

1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF HAWAII

3 KUPALE OOKALA, INC., a CIVIL NO. 17-00305-SOM-KSC  
4 Hawai'i non-profit  
5 corporation; CENTER FOR FOOD  
6 SAFETY, a Washington, D.C.  
7 non-profit corporation;

8 Plaintiffs,

9 vs.

10 BIG ISLAND DAIRY, LLC, a  
11 Hawai'i limited liability  
12 company,

VOLUME II

13 Defendant.

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14 DEPOSITION OF MATTHEW ROBERT KURANO (Continued)

15 Taken on behalf of the Plaintiffs, at State of  
16 Hawaii Department of Health, Clean Water Branch, 2827  
17 Waimano Home Road; Hale Ola Building, Room 241; Pearl  
18 City, Hawaii 96813, commencing at 10:00 a.m., on  
19 Thursday, October 18, 2018, pursuant to Notice.

20 BEFORE: HEDY COLEMAN, CSR NO. 116  
21 Registered Merit Reporter

## 1 APPEARANCES:

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20

21 Also present: Derek Whitesides

22

23

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1 THE REPORTER: Our disclosure is complete and available  
2 for everyone to review. It will be attached to the  
3 deposition transcript.

4 MATTHEW ROBERT KURANO,  
5 called as a witness on behalf of the Plaintiffs,  
6 having been previously duly sworn or affirmed to tell  
7 the truth, the whole truth and nothing but the truth,  
8 was examined and testified as follows:

9 EXAMINATION

10 BY MR. CLAIBORNE

11 Q Mr. Kurano, my name is David Claiborne, and  
12 I'm an attorney for Big Island Dairy. We've met  
13 before, correct?

14 A Correct.

15 Q Okay. And you understand even though we've  
16 broken or recessed overnight, that you're still under  
17 oath?

18 A Yes.

19 Q I want to talk about something that was  
20 discussed early on yesterday, which was the permitting  
21 process for Big Island Dairy.

22 Can the enforcement proceeding still be open  
23 as the NPDES permit process unfolds?

24 A As you said yesterday, yes, is the short  
25 answer.

1 Q And in the meeting that was held at your  
2 office on Monday, was there discussion about that  
3 process -- the process occurring in that way?

4 A There was substantial discussion about the  
5 permit process.

6 Q And do you recall any discussion of the  
7 permit process initiating its public processes in the  
8 first quarter of 2019?

9 A I do recall that that is a possibility that  
10 was discussed.

11 Q As a goal of both sides. Would that be fair?

12 A Yes.

13 Q What in your opinion has to occur on the  
14 enforcement side in order for the permit process to go  
15 forward in the first quarter of 2019?

16 A I think two things need to occur: The  
17 Department of Health needs to provide the dairy with  
18 the most recent inspection and some form of  
19 communication of what expectations are for the dairy  
20 to complete activities in order to demonstrate that it  
21 would not discharge except for extraordinary events.

22 And the second part is that the dairy would then  
23 need to take adequate actions, as well as planning, and  
24 submit a formal report stating what those actions would  
25 be for which the director can deem appropriate.

1 Q With respect to item one, the DOH response to  
2 Big Island Dairy, is that reflected through  
3 Exhibit 12, the August inspection report?

4 A Exhibit 12 is the draft inspection report  
5 from an August inspection. So I'm referring to what  
6 the final report would need to be provided to the  
7 dairy.

8 Q And Exhibit 12 has not been provided to the  
9 dairy, at least through a formal channel at this  
10 point.

11 A Let me confirm Exhibit 12.

12 Q Sure.

13 A That is correct. Exhibit 12 has not been  
14 provided to the dairy through a direct correspondence  
15 from the department.

16 Q And I believe yesterday, you testified that  
17 Exhibit 12 would be in final form today?

18 A Yes.

19 Q Okay. Is it right now?

20 A Yes.

21 Q Are you prepared to deliver it to the dairy  
22 today?

23 A I am prepared to provide it to management,  
24 and at their direction, it will be provided to the  
25 dairy.

1 Q So in the past, we've seen official  
2 correspondence come from Alec Wong. Is that how this  
3 would be transmitted to the dairy as well?

4 A Likely, that is a possibility, but that is  
5 not the only way that it can be provided to the dairy.

6 Q What's the other way?

7 A It could also be accompanied with some more  
8 formal of an enforcement order.

9 Q Similar to the NOVO?

10 A Similar to the NOVO.

11 Q Okay.

12 A It could also be provided directly from  
13 myself to dairy representatives upon receiving  
14 authorization from management.

15 Q And do you know how this report will be  
16 transmitted to the dairy, through what method?

17 A No.

18 Q Okay. Do you have any recommendation as to  
19 what method?

20 MR. BOHLEN: I would not answer that  
21 question. Because if he does have a recommendation,  
22 that's something to work out with his management as  
23 opposed to stating what the department should do.  
24 That's an internal matter that we need to discuss..

25 BY MR. CLAIBORNE

1 Q Okay. Understood. Have you written any  
2 memorandums or internal communication concerning  
3 transmission of the final report to Big Island Dairy?

4 A No.

5 Q So look at Exhibit 16. And Exhibit 16 is a  
6 document you wrote previously. Correct?

7 A Correct.

8 Q And it was distributed internally in a  
9 confidential manner?

10 A Correct.

11 Q Yet it's been provided to everyone in the  
12 case. Is that correct?

13 A Correct.

14 Q Have you written anything like this with  
15 respect to the August 2018 inspection and followup to  
16 that?

17 A No.

18 Q Can you say today whether or not an  
19 enforcement action will be initiated against Big  
20 Island Dairy for events that have occurred since the  
21 NOVO?

22 MR. TEBBUTT: Objection. I just want to  
23 state an objection for the record, and I should have  
24 done this in the beginning.

25 Counsel for Big Island Dairy did not cross

1 notice Mr. Kurano for deposition, and so we do not  
2 believe that they have the right to ask questions  
3 outside the scope of the questions that we asked or  
4 that I asked yesterday. I believe this is outside the  
5 scope, and so I object.

6 MR. CLAIBORNE: And, Mr. Bohlen, is that  
7 question I asked, is that one he could answer?

8 MR. BOHLEN: I think not.

9 MR. CLAIBORNE: Okay.

10 MR. BOHLEN: Thank you for asking me.

11 BY MR. CLAIBORNE

12 Q So we kind of got down that road we were  
13 talking about the permit process.

14 The second item that you mentioned would need  
15 to be done before the permit process proceeds would be  
16 some demonstrative action by the dairy. Was that  
17 right?

18 A That's right.

19 Q And the demonstrative action that you'd like  
20 to see from the dairy, is that going to be contained  
21 in the forthcoming formal communication from the  
22 department?

23 A I would assume so, but I can't guarantee it.

24 Q Because you're not the ultimate  
25 decision-maker?

1 A And it hasn't been written yet.

2 Q Okay. But Exhibit 12 is in final form. Is  
3 that right?

4 A Exhibit 12 is in final form, the report, but  
5 the method to transmit and communicate has not.

6 Q Okay. Does Exhibit 12 contain within it  
7 items that you would want Big Island Dairy to perform  
8 before its permit process initiates?

9 A The report includes items that require Big  
10 Island Dairy to address. It's not explicit in  
11 direction of what actions to perform.

12 Q So something more specific will be included  
13 when Exhibit 12 is transmitted in final form?

14 A I can't answer that right now.

15 Q And when I say initiate the permit process,  
16 I'm saying the circulation of a draft on a permit. Is  
17 that how you understand it as well?

18 A That's what I understood it as the permit  
19 application has been received --

20 Q Right.

21 A -- therefore the permit process has been  
22 initiated. But within the context of our conversation  
23 today, I interpret it as move forward towards a draft  
24 permit.

25 Q Would there be any reason that the dairy

1 could not proceed with public informational meetings  
2 incident to its permit at this time?

3 A I cannot comment as to what the dairy can or  
4 cannot do on its own accord with respect to  
5 informational meetings.

6 Q Would there be -- would it be against any  
7 departmental policy or regulation for them to do that?

8 A Not that I know of.

9 Q Okay. And likewise, would it be against any  
10 departmental policy or regulation for the permitting  
11 process to go into draft stage while the enforcement  
12 action remains open?

13 A I don't know of any explicit policy that it  
14 would be against, but those decisions are at the  
15 direction and discretion of the director.

16 Q Okay. But you're speaking for the department  
17 today. Correct?

18 A Correct.

19 Q Okay. And so as you sit here today, you're  
20 not aware of any policy or procedure of the department  
21 that would prohibit the permit process going to draft  
22 stage even while the NOVO issues remain outstanding?

23 A Correct.

24 Q And so if such an impediment were to be  
25 imposed, it would just be -- it wouldn't be based on

1 any existing authority?

2 MR. TEBBUTT: Objection; misstates the  
3 record.

4 MR. BOHLEN: You may answer that.

5 A I do not believe that there is any existing  
6 law or regulation prohibiting the movement forward  
7 toward the draft permit. However, there is a mandate  
8 that the director acts in the public interests. And  
9 at the discretion of that director, the department can  
10 either move towards a draft permit or not.

11 I mean yesterday's -- in an answer from  
12 yesterday, I think I gave an example of an enforcement  
13 order with the City and County of Honolulu that is 35  
14 years long. And during that period, permits have been  
15 and will be issued.

16 BY MR. CLAIBORNE

17 Q In this case, specific to Big Island Dairy,  
18 isn't the NPDES permitting process an explicit part of  
19 the enforcement order?

