason
19 was separated in the file that we got.

20 ATTORNEY FERRENCE:

21 Obviously, I had nothing
22 to do with it, or maybe I did and
23 that's why it's separated.

24 A. I didn't copy them. I didn't do
25 it ---.

1 ATTORNEY FERRENCE:

2 No, I'm not the best at
3 copying, so ---.

4 A. I'm not sure. In my file, they
5 all generally go together, so ---.

6 BY ATTORNEY YEAGER:

7 Q. The letter goes next to the ---?

8 A. Yeah. I would keep it all
9 together so that I can find it, not like
10 this. I don't think that was an
11 intention on our part.

12 ATTORNEY FERRENCE:

13 I can attest with absolute
14 100-percent certainty it was not
15 intentional.

16 A. Right.

17 BY ATTORNEY YEAGER:

18 Q. Do you know what the species was?

19 A. Again, I think it's on the US
20 Fish and Wildlife Service response,
21 which I don't see that. I only see the
22 Fish and Boat Commission exhibit, Craven
23 12, in front of me.

24 (Craven Exhibit 12 marked
25 for identification.)

1 ATTORNEY YEAGER:

2 Here you go, Michael. I
3 put it down right behind your
4 stuff. You got it? Yep.

5 ATTORNEY FERRENCE:

6 Yeah, got it.

7 BY ATTORNEY YEAGER:

8 Q. If you've got an intermittent ---
9 do you ever go about trying to identify
10 the location of perennial and
11 intermittent streams?

12 A. Absolutely, on the application
13 site, on the farm.

14 Q. Okay. How do you do that if it's
15 --- if you go out when there hasn't been
16 --- when it's not being intermittent?

17 A. That's a good question. I would
18 look --- generally, I'm pretty
19 conservative in the aspect that if we
20 see anywhere where there would be
21 concentrated flow, that we would call an
22 intermittent stream, and we would
23 isolate and buffer that. And you can
24 see that on some of the other exhibits
25 here, where we've mapped and indicated

1 those areas where we saw concentrated
2 flow. We may not necessarily see a
3 stream or something like that.

4 And on the other side of things,
5 I've had farmers tell me, no, that
6 stream is intermittent and it's running,
7 and I say, well, as long as that
8 stream's running, I'm calling it
9 perennial. If you can demonstrate to me
10 at some point during the year that it is
11 intermittent, fine, but I err on the
12 side of caution when it comes to those
13 isolation distances.

14 Q. Well, sometimes you're supposed
15 to have the isolation distance from both
16 perennial and intermittent, such as ---
17 with some of the PNDI hits; right?

18 A. I don't recall what the responses
19 were for the PNDI hit and avoidance
20 measures.

21 Q. If you go back to the prior
22 exhibit, the PNDI hit ---.

23 A. Okay.

24 ATTORNEY GOLDSTEIN:

25 Craven 11?

1 ATTORNEY YEAGER:

2 Yeah.

3 A. Okay.

4 BY ATTORNEY YEAGER:

5 Q. You see there's a location for
6 signatures certifying that they'll
7 implement the avoidance measures?

8 A. Uh-huh (yes).

9 Q. Yes?

10 ATTORNEY FERRENCE:

11 Yes?

12 A. Yes.

13 BY ATTORNEY YEAGER:

14 Q. When you're looking at these ---
15 at the documents that are submitted with
16 the 30-day notice, is that part of what
17 you're looking for, to see whether
18 that's been signed?

19 A. I typically don't look at whether
20 that was signed or not. I look at what
21 the PNDI results were, make sure that
22 those were addressed, look at the
23 acreage, make sure that the acreage is
24 what is actually similar or at least
25 represents what is being land applied

1 on, and I would make sure that the land
2 application map shows those buffers or
3 isolation distances if needed.

4 Q. Looking at where it says PFBC
5 species on the PNDI review report, which
6 is on the second page --- see under
7 Pennsylvania Fish and Boat Commission
8 response?

9 A. Yeah, PFBC species?

10 Q. Yeah.

11 A. Uh-huh (yes).

12 Q. It says note, the PNDI tool is a
13 primary screening tool and a desktop
14 review may reveal more or fewer species
15 than what is listed below. What's a
16 desktop review?

17 A. PA Fish and Boat Commission is
18 sitting at a desktop reviewing the
19 information that they have in their
20 system. They're not actually going out
21 to the field and verifying or looking
22 for sensitive species. That's my
23 understanding of what their desktop
24 review is.