20 A Correct. To apply for a permit.

21 Q So in order for BID to comply with the NOVO,  
22 it needs to follow through with its permit application  
23 process, does it not?

24 A So the order, as far as I remember it, stated  
25 that Big Island Dairy must submit an application for a

1 NPDES permit, which it did.

2 Q So as far as you're concerned, they have  
3 satisfied that aspect of the NOVO?

4 A That singular aspect, yes.

5 MR. CLAIBORNE: Okay. There's a few items I  
6 might not made enough copies of.

7 MR. TEBBUTT: So we just have two copies.  
8 You don't have a copy for us?

9 MR. CLAIBORNE: I don't. Maybe at a break,  
10 we can get one.

11 What exhibit is this?

12 THE REPORTER: 24.

13 (Whereupon, Exhibit 24 was marked for  
14 identification.)

15 MR. TEBBUTT: Off the record.

16 (Discussion hold off the record.)

17 BY MR. CLAIBORNE

18 Q Handing you what we've marked as Exhibit 24,  
19 do you recognize Exhibit 24 as the NOVO?

20 A Yes.

21 Q And when you -- your prior testimony that  
22 they completed one aspect of the NOVO, would that be  
23 item number two of the order?

24 A Yes.

25 Q Now, if you turn to item six of the order, it

1 indicates that DOH may prior corrective actions  
2 identified in the report to be implemented. Has the  
3 department transmitted any such requirements to Big  
4 Island Dairy?

5 A No.

6 Q And has the department received the report  
7 required by item number five?

8 A Yes.

9 Q When did the department receive the report  
10 required by item number five?

11 A I don't remember. I'd have to check the  
12 records.

13 Q Would the summer of 2017 sound accurate to  
14 you?

15 A Yes, that's the approximate time frame.

16 Q And so in the intervening year, has the  
17 department determined that it has no followup  
18 corrective actions under item number six?

19 A No.

20 MR. BOHLEN: Let's clarify that answer,  
21 please.

22 A In the intervening year, the department has  
23 conducted multiple inspections of which the department  
24 has made findings of issues associated with the same  
25 subject matter in item five of the NOVO. So as to

1 your question of did we determine whether any followup  
2 actions were required, the answer to that is, yes.  
3 But did we order them explicitly as a continuation or  
4 addendum to the order provided in the NOVO, we have  
5 not.

6 BY MR. CLAIBORNE

7 Q Will that be part of the Exhibit 12  
8 forthcoming final report?

9 A Many of the items identified in the period in  
10 between when this NOVO was issued and the present will  
11 be included, but I cannot speak to exactly what will  
12 be included in that as it hasn't been written yet.

13 Q You do recognize that compliance with item  
14 number six is dependent upon communication from the  
15 department to Big Island Dairy, do you not?

16 A I do.

17 Q All right. Do you feel that a permit going  
18 to draft in the first quarter of 2019 is a realistic  
19 possibility?

20 A Yes, depending on the amount of work that has  
21 been completed in the last several months, of which --  
22 at the dairy, of which we're not aware.

23 What I mean to say is if a lot of the items that  
24 are formally documented in the August 6 report has  
25 already been corrected by the dairy, as well as

1 potentially new items that is coming to our awareness now  
2 and that the dairy can complete it very aggressively,  
3 then it's possible.

4 Q Okay.

5 A But that is a lot of ifs.

6 Q You mentioned yesterday that it's possible  
7 that after a permit, it would be issued in final form;  
8 that it's possible that they be reopened. Do you  
9 remember that testimony?

10 A I don't remember, but that's accurate.

11 Q Okay. Would the occurrence of a -- do you  
12 know what an upset condition is?

13 A Upset is a legal definition specifically  
14 associated with NPDES regulations, typically with  
15 respect to wastewater treatment plant.

16 Q So you've heard the term before?

17 A I am familiar with upset.

18 Q Would an upset condition be a basis to reopen  
19 a permit?

20 A No.

21 Q With respect to CAFO operations, has the  
22 State of Hawaii adopted any standard for discharge,  
23 permitted discharge, any stricter than the  
24 25-year/24-hour national standard?

25 A I'm unable to give a yes-or-no answer to

1 that, as the permitting process allows for the  
2 imposition of additional requirements, more stringent  
3 than national standards on a permit-by-permit basis.  
4 So whereas we haven't adopted categorical standards  
5 that are more stringent, NPDES permits are provided  
6 the opportunity to be more stringent in order to be  
7 protective of human and environmental health where  
8 needed.

9 Q So no uniform standard has been applied --  
10 adopted for the State, but you do use your  
11 site-specific discretion?

12 A Yes.

13 Q Are you familiar with the CNMP submitted by  
14 Big Island Dairy this past summer?

15 A I am familiar.

16 Q It's Exhibit 17.

17 A I'm familiar with the document.

18 Q Okay. I'll ask a few questions about it, and  
19 if you don't know, it's fair enough.

20 Did the CNMP, Exhibit 17, design for  
21 conditions harsher than a 25/24?

22 A I remember that it -- it does include a  
23 25/24-hour design storm event, and it makes some  
24 discussion of a more chronic rain condition, but I  
25 don't remember specifically what that is.

1 Q Would it be appropriate for Big Island Dairy  
2 to design around chronic storm events?

3 A I think so, yes.

4 Q And to the extent their BID -- their CNMP  
5 does that, it would be -- it would be appropriate?

6 A Yes, as it would determine the appropriate  
7 rates and distribution methods for fertilization into  
8 the fields.

9 Q Do you know whether the CNMP used  
10 precipitation standards based on the wettest year on  
11 record in the past 10 years?

12 A It's my understanding that it is, but I don't  
13 remember specifically where it says so in the CNMP.

14 Q How many CAFOs are there in the state of  
15 Hawaii?

16 MR. TEBBUTT: It's been asked and answered.

17 MR. CLAIBORNE: Oh.

18 A It's my understanding that we have one large  
19 CAFO.

20 BY MR. CLAIBORNE

21 Q And where is that?

22 A That is Big Island Dairy.

23 Q How many dairies are there in the state of  
24 Hawaii?

25 A My understanding is that there may be two

1 dairies, a second dairy in addition to Big Island  
2 Dairy in North Kohala on the Big Island.

3 Q Is the production of local dairy products  
4 important to the state of Hawaii?

5 A I don't think I can speak on behalf of the  
6 department of whether collectively it's important to  
7 the state or not.

8 Q How do you -- do you feel it is?

9 A I feel that any movement towards food  
10 security is important for a state.

11 Q Particularly an isolated state like this one,  
12 right?

13 A Any state.

14 Q Yesterday Mr. Tebbutt asked you about cases.  
15 Do you remember that, case -- court cases?

16 A Yes.

17 Q Do you read the actual court case opinions or  
18 case summaries?

19 A I think I answered yesterday that I haven't  
20 read very many at all of the cases that he cited. But  
21 to be open, it depends. Most case summaries are  
22 provided in the list serves that I talked about  
23 yesterday.

24 So for the amount of environmental law and cases  
25 on a regular basis, I may skim the summaries provided by

1 third-party-type providers. In rare occasions in which  
2 there's a highly relevant case to something specific that  
3 we're working on, and time and level of resource permit,  
4 then we'll often read the case itself, particularly  
5 Hawaii cases, as that's more relevant to what we work on.  
6 But please note I'm not a legal expert or attorney.

7 Q Hawaii cases like the Hawaii Wildlife Fund  
8 versus County of Maui, are you familiar with that one?

9 A Not by its name. I'm not sure which case  
10 that is.

11 Q It's a Ninth Circuit decision that came out  
12 earlier this year on their wastewater injection wells,  
13 I believe. Are you familiar with that?

14 A Is that the Lahaina case?

15 Q Yeah.

16 A Yes.

17 Q In the inspections that you've been involved  
18 with at Big Island Dairy, have you seen any evidence  
19 that the lagoons are leaking?

20 A Can you define "leaking."

21 Q Do you not know what a leak is?

22 A Well, there has been evidence that there's  
23 been water pumped over, so wastewater lost from the  
24 lagoon that way.

25 Q Over its spillway?

1           A     Not over its spillway, but over its berm,  
2 when it had to be pumped out.

3           Q     Okay.

4           A     So I don't characterize that as a leak, but I  
5 didn't want that to be misunderstood as I didn't see  
6 any evidence of --

7           Q     Okay.

8           A     -- water loss from the lagoon.

9           Q     Okay. Any other circumstances you've  
10 observed along the lines of leaking from the lagoons?

11          A     No.

12          Q     And I believed Big Island Dairy has told you  
13 that the lagoons are lined. Right?

14          A     Yes.

15          Q     Have they told you they're not leaking?

16          A     Yes.

17          Q     Have they told you there was little solids  
18 accumulation in the upper lagoon?

19          A     Yes.

20          Q     Have they told you that that was based upon  
21 professional survey work they had performed of the  
22 lagoon?

23          A     Yes.

24          Q     And has that survey work been provided to the  
25 department?

1           A     I believe it has, but I'm not familiar with  
2     it and I don't remember reading it myself.

3           Q     How many meetings has the department had with  
4     representatives of the Center For Food Safety?

5           A     I can only speak to the ones that I know of,  
6     and I don't know of any.

7           Q     How about with representatives of Kupale  
8     Ookala?

9           A     There have been meetings that I attended with  
10    representatives of Kupale Ookala, but not legal  
11    representatives but of members. For instance,  
12    Charlene and Genard were here yesterday, and I assume  
13    that they're Kupale Ookala. And through our  
14    inspections and interviews, we've had meetings with  
15    them.

16          Q     Okay. Have you had meetings with them that  
17    are not reflected in your inspection reports?

18          A     No, no -- once second, let me think. I'm not  
19    completely certain who all is in Kupale Ookala. We  
20    have had meetings with representative or Councilwoman  
21    Poindexter, and that's not reflected in a particular  
22    report. That was a meeting requested with our  
23    director, and it was -- it was Councilwoman  
24    Poindexter.

25                    There are conversations through complaint

1 calls that we fielded from both Charlene and Genard,  
2 and those aren't reflected in inspection reports as  
3 they were just phone calls.

4 Q If there's a complaint call and no action is  
5 taken in followup, would there be any record of it?

6 A Very often complaint phone calls are not  
7 recorded. Specific complaints often will be,  
8 particularly if it's a new complaint. They can be  
9 recorded, but not everything that we touch at every  
10 moment of the day is recorded.

11 Q Have any of the folks you've mentioned, this  
12 Poindexter, Charlene Genard, have any of them  
13 complained to you about the department's response  
14 efforts related to Big Island Dairy?

15 A I think many people in the community,  
16 including the three that you mentioned, are  
17 unsatisfied with the level of response and maybe  
18 frustrated by the lack of resource that we have to put  
19 towards this issue.

20 Q Yesterday you indicated that you wanted the  
21 dairy to demonstrate it won't discharge during typical  
22 wet weather. Do you recall that?

23 A Yes.

24 Q What is typical wet weather?

25 A Typical wet weather should be associated with

1 the local area in which the site or facility is, or  
2 where it's located. So for Big Island Dairy, that  
3 means the Ookala area at the elevations in which it  
4 conducts its activities, outside of what should be an  
5 incredibly severe weather event like a hurricane.

6 Q And that's what some followups are going to  
7 be. With an event like Hurricane Lane, you would not  
8 include within typical wet weather?

9 A The general practice of the department is to  
10 not look at environmental events which occur during  
11 hurricane events or dramatically severe storms.

12 Q Like a tropical storm?

13 A Like a tropical storm, as something in which  
14 it takes some type of enforcement proceeding, provided  
15 that the facility has taken all steps to mitigate any  
16 type of discharge associated with that type of event  
17 and has otherwise complied with state laws.

18 Q Are you familiar with how Big Island Dairy  
19 handled Hurricane Lane?

20 A No.

21 Q Okay. You haven't seen any of the reporting  
22 they did on that?

23 A Not in depth.

24 Q Yeah. Do you have an understanding of what  
25 constitutes a violation of the Clean Water Act?

1           A     Yes.

2           Q     What do you think is a violation of the Clean  
3 Water Act?

4           A     An unauthorized discharge of a pollutant from  
5 a point source to a water of the U.S.

6           Q     That's not authorized by a permit?

7           A     By a regulatory agency with authority in  
8 which to authorize specific discharges from a facility  
9 to state waters.

10          Q     So a discharge pursuant to a lawful permit  
11 would not be a violation?

12          A     Yes, discharges in compliance with a lawful  
13 permit.

14          Q     And how about agricultural storm water  
15 discharge?

16          A     Agricultural storm water discharges in state  
17 law are -- are defined as non-point source discharges.

18          Q     And are they defined the same way in the  
19 Clean Water Act under federal law?

20          A     I can't say for certain, but it is my  
21 understanding that agricultural storm water discharges  
22 are exempt from -- as a point source -- regulated  
23 point source category.

24          Q     Part of your answer was that there had to be  
25 a discharge. What is a discharge?

1           A     Discharge is an addition of a pollutant to a  
2     -- in the Clean Water Act to a water of the U.S.

3           Q     And what would you rely upon as evidence of a  
4     discharge?

5           A     Typically, we rely on visual observations.  
6     For traditional discharges such as wastewater  
7     treatment plants, they also submit discharge  
8     monitoring reports.  And it's a regulated entity's  
9     responsibility to affirmatively report when there has  
10    been a discharge.

11          Q     Are you familiar with the difference between  
12    direct discharges and indirect discharges?

13          A     I'm familiar with the concept.

14          Q     What's your -- what do you understand the  
15    concept to be?

16          A     Direct discharges is self-explanatory.  It  
17    should mean a point source discharge whereupon the  
18    discharge of that pollutant is direct from a regulated  
19    entity or an end of a pipe, for example, to a  
20    jurisdictional water body.

21                 The term indirect discharge, and I'm not sure  
22    if it's a term of law, but as I understand it, it's  
23    used when discharges of a singular nature get put into  
24    either a combination or mixed streams and ultimately  
25    connect to a water body.  It could also mean the

1 discharge of a pollutant to a surface water, which is  
2 a jurisdictional water in the Clean Water Act, via  
3 something like groundwater. But I think that's more  
4 of a commonly used lay-type expression. I'm not aware  
5 of it being a legal term.

6 Q So in order to -- well, have you ever seen a  
7 condition that you would view as an indirect  
8 discharge?

9 A From the dairy or just in general?

10 Q In general.

11 A I think I have.

12 Q And where do you think you've seen that?

13 A There are discharges into nearshore  
14 groundwaters that there are evidence that that  
15 ultimately hits a surface water.

16 Q And what type of evidence have you relied  
17 upon to form an opinion that an indirect discharge has  
18 occurred?

19 A These would --

20 MR. TEBBUTT: I'm going to object to this  
21 line of questioning as outside the scope of  
22 yesterday's direct.

23 MR. BOHLEN: You may answer.

24 A Typically, we rely on studies that may  
25 include chemical tracer-type studies or other types of

1 studies scientifically based.

2 BY MR. CLAIBORNE

3 Q What is a pollutant?

4 A There's a definition of pollutant, both in  
5 the implementing regulations for the Clean Water Act  
6 in 40 CFR, Code of Federal Regulations, as well as in  
7 state law and the implementing administrative rules.

8 Pollutant can be, in general, anything that  
9 changes the physical, chemical, or a biological condition  
10 of the receiving water. This includes sediment as well  
11 as pathogens, as well as temperature, and many other  
12 potential sources.

13 Q So, does the Clean Water Act to your  
14 knowledge prohibit discharge of non-pollutants?

15 A I'm sorry, that's a -- I'm taking a moment to  
16 understand the question.

17 MR. TEBBUTT: I'll object; vague and  
18 ambiguous.

19 A The Clean Water Act prohibits the discharge  
20 of pollutants. What that implies, then, is it doesn't  
21 prohibit the discharge of non-pollutants, though the  
22 definition of discharge is explicit to the addition of  
23 a pollutant. So I don't think there can be an  
24 addition of a non-pollutant. I think that's just the  
25 language issue.

1 BY MR. CLAIBORNE

2 Q Well, would the mere fact that rain falls on  
3 a field and then that rain flows to a gulch, would  
4 that be in and of itself the discharge of a pollutant?

5 A Clean water like storm water, which is only  
6 rainwater or any type of other precipitation flowing  
7 into a stream, does not constitute the addition of a  
8 pollutant. There must be an explicit pollutant.

9 Q So you would -- as an enforcement officer,  
10 you would have to find some evidence that that storm  
11 water contained a pollutant in order to find a Clean  
12 Water Act violation?

13 A Yes.

14 Q And how -- what steps would you take to  
15 determine whether or not a storm water runoff  
16 contained a pollutant?

17 A We need to collect evidence to support a  
18 finding that there was a discharge of a pollutant.  
19 Evidence, as I've said prior, can include things like  
20 visual observations, it can include chemical testing,  
21 though, as explained yesterday, that's not something  
22 we commonly collect. It could include statements, as  
23 well as evidence that the discharge may have occurred,  
24 such as the erosional cuts or reeling.

25 Q And would you take any steps to determine

1 whether pollutants that you might find in storm water  
2 came from a point source?

3 A Yes. We would need to identify the point  
4 source, meaning the discrete point of which the  
5 pollution came from.

6 Q You're familiar with the gulches around Big  
7 Island area and on Big Island area, are you not?

8 A Yes.

9 Q Are there any natural soil conditions in and  
10 around those gulches that contain bacteria?

11 A We haven't done the testing, but my  
12 understanding from this experience, working with our  
13 branch, that bacteria does naturally occur in soils.  
14 Environment is not sterile.

15 Q And do you also understand that when it rains  
16 and the gulches on Big Island Dairy rain, falling in  
17 non-production areas of the dairy, picks up sediment?

18 A That would be a likely assumption.

19 Q Are you aware of other animals that inhabit  
20 the gulch areas that can contribute bacteria?

21 A Yes.

22 Q What?

23 A I've seen pigs running through the gulches,  
24 and there must be birds and likely mongoose, and any  
25 other type of natural, or not natural but animals that

1 are running in that area.

2 Q And what about livestock on pasture ground  
3 off the production area, could they contribute  
4 bacteria to storm water?

5 A Yes.

6 Q And would they be a point source?

7 MR. TEBBUTT: Objection; calls for a legal  
8 conclusion.

9 MR. CLAIBORNE: If you know.

10 A That would require a legal conclusion,  
11 depending on the evidence and the fact pattern, but  
12 pastured animals in and of themselves are not a  
13 categorical point source category.

14 (Whereupon, Exhibit 25 was marked for  
15 identification.)

16 BY MR. CLAIBORNE

17 Q Sir, handing you Exhibit 25, can you look at  
18 those three pictures and tell me if you recognize  
19 manure in those pictures.

20 A I would assume that on the second picture,  
21 that is clearly manure. And the dark --

22 MR. BOHLEN: Let me look, because I think  
23 you're looking at the third picture. Okay, never  
24 mind.

25 A And I would suspect, given the context in

1 which you're providing me these photos, that the dark  
2 spots in the middle could likely be manure, but I  
3 can't tell explicitly on photos one and three. But it  
4 certainly looks like it on photo two.