25 Q. Okay. And neither are you;

1 correct?

2 A. I'm not qualified to look for
3 sensitive species ---

4 Q. Okay.

5 A. --- for the Pennsylvania Fish
6 Commission, so yes, that's correct.

7 Q. You're not requiring the
8 Applicant to submit further review
9 material; correct?

10 A. That's correct.

11 Q. Do you have the ability to do
12 that?

13 A. I guess I could.

14 Q. Have you ever done that?

15 A. No, I have not.

16 OFF RECORD DISCUSSION

17 BY ATTORNEY YEAGER:

18 Q. Well, before I mark this, this is
19 Bates page --- I'm sorry, Bates page
20 434. Do you recall ever having seen
21 that picture before?

22 A. Only in the files that were
23 submitted that Mike Ferrence --- that
24 you made available for me to see just
25 the other --- the other day. That's the

1 first time I saw that picture. I
2 believe that was one of those pictures
3 that's on the shared file folder.

4 Q. Okay. I'm sorry. That's on what
5 shared file folder? Is that an
6 internal ---?

7 ATTORNEY FERRENCE:

8 Yes, it is.

9 ATTORNEY YEAGER:

10 Oh, okay. All right. I
11 don't want to hear about any of
12 the ---

13 A. Oh, I'm sorry.

14 ATTORNEY YEAGER:

15 --- internal stuff.

16 That's all right.

17 OFF RECORD DISCUSSION

18 BY ATTORNEY YEAGER:

19 Q. All right. I'm not going to mark
20 these because you haven't seen them. I
21 just want to ask you some questions ---

22 A. Okay.

23 Q. --- about the features that you
24 see here generally.

25 ATTORNEY YEAGER:

1 So if you want to look at
2 this before I show it to him?

3 ATTORNEY GOLDSTEIN:

4 Don't you think it would
5 be helpful for the record, you
6 think, or ---?

7 ATTORNEY YEAGER:

8 I'm just trying to speed
9 it up.

10 ATTORNEY GOLDSTEIN:

11 Okay.

12 ATTORNEY YEAGER:

13 Yeah, because we all have
14 the Bates documents.

15 ATTORNEY GOLDSTEIN:

16 Okay. I was just thinking
17 that ---.

18 ATTORNEY YEAGER:

19 So I'm going to identify
20 the Bates ---.

21 ATTORNEY GOLDSTEIN:

22 That's fine.

23 ATTORNEY YEAGER:

24 Yeah.

25 BY ATTORNEY YEAGER:

1 Q. So this is SFUMBT document to
2 produce 436. And it's a photo from
3 12/29/13 from your --- using your lingo,
4 how would you describe that water flow
5 there? What would you describe that as?

6 A. Water flowing in a ditch through
7 a culvert pipe.

8 Q. Okay. Does that reflect a ---
9 would you consider that to be waters of
10 the Commonwealth, would you consider it
11 to be an intermittent stream, perennial
12 stream? How would you classify it?

13 A. It's waters of the Commonwealth.
14 It's a ditch. I don't know any other
15 information, whether or not it's
16 intermittent by just looking at ---.

17 Q. Okay. All right. I'll leave it
18 at that. And my understanding from your
19 prior answers were that you don't look
20 at any other data besides what the
21 Applicant has submitted before going out
22 to get a better understanding of the
23 site characteristics. You don't look at
24 Google Earth or at county mapping data,
25 that kind of stuff?

1 A. I might look at Google Earth to
2 --- or we don't have Google Earth. I
3 might look at Google Maps to get an idea
4 of where the location is so I can get
5 there easily, but that's about it.

6 Q. And I understood you before to
7 say that you don't review information
8 from the Natural Heritage Inventory?

9 A. That's correct.

10 Q. Have you received any documents
11 from Synagro after your approval?

12 A. Not that I recall.

13 Q. Have you had any communication
14 with anybody at Synagro about this
15 project since your approval?

16 A. Nothing specific other than, hey,
17 we've got the appeal coming up, but
18 that's about it.

19 Q. Well, any discussion about any of
20 the issues identified in the appeal?

21 A. No.

22 Q. Who have you spoken with?

23 A. Pete Price.

24 Q. Anyone else?

25 A. That's all that I recall speaking

1 with.