5 BY MR. CLAIBORNE

6 Q Okay. From what animal do you think that  
7 manure came, if you can tell?

8 A I can't tell.

9 Q Okay. Would it surprise you to know that  
10 that is pig manure?

11 A I wouldn't have any reason to say otherwise.

12 Q Have you ever seen pig manure or pig  
13 droppings?

14 A Yes.

15 Q Does it look like pig droppings you've seen  
16 before?

17 A I'm not enough of a specialist in, you know,  
18 animal waste to be able to clearly identify it, but I  
19 have no reason to believe otherwise.

20 Q Now, you've used the term "point source."  
21 What is a point source to your understanding?

22 A Point source is a regulatory definition used  
23 to define who can be permitted under the Clean Water  
24 Act. And it's defined as a discrete conveyance, but  
25 also means a clearly identifiable source that's

1 discrete not just in terms of conveyance but as to the  
2 source itself.

3 Q Is a concentrated animal feeding operation a  
4 point source?

5 A If it discharges, yes.

6 Q So Big Island Dairy would fall within that  
7 definition?

8 A Yes.

9 Q Are you familiar with a regulatory definition  
10 of what constitutes the confinement areas or  
11 production areas of a CAFO?

12 A I am generally familiar, but there are a lot  
13 of definitions as to what the qualified footprint is  
14 under the CAFO regulation.

15 Q What do you generally understand it to be?

16 A Areas where animals are confined for the  
17 purpose of feeding, milking, or other type of  
18 concentrated activity.

19 Q What about the waste containment areas?

20 A Can you define what you mean by "waste  
21 containment area."

22 Q Lagoons.

23 A Those would be part of the regulated  
24 footprint of a CAFO.

25 Q Composting areas?

1           A     Solid waste and manure handling areas.

2           Q     And areas where inputs are stored; feed, raw  
3 materials?

4           A     Yes, production areas.

5           Q     What about areas where crops are grown?

6           A     Crops that are grown are not considered part  
7 of the production areas provided that the  
8 fertilization in that area is consistent with a  
9 Comprehensive Nutrient Management Plan that was  
10 approved of by the regulatory authority and  
11 implemented as such by the regulated entity.

12          Q     What about pasture areas?

13          A     Pasture is not considered part of the point  
14 source footprint of something like a CAFO.

15          Q     What about roads?

16          A     Roads, I believe may be a mix, depending if  
17 they're serving the production area or if they're  
18 general dirt, farming area access roads.

19                   (Whereupon, Exhibit 26 was marked for  
20 identification.)

21 BY MR. CLAIBORNE

22          Q     Handing you what we've marked as Exhibit 26,  
23 have you ever seen this document before?

24          A     I've seen -- if I haven't seen this document,  
25 I've seen something very similar.

1 Q What do you recognize within the document?

2 A It is an aerial photograph of the Big Island  
3 Dairy facility footprint.

4 Q Does it include areas outside the CAFO  
5 footprint?

6 A Outside.

7 MR. TEBBUTT: Objection; calls for a legal  
8 conclusion.

9 MR. BOHLEN: You may answer.

10 MR. TEBBUTT: To the extent it calls for a  
11 legal conclusion.

12 A It identifies both the CAFO production areas  
13 as well as the associated pasturing areas.

14 BY MR. CLAIBORNE

15 Q Okay. So you've given us your understanding  
16 of what you think the CAFO production areas are.  
17 Would you please outline or circle those with this red  
18 pen on Exhibit 26 --

19 A So I'll make a general...

20 Q -- as best you can.

21 A (Witness complies.)

22 MR. CLAIBORNE: Probably better pass it  
23 around, let everybody see.

24 BY MR. CLAIBORNE

25 Q Sir, on Exhibit 26, you have marked on that

1 in red ink. Is that right?

2 A I have.

3 Q And the area in red ink is the area that you  
4 understand to be part of Big Island Dairy CAFOs  
5 production area. Is that right?

6 A Yes.

7 Q Now, one area you didn't mark, and I want to  
8 give you an opportunity to correct yourself if you  
9 want, but is the area of the screw press composting  
10 area --

11 A Oh.

12 Q -- and the agitation pit?

13 A Yeah. Thank you. I didn't see those  
14 features.

15 Q So now with that correction, did the outer  
16 points of the red ink show the area that you believe  
17 is part of Big Island Dairy CAFOs production area?

18 A Yes, which doesn't include the area that  
19 would be covered under a Nutrient Management Plan,  
20 which is part of the NPDES permit, but I wouldn't  
21 identify as production area.

22 Q I don't know what you mean by that. Can you  
23 explain.

24 A What I'm identifying as the production area  
25 refers to the parts of Big Island Dairy that produce a

1 point source wastewater discharge which should be  
2 treated through the lagoons. The fields that the  
3 dairy uses to apply fertilizer or wastewater  
4 production areas could be considered part of the  
5 regulated footprint, and discharges from those areas  
6 could be point source discharges if the dairy is not  
7 following its application rates, agronomic application  
8 rates, and conditions set forth in the CNMP.

9 Q Do you believe the CAFO regulations define  
10 the field areas as part of their production area?

11 A My understanding is that the regulations  
12 allow for the exemption of the agricultural areas  
13 provided that the fertilizer for manure application  
14 areas are done consistently with the CNMP.

15 So I don't want to split hairs in terms of  
16 verbiage, because the verbiage might not be entirely  
17 accurate when I say production areas. However, storm  
18 water falling on the area that I've outlined, it's my  
19 understanding that those areas would need to be treated  
20 as wastewater and part of the wastewater system, lagoon  
21 system.

22 But storm water that falls on field areas where  
23 manure is land applied can be treated as a non-point  
24 source discharge, provided that or -- or that's a  
25 misnomer -- an exempted discharge from the point source

1 category, provided that the fertilizer application or  
2 maneuver handling and application is consistent with the  
3 terms of the CNMP that's incorporated in the NPDES  
4 permit.

5 Q That helps. Thank you. The clean water that  
6 falls on the production area, if it's kept away from  
7 contact with manure, does it have to go within the  
8 processed water system?

9 A No. So, for instance, my understanding is  
10 the barns have roofs. And that's within the  
11 production area. But if the water that falls on the  
12 roof of a barn comes into contact with no pollutant  
13 such that that storm water can stay clean, that storm  
14 water can be diverted outside of the production area  
15 and -- and allowed to flow into the gulches, as long  
16 as it doesn't pick up or otherwise transport any other  
17 pollutant with it.

18 (Whereupon, Exhibit 27 was marked for  
19 identification.)

20 BY MR. CLAIBORNE

21 Q Handing you Exhibit 27, do you recognize this  
22 document?

23 A I recognize what the document depicts.

24 Q Would you agree that Exhibit 27 depicts the  
25 production areas of the Big Island Dairy CAFO?

1           A     Yes.

2                     (Whereupon, Exhibit 28 was marked for  
3     identification.)

4     BY MR. CLAIBORNE

5           Q     Now, handing you what we've marked as  
6     Exhibit 28, and I'll represent to you this is a  
7     drainage diagram for Big Island Dairy's production  
8     area, have you ever seen this document before?

9           A     I haven't seen this document before.

10          Q     Okay. So have you studied the drainage flows  
11     of Big Island Dairy CAFO?

12          A     Yes.

13          Q     And how have you done that?

14          A     In a report that was in response to the NOVO  
15     that we discussed earlier, there were drainage  
16     diagrams.

17          Q     Okay. These were, I'll just represent to  
18     you, extracted from that report and then they're  
19     included now in the Exhibit 17 CNMP.

20                     Based upon your field observation, do you have  
21     any reason to believe that any of the flow diagrams on  
22     Exhibit 28 are incorrect?

23                     MR. TEBBUTT: I'm going to object; again,  
24     this is outside the scope of yesterday's questioning.

25                     MR. BOHLEN: You may answer.

1           A     I have no reason to believe, but I also  
2 haven't been to the dairy when there was enough rain  
3 to actually validate how all of the flows are coming  
4 off the site.

5 BY MR. CLAIBORNE

6           Q     Okay. Is it a discharge in violation of the  
7 Clean Water Act if litter or manure from the CAFO area  
8 reaches a non-production area through movement in the  
9 air?

10           MR. TEBBUTT: Objection to the extent it  
11 calls for a legal conclusion.

12           A     That's a very complicated question. I think  
13 it is a violation of the Clean Water Act if a  
14 pollutant is discharged from the -- a discrete source.  
15 It's my understanding that it doesn't matter  
16 necessarily how the pollutant traveled to a particular  
17 area. If a discrete discharger were to discharge that  
18 pollutant, then that discharge itself can be  
19 considered a violation of the Clean Water Act.

20 BY MR. CLAIBORNE

21           Q     If it reaches a water, a receiving water?

22           A     In order to violate the Clean Water Act,  
23 there must be a discharge to a jurisdictional water  
24 body.

25           Q     And so if manure or feed were carried by wind

1 off the production area and into a field but did not  
2 reach a receiving water, would that be a discharge?

3 A It calls for legal conclusion and speculative  
4 on my part, but what I hear you representing is that  
5 there is waste being transported but not discharged,  
6 as discharge means addition of a pollutant to a water  
7 body -- jurisdictional water body.

8 So what you're saying is if the pollutant  
9 does never -- does never -- does not enter a water  
10 body, does that constitute a discharge? And my  
11 understanding is that that does not constitute a  
12 discharge.

13 Q You wouldn't issue a violation order based on  
14 that fact pattern?

15 A For a discharge, no. It is a possibility,  
16 since we're speculating in a hypothetical situation,  
17 that a permit required certain control mechanisms.  
18 And if there was a violation of the permit conditions  
19 such that an action that was obligated was not taking  
20 place, enforcement action could be taken for violation  
21 of a permit condition. But that would not be for the  
22 discharge of a pollutant if, in our hypothetical  
23 situation, a pollutant never entered or was added to a  
24 jurisdictional water body.

25 Q I guess what I'm getting at, you do recognize

1 that there are circumstances under which litter or  
2 manure may leave a production area by weather  
3 circumstances unrelated to precipitation. Correct?

4 A Possible.

5 Q It could also get tracked by, say, a human  
6 through their foot steps, could it not?

7 A It could.

8 Q It could be tracked outside the production  
9 area by a vehicle. Right?

10 A Yes.

11 Q Or a wild animal? I suppose a mongoose could  
12 walk over cow manure in the production area and then  
13 leave the production area, can it not?

14 A It could.

15 Q In any of those circumstances, are those  
16 discharges?

17 A In none of the examples that you've provided  
18 have you stated that that manure entered into a  
19 jurisdictional water body.

20 Q So if the mongoose walked over to the  
21 production area and then ran down in the gulch  
22 carrying manure on its pads on its feet, would you  
23 issue a discharge -- a violation?

24 A It's speculative, but likely not.

25 Q Why not?

1           A     It seems that that wouldn't be a controllable  
2 discharge if it's one mongoose. However, depending on  
3 the fact pattern of our hypothetical situation, if a  
4 responsible party, a dairy, were allowing the regular  
5 discharge, be it through mongoose feet or tire  
6 tracking or other weather events, that it was a  
7 systemic issue, then it could be determined that the  
8 dairy was in fact causing the discharge of these  
9 pollutants, but it's up to the regulatory agency to  
10 provide the level of evidence to show that the dairy  
11 is responsible in fact for those discharges.

12           Q     Are you familiar with the Lois Alt versus EPA  
13 case out of West Virginia?

14           A     If you're referring to, I think the selenium  
15 case?

16           Q     It was a chicken -- a chicken facility.

17           A     Then, no, I'm not.

18           Q     Okay. The gulches we're talking about here,  
19 Big Island Dairy, they are all receiving waters or  
20 waters of the United States, are they not?

21           A     They're certainly state waters. It would be  
22 up to a federal jurisdiction to determine whether they  
23 were jurisdictional water bodies for the waters of  
24 the U.S.

25           Q     They flow to the Pacific Ocean. Is that

1 right?

2 A Yes.

3 Q Do they always flow to the Pacific Ocean?

4 A As far as I understand, yes.

5 Q Year-round, 24 hours a day?

6 A Are you asking me if they're perennial  
7 streams versus intermittent streams?

8 Q Yeah.

9 A I believe most of them are intermittent  
10 streams, though the stream on the Honoka'a side, I  
11 believe is perennial except in severe drought  
12 conditions.

13 Q Kaula Gulch?

14 A That sounds right to me.

15 Q What are the human uses of the gulches at Big  
16 Island Dairy if you know?

17 A Anecdotally, I know people have hiked those  
18 gulches, probably for hunting, but I don't think  
19 there's any limitation on designated uses.

20 Q What about aquatic uses within those gulches,  
21 aquatic life?

22 A I have not been purview to benthic or aquatic  
23 surveys.

24 Q What aquatic life have you observed when  
25 you've been in the gulches?

1 A Very little.

2 Q Okay. What's the little you have observed?

3 A Mosquitoes.

4 Q Okay.

5 A And often the gulches would be dry when I was  
6 inspecting them.

7 Q Now, in some of your testimony yesterday, you  
8 mentioned that your indicator for a Clean Water Act  
9 violation was that of definitive evidence. Do you  
10 recall using that term?

11 A Before I answer that question, I haven't  
12 hiked or inspected Kaula Gulch --

13 Q Fair enough.

14 A -- which is the more perennial stream.

15 Q Yeah, okay.

16 A Okay. My recollection of yesterday, I was  
17 very tired, but sounds like, yes, definitive evidence  
18 is something that we look for. I think we need a  
19 preponderance of evidence is what the -- our standard  
20 is. But in doing our jobs, we try to look for  
21 definitive proof.

22 (Whereupon, Exhibit 29 was marked for  
23 identification.)

24 MR. CLAIBORNE: This is -- I didn't make  
25 enough copies, but you can look at mine.

1 Q So handing you Exhibit 29, is this the  
2 transmittal letter sent by your department to Big  
3 Island Dairy in relation to the December 2016  
4 inspection?

5 A Yes.

6 Q Which is Exhibit 3. Is that right?

7 A Yes.

8 Q And the department's determination with  
9 respect to that inspection was that there was no  
10 definitive evidence of discharge. Is that right?

11 A Correct.

12 Q And that's the term you used in the second  
13 paragraph on page one?

14 A Correct.

15 Q So what constitutes definitive evidence?

16 A For the example of Big Island Dairy, it would  
17 have been that we saw water from the lagoon or from  
18 its production areas clearly flowing into -- or let me  
19 clarify -- from its wastewater lagoons into the gulch  
20 via the spillway.

21 Q That's the only definitive evidence of a  
22 discharge you've seen at Big Island Dairy? You  
23 personally.

24 A In retrospect, I have seen other discharges  
25 from the production area. At the time of writing

1 this, we were only considering the wastewater lagoon  
2 as the discharge point from the production area.

3 Q Do you consider brown water definitive  
4 evidence of a discharge?

5 A That's really ambiguous. I would need to  
6 determine whether there was evidence that the dairy  
7 itself was discharging. The presence of brown water,  
8 as I interpret your question, being in just a water  
9 body is not evidence enough. We would need to track  
10 that the source or at least part of the source of that  
11 brown water was a particular entity.

12 Q And it would need to have a pollutant in it,  
13 wouldn't it? Is brown water a pollutant?

14 A Again, that's very ambiguous. If the brown  
15 water is brown because there's sediment in it, then  
16 sediment is the pollutant.

17 Q Right.

18 A So the fact that --

19 Q Depending on where the sediment came from.

20 A No.

21 MR. TEBBUTT: Objection; calls for a legal  
22 conclusion.

23 MR. BOHLEN: You may answer.

24 A The sediment in and of itself, if the  
25 sediment wasn't actually present in the stream as part

1 of the stream, because then it wouldn't be discharge,  
2 it wouldn't be added, it would just be there. But if  
3 sediment entered into the stream, then it would be the  
4 addition of a pollutant.

5 If it were from a discrete source of which we  
6 see and can track that we have evidence, then we would  
7 feel fairly confident. I would say it's definitive if we  
8 can clearly track the source from a state receiving water  
9 to a particular discharger, that that in fact was a  
10 discharge.

11 BY MR. CLAIBORNE

12 Q Okay. Would the same standards apply to  
13 turbid water?

14 MR. TEBBUTT: Objection; vague and ambiguous.

15 BY MR. CLAIBORNE

16 Q Do you know what turbidity is?

17 A I certainly understand what turbidity is.  
18 But when we -- when you just used it as brown water,  
19 brown water by definition would also be turbid. So I  
20 feel --

21 Q Just semantics?

22 A Well, no. It means different things, right.

23 Q Uh-huh?

24 A Turbidity has to do with opacity and light  
25 transmittance through water. That could be from

1 different things. Brown water is going to be brown  
2 because there's either some type of particle or other  
3 soluble that's causing it to turn colors. But that  
4 may or may not affect light transmittance. I don't  
5 want to split hairs, but...

6 Q But turbidity can be the basis for a  
7 discharge violation, can it not?

8 A It can.

9 Q And is the same process required, the tracing  
10 of it to the point source in order to issue, or to  
11 determine a violation?

12 A Yes.

13 Q We've seen in some of the photographs and  
14 inspection reports use of the term foaming water. Is  
15 foaming water definitive evidence of a discharge?

16 A It's not definitive evidence of a discharge  
17 in the water body itself.

18 Q It comes back to the tracing issue, does it  
19 not?

20 A Correct.

21 (Whereupon, Exhibit 30 was marked for  
22 identification.)

23 BY MR. CLAIBORNE

24 Q Handing you Exhibit 30, I'll represent to you  
25 these are photos taken from, I'm just going to spell

1 it, K-U-P-A-P-A-U-L-U-A Gulch in November of 2017. Do  
2 you see these pictures?

3 A Yes.

4 Q Do these pictures show to you brown water?

5 A Yes.

6 Q Turbid water?

7 A Yes. On photos two and three or pages two  
8 and three.

9 Q Cloudy water?

10 A Cloudy implies that it's not as opaque as it  
11 is.

12 Q Okay. Foamy, do you see foam?

13 A I see bubbles, but I can't tell if it's  
14 really foamy or if that's just bubbles.

15 Q Do you know whether that gulch Kupapaulua  
16 Gulch is affected by dairy operations?

17 A I don't know.

18 Q If it is not affected by dairy operations and  
19 these are conditions found in that gulch, would that  
20 be indicative of the natural runoff conditions in the  
21 area of Ookala?