2 Q. On how many different occasions?

3 A. Regarding the appeal? A couple.

4 Q. Okay. And what's been talked
5 about?

6 A. Like I said, just that, hey, ---
7 we talk on a regular basis, Pete and
8 I, ---

9 Q. Okay.

10 A. --- because I do a lot of
11 inspections. Other than we have --- you
12 know, I'll see you on Thursday --- or
13 Tuesday when we've got the, you know,
14 the deposition.

15 Q. All right.

16 A. Other than that, nothing ---
17 nothing technical or anything like that.

18 ATTORNEY YEAGER:

19 I'm getting there. Okay.
20 Let's have this marked. Oh, I'm
21 sorry, it looks like it's two
22 pages. Yeah, we're going to have
23 this marked. Here you go,
24 Michael.

25 ATTORNEY FERRENCE:

1 Okay. This is what,
2 Craven 13?

3 (Craven Exhibit 13 marked
4 for identification.)

5 OFF RECORD DISCUSSION

6 BY ATTORNEY YEAGER:

7 Q. So the first page is Synagro 78
8 and the second is Synagro 222. And
9 you'll see that they have the same date
10 on them, both 10/7/13.

11 A. Okay.

12 Q. I'll represent to you that 222,
13 the second page, was in the DEP's file,
14 and that they both are images, maps of
15 the Sunrise property, but that the ---
16 that 78 was not in the DEP file. Do you
17 recall ever having seen 78 before, the
18 first of those pages?

19 A. I do not recall ever seeing that
20 map.

21 Q. Do you see the blue dots?

22 A. Yes.

23 Q. Would you agree with me those are
24 wells?

25 A. As the key identifies them and

1 also as I identified them on Exhibit
2 Eight, I believe those are the wells
3 that we observed in the field during my
4 inspection.

5 Q. Okay. Now, the one that's
6 offsite --- I'm sorry, the one that's
7 not in the DEP file, the number 78, has
8 additional wells mapped offsite as well;
9 correct?

10 A. It appears that way, yes.

11 Q. Is there ---?

12 A. Offsite, you mean along Price
13 Lane and one along the pond?

14 Q. Yeah, beyond the field boundary.

15 A. Correct.

16 Q. Is there a different --- are
17 there different types of dots used on
18 78? Some look darker blue than others.

19 A. They appear to be the same color.

20 Q. Okay. This is the debate I have
21 with my associates.

22 A. Oh, okay.

23 Q. You settled it in my favor.

24 A. Okay. I'm like, am I missing
25 something?

1 Q. So do you have any understanding
2 as to why there would be two maps from
3 --- from your work on these projects and
4 working with Synagro generally, do you
5 have any understanding as to why the map
6 that would be in the DEP's file would
7 have fewer wells identified than the map
8 that's not?

9 A. I can't answer that, except for
10 the fact that when I did my site
11 inspection, there was corn that had been
12 harvested in the fall, and there was no
13 vegetation, and any well cap or well
14 casing was clearly visible.

15 So the four or the five that were
16 indicated on the map were the only ones
17 that were visible during my inspection.
18 But I can't answer for what might have
19 been closed or what this map indicates.
20 I didn't see --- I didn't see that
21 represented out in the field.

22 Q. Okay. And you were out in the
23 field after this --- after the date of
24 these maps; correct?

25 A. That's correct.

1 Q. Did you use the information you
2 had in the application packet, in the
3 materials that was submitted with the
4 30-day notice, to assist you out in the
5 field?

6 A. Sure.

7 Q. Before we mark it, this is a
8 topographical map, Bates number Synagro
9 87. Do you recall seeing maps like this
10 in the file?

11 A. I've seen lots of maps. I can't
12 recall if I specifically saw that map or
13 not.

14 Q. You see the kind of green boxes
15 that are reflected here?

16 A. Yep. Yes.

17 Q. Reminds me of your shirt. Do you
18 know what those represent on a map like
19 this?

20 A. I do not know without seeing a
21 key.

22 Q. Okay.

23 ATTORNEY YEAGER:

24 I'm handing you, Michael
25 --- this is ---.

1 ATTORNEY FERRENCE:

2 Fourteen (14).

3 ATTORNEY YEAGER:

4 Is that what we're up to?
5 (Craven Exhibit 14 marked
6 for identification.)

7 BY ATTORNEY YEAGER:

8 Q. This is Synagro 88. Do you
9 recall seeing this in the file?

10 A. I do not recall seeing this
11 submitted in the 30-day notice.

12 Q. Do you see where it says POW ---

13 A. Yes.

14 Q. --- at the ponds?

15 A. Yes.

16 Q. Do you know what that stands for?

17 A. I'm not sure what POW stands for
18 on this map.

19 Q. And is this an accurate
20 representation for the Sunrise site of
21 where the water resources are on the
22 site or --- and around the site?