22 A Well, I don't know where this gulch is.

23 MR. CLAIBORNE: Okay.

24 MR. TEBBUTT: Then objection; calls for  
25 speculation.

1 BY MR. CLAIBORNE

2 Q Is it important to you to understand the  
3 background conditions of the environment --

4 A Yes.

5 Q -- to in order to determine a Clean Water Act  
6 violation?

7 A No.

8 Q Okay. Do you know whether the gulches along  
9 the --

10 MR. BOHLEN: Hamakua.

11 BY MR. CLAIBORNE

12 Q -- Hamakua Coast, whether those gulches are  
13 known to run brown and very turbid in storm water  
14 conditions?

15 A In high-flow conditions, almost all streams  
16 in Hawaii run brown.

17 Q Do you know what a brown surf advisory is?

18 A No.

19 Q Okay.

20 A Do you mean a brown water advisory?

21 Q What's a brown water advisory?

22 A The Department of Health will put out an  
23 advisory when receiving nearshore waters are brown,  
24 typically after heavy storms.

25 (Whereupon, Exhibit 31 was marked for

1 identification.)

2 BY MR. CLAIBORNE

3 Q Handing you Exhibit 31, I'll represent these  
4 are photographs of the Ka'awali'i Gulch area taken in  
5 November of 2017. This is a gulch on the Hilo side of  
6 the dairy, I think.

7 MR. TEBBUTT: Counsel, have these ever been  
8 produced in discovery?

9 MR. CLAIBORNE: Yes.

10 MR. TEBBUTT: They're not Bates-stamped,  
11 though.

12 MR. CLAIBORNE: Yeah, I don't think we  
13 printed the Bates-number ones. But, yeah, they've  
14 been produced.

15 MR. TEBBUTT: Okay.

16 BY MR. CLAIBORNE

17 Q So these photos were taken the same day that  
18 counsel was showing you photos yesterday of in  
19 November of 2017. And in this gulch, Ka'awali'i  
20 Gulch, do you see brown water?

21 A Yes.

22 Q Do you see turbid water?

23 A Yes.

24 Q Do you see foamy water?

25 A Yes.

1 Q In the pictures of the coastline, do you see  
2 brown water?

3 A Yes.

4 Q Do you know whether a brown water advisory  
5 was issued by the Department of Health on November 27,  
6 2017?

7 A I don't remember.

8 Q Would it surprise you if you had, based on  
9 the photographs you're looking at?

10 A No.

11 Q Would it surprise you if those brown  
12 conditions extended for miles up and down the coast on  
13 that day?

14 A No.

15 Q Is that -- are these conditions evidence of a  
16 discharge by Big Island Dairy?

17 A In and of themselves, no. They could be if  
18 it was part of, as we talked, the tracing pattern.  
19 But provided without context, it's just pictures of  
20 brown coastal waters.

21 (Whereupon, Exhibit 32 was marked for  
22 identification.)

23 BY MR. CLAIBORNE

24 Q Why do you issue brown water advisories?

25 A The department has put together a program to

1 advise the public when the Department of Health  
2 believes that the public should show caution when  
3 entering into waters that have been affected by  
4 typically heavy rain and runoff from both point and  
5 non-point sources.

6 Q Is that because the department recognizes  
7 that natural -- naturally occurring processes in the  
8 soil contain contaminants harmful to human health?

9 A The department doesn't discern whether  
10 natural or unnatural. In these cases because of the  
11 nature of events, typically heavy rain events,  
12 regardless of the cause, the department believes that  
13 the public should be advised to show caution and stay  
14 out of the water.

15 Q Does any sampling have to occur before a  
16 brown water advisory is issued?

17 A Typically, it's only visual monitoring as  
18 opposed to like a chemical water quality sample.

19 Q Okay. Exhibit 32, these are pictures taken  
20 in November of 2017 of Kaula Gulch above the dairy  
21 operation. Do you understand Kaula Gulch is a dairy  
22 or a gulch impacted by the dairy operation?

23 A Yes.

24 Q Do you understand that gulch has reaches that  
25 go beyond and above the dairy operation?

1 A Yes.

2 Q Okay. And these pictures taken of the gulch  
3 above the dairy operation, do they show brown water?

4 A I didn't take these myself, but if you're  
5 representing that the first photo is a photo taken  
6 above, and I'm do believe that, then, yes, that is  
7 brown water at the location in which you're  
8 specifying.

9 Q And turbid water?

10 A Correct.

11 Q And do you believe these background  
12 conditions of a gulch affected by the dairy are  
13 important to understand?

14 A Yes.

15 Q Why?

16 A There are multiple considerations made when  
17 determining whether enforcement action is going to be  
18 taken: The first obviously is whether discharge  
19 occurred. The second is the conditions upon which the  
20 discharge occurred, was it due to some type of  
21 negligence or other noncompliance with the expected  
22 law versus an event in which it could not be  
23 controlled, perhaps like a hurricane-type event.

24 The third consideration is the impact it had on  
25 the its receiving water. For instance, the severity of a

1 discharge into something like a pristine bay that's  
2 highly full of corals versus an irrigation ditch or a  
3 drainage ditch that is in a consistent state of  
4 compromise is looked at differently.

5 So it is important for consideration. It doesn't  
6 determine whether a discharge or not has occurred, but it  
7 goes into the information used by the department on  
8 whether to make a case against a discharger or not.

9 Q In order to reach a determination that a  
10 pollutant has reached a receiving water, does a  
11 measurable quantity of the pollutant have to reach the  
12 state water?

13 A If a measurable -- I'm not sure what you mean  
14 by "measurable." If it be identified that a pollutant  
15 entered, the amount of that pollutant matters in terms  
16 of severity of the discharge. However, from a strict  
17 liability standpoint, it's my understanding is that  
18 the amount of which doesn't matter.

19 Q So you're not familiar with any case law from  
20 -- oh, sorry -- yeah, we can take a break.

21 A Yeah, if we're going to be...

22 MR. CLAIBORNE: This would be a fine spot to  
23 stop.

24 (At 11:17 p.m., a recess was taken until 11:24 a.m.)

25 BY MR. CLAIBORNE

1 Q All right. Mr. Kurano, if you're  
2 investigating a case of an indirect discharge that you  
3 cannot trace to a point source, in that instance do  
4 you believe you would have to find a measurable  
5 quantity of a pollutant?

6 A Let me rephrase so that I can be clear.

7 If we were investigating a source of a  
8 discharge and then could not define particular  
9 responsible persons, then it would be unlikely that we  
10 could issue an enforcement action, regardless if the  
11 collective amount was measurable or not, because a  
12 particular entity could not be held responsible for  
13 that discharge.

14 Q Are you familiar with any cases where you've  
15 seen discussions regarding measurable quantity of a  
16 pollutant?

17 A The most relevant case I can think of is the  
18 most recent Lahaina ruling where the Lahaina  
19 Wastewater Treatment Plant injects into groundwater,  
20 that groundwater then ultimately flows into nearshore  
21 surface waters, and there was a measurable amount of  
22 the pollutant from the wastewater treatment plant  
23 entering into nearshore waters.

24 Q And are you also familiar with that case's  
25 discussion that the pollutant level must be more than

1 de minimus?

2 A I'm familiar with it, though I wouldn't say  
3 that I would be the appropriate legal expert to  
4 interpret.

5 Q You must also be familiar with this, and I  
6 think you've used the term today, that case's  
7 discussion that the pollutant must be fairly traceable  
8 to a point source?

9 A Yes.

10 Q Would you ever rely on bacteriological  
11 samples alone to trace a pollutant to a point source?

12 A Talking about evidence without context is  
13 very difficult. It's possible, depending on how a  
14 study was set up, to determine whether enough evidence  
15 exists within the sampling.

16 And just let me speculate that there are methods  
17 in which even molecular methods in which bacteria is  
18 sampled, but to identify the likely source of that  
19 particular bacteria.

20 Q Like DNA test tracing?

21 A Like DNA testing. And if it's determined  
22 that that DNA source could only be the DNA source or  
23 more likely than not be the DNA source associated with  
24 a particular activity, then that evidence would be  
25 compelling to be able to determine that that is

1 responsible persons. But just to answer with bacteria  
2 alone without context, evidence alone is not strong.

3 Q So specific to Big Island Dairy, taking water  
4 samples from the gulches below the highway adjacent to  
5 the dairy, below meaning downgradient, could you rely  
6 on water samples alone on days of discharge to find a  
7 Clean Water Act violation?

8 MR. TEBBUTT: Again, this is outside the  
9 scope of yesterday's questioning. I don't think this  
10 is proper questioning today. It should have been  
11 cross noticed if you wanted to get into this. I don't  
12 think it's proper to get into this today.

13 MR. BOHLEN: You may answer.

14 A Just taking one set of samples in receiving  
15 water downstream from anything without a design study  
16 that would isolate particular sources, whereas may be  
17 measuring the impact of a source, does not provide  
18 enough context to be able to definitively identify the  
19 source. But that isn't to say that there's no value  
20 in that information, it's just that the value of that  
21 information may be limited.

22 BY MR. CLAIBORNE

23 Q With respect to the NOVO violation in Big  
24 Island Dairy, the maximum departmental penalty was  
25 assessed, was it not?

1           A     It was.

2           Q     Because the maximum penalty was assessed with  
3     respect to that incident, is it really important to  
4     know the volume of the discharge that occurred to form  
5     the basis for that NOVO?

6           A     That's really ambiguous as to it's really  
7     important to whom?  If you mean --

8           Q     To the department.

9           A     To the department, the department determined  
10    that the nature of the discharge was such that it  
11    deserved the statutory maximum penalty, regardless of  
12    the exact size of the discharge.

13          Q     Turn to Exhibit 19.  Does Exhibit 19 contain  
14    any photos showing discharge of water to -- discharge  
15    to a receiving water?

16          A     The second page of 19 shows water leaving the  
17    confinement area that ultimately flows along Kaohaoha  
18    Gulch, but it doesn't explicitly show the connection  
19    between the edge of that hardened area and the banks  
20    of Kaohaoha Gulch.

21          Q     So from these photos in Exhibit 19, can you  
22    tell whether that flow reached the gulch?

23          A     From the photo alone, I cannot.

24          Q     Let's turn to Exhibit 21.  These were the  
25    pictures that you testified that there was feed in the

1 vehicle lane and some spillage of manure outside the  
2 collection area. Is that right?

3 A That's correct.

4 Q But do they evidence or do they depict a  
5 discharge to a receiving water?

6 A These photos alone do not.

7 Q And as long as these materials were cleaned  
8 up before a storm water event, is there a problem?

9 A That's, again, somewhat ambiguous. Was there  
10 a problem for department? There could be a problem,  
11 because there should be implemented measures so that  
12 this doesn't occur even after it's cleaned up. So  
13 corrective action.

14 However, if what is being asked is, is there  
15 discharge provided that this was all cleaned up?  
16 Discharge means the addition of a pollutant to a water of  
17 the U.S., in our case water of the State. So if the  
18 material that is pictured here, or the storm water that  
19 contacted it did not enter into state receiving water, as  
20 you've suggested, due to cleaning or other type of  
21 corrective measures, then it would not be a discharge  
22 that would be subject to some type of violation.

23 Q And these areas depicted in Exhibit 21, to  
24 your knowledge, are they in service today?

25 A As I understand it, this upper heifer area

1 has been abandoned due to the reduction of herd size.

2 Q There was questioning yesterday on whether  
3 you compared application records to precipitation  
4 records, and you said you had not. Do you know if  
5 your contractor has, PG Environmental?

6 A I don't know for certain, but that would be  
7 something that we would ask him to do as part of the  
8 process.

9 Q You also testified yesterday that there could  
10 not be application -- land application during rain  
11 events. Is it your or the department's position that  
12 there can be no land application during any  
13 precipitation event?

14 A There should be no land application of manure  
15 under conditions in which there's a high risk or  
16 definitely certain discharge of that material into a  
17 receiving water. There's a lot of question,  
18 particularly due to natural environment there, what  
19 those conditions are in which the risk is very high,  
20 which is something that we have asked and directed you  
21 folks to look at.

22 So a precipitation event could be something like  
23 a fraction of a fraction of an inch. That is not  
24 uncommon in Hawaii. And if that occurs after a period of  
25 dry, the fact that it precipitated at all may not be

1 enough to prohibit any further land application.  
2 However, it's also possible that there be a short  
3 duration high intensity rainfall that then saturates the  
4 soil, causing either runoff or limited ability for the  
5 soil to assimilate the manure. Those conditions would  
6 not be appropriate to be land applying, as the risk of  
7 runoff is so high, discharge.

8           So the specific conditions in which the dairy  
9 can be land applying is of high technical interest and  
10 environmental value to the department, and those  
11 specifics are in fact what the department is  
12 considering.

13           Q     And your contractor is working on that for  
14 you?

15           A     Yes.

16           Q     With respect to the Exhibit 22 related to a  
17 complaint of a spill in July of 2017, take a moment to  
18 refresh your memory on Exhibit 22.

19           A     Okay.

20           Q     Did the department find the response and  
21 explanation provided by Big Island Dairy in Exhibit 22  
22 to be reasonable?

23           A     Found it to be reasonable.

24           Q     And no further enforcement action was  
25 initiated with respect to that event?

1 A Correct.

2 Q Turn to page six or, I'm sorry, Exhibit 16.  
3 On page three, there's a list of six items that you  
4 were suggesting be implemented to help ensure that the  
5 dairy does not release wastewater in the future. Is  
6 that right?

7 A That's correct.

8 Q Number one, did you ever communicate the  
9 request of number one to Big Island Dairy?

10 A Yes.

11 Q And how did you communicate it to them?

12 A These were a part of conversations I think we  
13 had in meetings with the dairy as well as our  
14 management.

15 Q To your knowledge, did the dairy follow up  
16 and obtain additional equipment to increase  
17 distribution and incorporation capacity?

18 A My understanding is that they have added  
19 additional equipment to increase distribution and may  
20 be adding equipment for incorporation capacity.

21 Q Was item number two ever communicated to the  
22 Big Island Dairy?

23 A Yes.

24 Q To your knowledge has Big Island Dairy  
25 completed the item requested in number two?

1           A     Partially.

2           Q     What part has been completed and what part  
3 has not?

4           A     They have removed the vegetation and silt.  
5 That was the vegetative mat. But I do not believe  
6 that it was ever fully drawn down.

7           Q     Do you still feel they need to fully draw  
8 down that lagoon?

9           A     I think that the lagoons need to be drawn  
10 down substantially, particularly Lagoon 2, since it's  
11 in series, so that there's a high degree of confidence  
12 that the amount wastewater and storm water produced by  
13 the facility will never overtop the amount of holding  
14 capacity in the ponds.

15          Q     Item number three, was that ever communicated  
16 to Big Island Dairy?

17          A     Yes.

18          Q     And has Big Island Dairy been undertaking  
19 activity to eliminate or reduce catchment of storm  
20 water into the wastewater lagoons?

21          A     Yes.

22          Q     Item number four, was that communicated to  
23 Big Island Dairy?

24          A     Yes.

25          Q     Has Big Island Dairy, since that was

1 communicated them, undertook efforts at odor control?

2 A Yes.

3 Q Number five, you talked about yesterday. And  
4 I don't believe Big Island Dairy has done anything in  
5 that regard. Is that correct?

6 A Correct.

7 Q And that has number five ever been  
8 communicated to Big Island Dairy?

9 A Yes.

10 Q Who did you communicate it to?

11 A It was communicated multiple times, but  
12 through verbal communication with Big Island  
13 representatives whom we were walking the site.

14 Q During your on-site visits?

15 A Yes.

16 Q Item number six is the NMP, and that's in  
17 progress. Is that right?

18 A Correct.

19 Q And in that regard they're waiting for your  
20 latest comments. Correct?

21 A Correct.

22 Q I think you mentioned earlier today you've  
23 sent that final draft on up your chain, and that's the  
24 Exhibit 12. Correct?

25 A It will be sent up the chain.

1 Q Okay. And then what's the timeline for it to  
2 come back to Big Island Dairy?

3 A That, I cannot be certain, as it needs to be  
4 reviewed by multiple parties.

5 Q Is the technical review side through your  
6 contractor done?

7 A Yes.

8 Q So the review process that's left is  
9 internal, internal to Department of Health?

10 A Yes.

11 Q Exhibit 23, do you know what day the photos  
12 in Exhibit 23 were taken?

13 A No.

14 Q Can you see how any of the other gulches  
15 around Ookala are interacting with the Pacific Ocean  
16 on the day these pictures were taken?

17 A No.

18 Q From these pictures alone, can you reach a  
19 conclusion that a discharge of a pollutant from Big  
20 Island Dairy is taking place in these pictures?

21 A No.

22 Q Is this water brown and foamy that's coming  
23 into the ocean --

24 A Yes.

25 Q -- similar to several of the other photos

1 we've looked at today of gulch conditions?

2 A Perhaps, but the pictures are a little  
3 blurry.

4 Q In your experience with inspections at Big  
5 Island Dairy, would you agree that dairy manure has a  
6 green tint to it?

7 A No.

8 Q Then let's look at Exhibit 1 and photograph  
9 number nine. Do you see a green tint in the flow  
10 depicted in photograph nine?

11 A I do.

12 Q Do you think the photograph nine is showing  
13 dairy waste?

14 A Yes. But this is not lagoon water either.  
15 And I don't think that the lagoon water has a green  
16 tint.

17 Q What is -- what is number nine? If it's not  
18 lagoon water, what is it?

19 A It's my understanding this was some of the  
20 wastewater that was associated with the lower airstrip  
21 prior to cattle being moved up to the free stall  
22 barns.

23 Q Okay. Exhibit 3. There was discussion  
24 yesterday about construction storm water permit. This  
25 takes place at page three of Exhibit 3. Do you

1 remember that?

2 A The discussion of it yesterday?

3 Q Yes.

4 A Yes.

5 Q Did you ever observe any discharges to  
6 receiving waters from the construction activities at  
7 Big Island Dairy?

8 A No.

9 Q You testified that the construction activity  
10 you observed with respect to the creamery was in  
11 excess of one acre. Do you recall making that  
12 testimony?

13 A Yes.

14 Q Now, was that based on visual observation?

15 A Yes.

16 MR. CLAIBORNE: Okay.

17 (Whereupon, Exhibit 33 was marked for  
18 identification.)

19 BY MR. CLAIBORNE

20 Q Handing you what's been marked as Exhibit 33,  
21 titled "Big Island Creamery processing facility," do  
22 you see where it says "New Creamery Building?"

23 A Yes.

24 Q And then below that, it says "Existing  
25 building." Do you see that?

1 A Yes.

2 Q Would the "existing building" be the milk  
3 parlor?

4 A The office, I think it is.

5 Q Okay.

6 A And then the milk parlor is next to it.

7 Q Do you recognize this general site overview?

8 A Yes.

9 Q Okay. In the lower right corner, where it  
10 says "C2.1," do you see that?

11 A Yes.

12 Q Under "Quantities," do you see where it says  
13 "quantities at finished grade, graded area 40,625  
14 square feet." Do you see that?