23 Allegheny Creek is noted, tributary
24 04724 to Delaware River.

25 A. It appears to be.

1 Q. Is this an area --- are the areas
2 where these sites are located at
3 headwaters for the Allegheny?

4 A. I'm not sure.

5 Q. Do you know what that means?

6 A. Where a spring starts and the
7 start of that spring would be, that
8 would be considered a headwater. There
9 very well may be other --- you know, as
10 you indicated about springs on the
11 Zimmerers' property which I was unaware
12 of and did not observe. That would be
13 considered certainly, I think,
14 headwaters, where waters start.

15 Q. Okay. Does the presence of
16 headwater streams impact your review in
17 any way?

18 A. No.

19 ATTORNEY YEAGER:

20 All right. Bear with me a
21 second. I'm going to try to see
22 if I can wrap up.

23 OFF RECORD DISCUSSION

24 BY ATTORNEY YEAGER:

25 Q. Do you know for any of the sites,

1 based on the plan that Synagro submitted
2 whether sludge would be exposed to
3 rainfall prior to the --- any
4 stabilization via crop cover?

5 A. No.

6 Q. You don't know?

7 A. Can you repeat the question? I'm
8 sorry.

9 Q. Do you know whether --- under the
10 plans that were submitted by Synagro ---

11 A. Right.

12 Q. --- whether the sludge would be
13 exposed to rainfall prior to any
14 stabilization via crop cover?

15 A. Can you define what you mean by
16 stabilization? I'm sorry, I'm ---.

17 Q. So crop cover is used to
18 stabilize a site, stabilize the soils;
19 is that right? Does crop cover have a
20 use to help prevent erosion?

21 A. Sure, it can.

22 Q. Okay.

23 A. Yeah.

24 Q. And so in that way does crop
25 cover help stabilize the site?

1 A. Okay. I'm sorry. Can you
2 rephrase the --- I'm not really sure
3 what you're trying to ask.

4 Q. What role does crop cover play
5 when you are applying sludge to a site?

6 A. Plant material, organic material,
7 crop cover, as you call it, can help
8 stabilize the site by minimizing soil
9 erosion during a rain event.

10 Q. Okay. And is that a favorable
11 thing?

12 A. Sure.

13 Q. Why?

14 A. We want to minimize any soil loss
15 from the site.

16 Q. Why?

17 A. That is what the --- that's what
18 the purpose of the conservation plan is,
19 is to minimize soil loss. That is a
20 valuable asset to the farmer and to the
21 land. We don't to see that leaving the
22 site.

23 Q. Does it also help prevent the
24 sludge from leaving the site via runoff?

25 A. Sure.

1 Q. Okay.

2 A. Yes.

3 Q. And was there crop cover
4 contemplated as part of the conservation
5 plan for any of these sites?

6 A. I'm not sure, again, what the
7 specifics are for the conservation plan.

8 Q. Okay. And even if I showed them
9 to you so that you were reminded what
10 they were, you're not in a position as
11 you sit here today, just like you
12 weren't then, to assess adequacy to
13 prevent runoff; correct?

14 A. That'd be correct.

15 Q. And do you know whether the plan
16 contemplated vegetative buffers at all?

17 A. I can't recall.

18 Q. Okay. Do you know what role
19 vegetative buffers play?

20 A. They would be a best management
21 practice to minimize soil loss off of a
22 site.

23 Q. Would they also help minimize
24 sewage sludge running off the site?

25 A. Absolutely.

1 Q. Whenever I've asked you similar
2 questions, your answer both times was
3 about the soil loss rather than about
4 the sludge. Is that a focus for you?

5 A. No, you're wrong. I look at soil
6 loss, biosolids, organic material, all
7 the same.

8 Q. Okay.

9 A. Okay. So when I say soil loss, I
10 would mean organic material, any
11 organics leaving the site or biosolids
12 leaving the site. I'm not trying to
13 just say soil, but ---

14 Q. Okay.

15 A. --- anything that would be land
16 applied, whether it be chemical
17 fertilizers, whatever it may be.

18 Q. Okay. Do you know from your work
19 whether buffers get overloaded over
20 time?

21 A. I don't see evidence of buffers
22 being land applied on, so I'm not really
23 sure what your question is.

24 Q. Do buffers play a filtering role,
25 a vegetative buffer?

1 A. Yes. Vegetative buffers could
2 play potentially a filtering role, yes.

3 Q. Okay. And do they lose that ---
4 do they lose effectiveness --- can they
5 lose effectiveness as a filter over time
6 if they get overloaded?

7 A. If they're not maintained
8 properly, I would say yes.

9 Q. Okay.

10 A. If they're maintained properly
11 according to the conservation plan, then
12 they're not going to get overloaded,
13 they're not going to --- but if they ---
14 if that buffer is meant to be in place
15 and that buffer is killed or wiped out,
16 then, yes, there's a potential.

17 Q. Okay.

18 A. That's why the buffer is there.

19 Q. Or overloaded? If you
20 don't ---.

21 A. No.

22 Q. If that's not a concept ---.

23 A. That's what the buffer is there
24 for, to --- or that vegetative buffer is
25 to protect anything that were to run

1 off, or a filter like you indicated.

2 Q. So the design of the buffer, of
3 the vegetative buffer, might impact
4 whether it would be successful or not;
5 correct?

6 A. Can you restate that? I'm sorry.

7 Q. The design of the vegetative
8 buffer ---

9 A. Yeah.

10 Q. --- might be important in
11 understanding whether it's going to be
12 successful in preventing runoff and
13 preventing erosion from leaving a site?

14 A. I would say that's correct.

15 Q. And that if a vegetative buffer
16 or other BMPs aren't designed
17 appropriately, then the results --- then
18 you can expect worse results; correct?

19 A. If the BMPs are not implemented
20 as they're supposed to be implemented?

21 Q. Or designed appropriately.

22 A. Or designed inappropriately?

23 Q. Yeah.

24 A. You could potentially have more
25 significant erosion, sure. That's what

1 the BMPs are there to protect.

2 Q. Okay. All right. We're going to
3 finish the document review to make sure
4 that there isn't anything else that
5 might in the file that we haven't seen.

6 A. Okay.

7 Q. If there is, we could conceivably
8 have a couple additional questions for
9 you, but we'll cross that bridge when we
10 get to it, if we get to it. Otherwise,
11 I don't have anything right now.

12 ATTORNEY GOLDSTEIN:

13 I have no questions at
14 this time.

15 EXAMINATION

16 BY ATTORNEY FERRENCE:

17 Q. Just one question, Tim.

18 A. Yes.

19 Q. You're a soil scientist; correct?

20 A. Yes.

21 Q. And I think you stated this
22 before, but I just want you to
23 reiterate. Are you qualified to analyze
24 a conservation plan?

25 A. Am I qualified to analyze ---

1 Q. Yes.

2 A. --- what was submitted? Like a
3 conservation plan that's submitted?

4 Q. Yeah.

5 A. No, I'm not a designer. I
6 can't ---.

7 Q. Okay. That's ---.

8 A. I am not a designer of
9 conservation plans. I don't have --- I
10 don't have those credentials.

11 Q. Thank you.

12 ATTORNEY FERRENCE:

13 That's all I wanted to ask
14 him.

15 ATTORNEY YEAGER:

16 Okay. We're set. Thank
17 you.

18 * * * * *

19 DEPOSITION CONCLUDED AT 5:00 P.M.

20 * * * * *

21

22

23

24

25

1 COMMONWEALTH OF PENNSYLVANIA)
2 COUNTY OF CLEARFIELD)
3

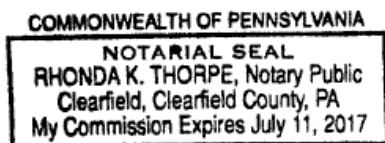
4 CERTIFICATE

5 I, Rhonda K. Thorpe, a Notary Public in
6 and for the Commonwealth of Pennsylvania, do
7 hereby certify:

8 That the witness whose testimony appears
9 in the foregoing deposition, was duly sworn by me
10 on said date and that the transcribed deposition
11 of said witness is a true record of the testimony
12 given by said witness;

13 That the proceeding is herein recorded
14 fully and accurately;

15 That I am neither attorney nor counsel
16 for, nor related to any of the parties to the
17 action in which these depositions were taken, and
18 further that I am not a relative of any attorney
19 or counsel employed by the parties hereto, or
20 financially interested in this action.



Rhonda K. Thorpe
Court Reporter