15 A Okay. Yes.

16 Q Is 40,625 square feet more or less than one  
17 acre?

18 A I think it's less than an acre. It's right  
19 under an acre.

20 Q Okay. So according to the plan, then, the  
21 disturbed area for the creamery was less than one  
22 acre, was it not?

23 A According to this plan, the quantity at the  
24 finished graded area is under one acre. But that may  
25 not include anywhere that was also disturbed in

1 support of the construction activity.

2 Q And is it your belief there was other areas  
3 disturbed?

4 A As I stated yesterday, we never fully  
5 evaluated compliance with it, and it was only a visual  
6 observation. And 40,000 square feet is very close to  
7 a full acre. But I do know that there are a lot of  
8 other unfinished graded areas around the barns that  
9 are gravel areas.

10 Q Around the barns?

11 A Or near to the area depicted in this diagram.  
12 And parking and mobilization of some of the equipment  
13 may have been occurring in that area. So whereas this  
14 picture identifies a finished area and footprint of  
15 less than an acre, it's very close to be either under  
16 or over. And I could not make a determination,  
17 because we did not measure it out of the total  
18 footprint associated with the construction activities.

19 Q And that's fair enough. What you're saying,  
20 you can't say one way or the other --

21 MR. TEBBUTT: Objection; misstates the  
22 record.

23 BY MR. CLAIBORNE

24 Q -- whether it was one acre or less?

25 MR. TEBBUTT: Objection; misstates the

1 record.

2 A I said, to clarify, I cannot definitively  
3 determine whether it is far over or far -- well, right  
4 over or right under, as we never did compliance and  
5 evaluation of that. However, it was very close to it.  
6 And this picture alone, that I don't think it fully  
7 depicts the full construction area.

8 BY MR. CLAIBORNE

9 Q You used the term yesterday regarding  
10 construction activity, you saw -- you used the term a  
11 common plan of development. What does that mean?

12 A That means if a particular construction  
13 project is going to be done in multiple phases, even  
14 if each phase is under one acre but there is a total  
15 common plan of development, and there are multiple  
16 ways to determine whether something is part of either  
17 a larger plan of development or the expression we use  
18 in Hawaii is a total common plan of development, then  
19 that does not exempt the construction activities which  
20 may be under an acre from obtaining NPDES permits  
21 authorizing the discharge of storm water associated  
22 with the construction activity.

23 As subdivisions, for instance, could be in  
24 multiple phases, even if there are two phases of less  
25 than an acre, if that construction project in totality is

1 one project, then the cumulative footprint associated  
2 with those construction activities and support activities  
3 should be counted together, and that project should be  
4 permitted as one construction site.

5 Q Had you ever seen any evidence that the  
6 addition of the bottling plant or creamery was part of  
7 Big Island Dairy's common plan of development?

8 A I have not seen the permit application or  
9 others. We didn't evaluate compliance for the  
10 construction aspect.

11 Q Did you understand that Big Island Dairy had  
12 a -- had conducted some construction activity shortly  
13 after it acquired the property?

14 A Yes.

15 Q And that involved the addition of a free  
16 stall -- two free stall barns --

17 A Yes.

18 Q -- and the milk parlor --

19 A Yes.

20 Q -- and some other aspects as well of the  
21 waste management system?

22 A Yes.

23 Q Do you know whether that included the milk  
24 bottling plant or not?

25 A No.

1 Q And if Mr. Whitesides testified through  
2 affidavit that it did not, would you have any reason  
3 to dispute that?

4 A No.

5 Q If Mr. Whitesides had testified by affidavit  
6 that the bottling plant was never part of their plan  
7 of development until years after the construction  
8 permit was issued, would you have any reason to  
9 dispute that?

10 MR. TEBBUTT: Objection; assumes facts not in  
11 the record.

12 MR. CLAIBORNE: You can -- oh, sorry.

13 MR. BOHLEN: You may answer.

14 A No.

15 BY MR. CLAIBORNE

16 Q Now, Exhibit 3, would you agree that the  
17 inspection report reflected in Exhibit 3 found no  
18 definitive evidence of discharges?

19 A Yes.

20 Q It just identified risk areas or areas of  
21 risk of discharge or potential discharge. Is that  
22 right?

23 A Yes.

24 MR. CLAIBORNE: I'll move along here.

25 MR. TEBBUTT: Don't want to be late for the

1 judge.

2 MR. CLAIBORNE: No, don't want to be.

3 Q With respect to Exhibit 4, this is a report  
4 that formed the basis of the NOVO. Is that right?

5 A Yes.

6 Q Did you do any testing or sampling to confirm  
7 any of your conclusion of the presence of pollutants  
8 in waters related to this inspection?

9 A No.

10 Q In paragraph four on page 13, would it be  
11 fair to say you relied on observations such as cloudy  
12 water, foamy water, brown water, I think is also used  
13 elsewhere, did you rely on those as indicators --  
14 those conditions as indicators?

15 A I relied on, if you look at paragraph seven,  
16 the black trail of what appeared to be dried  
17 wastewater solids running from the fields to the ditch  
18 that directs excess water to Kaohaoha Gulch. This  
19 returns to that kind of tracing discussion we had  
20 earlier.

21 Q And if those wastewaters had been applied at  
22 agronomic rates to those fields, would they be a  
23 discharge?

24 A If they were applied at agronomic rates, they  
25 should not have discharged.

1 Q Okay. Why do you say that? Where do you get  
2 that proposition from?

3 A My understanding is that appropriate  
4 application of manure onto fields should be such that  
5 all of the manure itself, or the fertilizer is  
6 assimilated within the fields, not that it runs off  
7 into gulches or receiving waters. That would be  
8 excess application.

9 Q Did the department conduct any investigation  
10 at the time of issuance of the NOVO to determine  
11 whether or not there had been non-agronomic  
12 application to Big Island Dairy's fields?

13 A No. I stated yesterday, we did not review  
14 field application rates.

15 Q Turn to Exhibit 9. Does Exhibit 9 illustrate  
16 any flow reaching a receiving water?

17 A No.

18 Q The area of the cistern overflow, you know  
19 what I'm talking about when I use that terms, or well  
20 overflow?

21 A Yes.

22 Q Has Big Island Dairy removed confined animals  
23 from the area that interacts with that overflow?

24 A It has.

25 Q And is that why on June 21, 2017, you

1 observed that water to be clear?

2 MR. TEBBUTT: Objection; calls for  
3 speculation.

4 A Can you tell me which exhibit you're on.

5 BY MR. CLAIBORNE

6 Q Exhibit 5, page three, paragraph one.

7 A Yes. When we were there in June, the animals  
8 had been removed and that area had been cleaned of  
9 maneuver. So we noted that the water that was still  
10 flowing over was from the well, but it was not coming  
11 into contact with animal waste.

12 Q And in fact you traced that flow to the  
13 Kaohaoha Gulch and found it clear with no odor?

14 A Yes. That was important to us.

15 Q With respect to the discharges that occurred  
16 in May of this year, and, you know, I think Big Island  
17 Dairy has admitted those discharge events occurred,  
18 has Big Island Dairy modified its operations since May  
19 to prevent such an event from happening again?

20 A It's my understanding that Big Island Dairy  
21 has reduced its herd size, as well as abandoned the  
22 heifer lanes, which should reduce the amount of  
23 wastewater into the ponds, thereby reducing the risk  
24 of having a similar discharge to the one that occurred  
25 in May.

1 Q Have they since installed a lagoon level  
2 monitoring gauge?

3 A That's what I've been told.

4 Q And you have not field verified that?

5 A I have not field verified that.

6 Q Isn't it depicted in the photographs  
7 contained in Exhibit 12? I'll direct you to  
8 photograph nine.

9 A That had not been installed at the time.

10 Q Okay. So you just don't know if it has been  
11 installed --

12 A Yes.

13 Q -- is that right?

14 A That was located outside of the lagoon.

15 Q Have they drawn down their lagoon levels  
16 since May of this year?

17 A Again, that's what I've been told, but I have  
18 not field verified.

19 Q Okay. Are you familiar with what the draw  
20 down levels were entering Hurricane Lane?

21 A No.

22 Q Do you think BID, Big Island Dairy, doesn't  
23 care whether it discharges?

24 A I think I've said before, I do think they  
25 care.

1 Q Have you found them to be caring and  
2 responsive to the department?

3 A I found them to be caring and largely  
4 responsive. That's not an absolute statement.

5 Q During the August visit, the basis of  
6 Exhibit 12, were there any discharges observed?  
7 Exhibit 12.

8 A We did see water flowing over the old cistern  
9 or well overflow area that likely discharged.

10 Q Did it contain pollutants?

11 A It didn't contain a high amount of pollutants  
12 that that area formerly had when animals were  
13 confined. However, animals are allowed to pass  
14 through that area, and there was some amount of manure  
15 on the ground.

16 Q Can you turn to Exhibit 13. On page four,  
17 paragraph 5B, you're the person designated to testify  
18 regarding water quality samples taken after the  
19 September 14, 2016 mud slide and discharge. Is that  
20 right?

21 A I think during our yesterday's testimony, I  
22 said I would not be able to testify as to that.

23 Q Okay. Are you familiar with any water  
24 quality samples taken by the department around  
25 September 14, 2016?

1 A I believe there were some.

2 Q Who would have taken them?

3 A Neil Mukai.

4 Q And if Neil Mukai testified he took no  
5 samples around that time, would you have any reason to  
6 dispute that?

7 A No.

8 Q Are you aware of any samples in the  
9 possession of the department that were taken around  
10 September of 2016?

11 A I wouldn't be able to say.

12 Q Would anyone other than Neil Mukai have taken  
13 those samples?

14 A Not on behalf of the Department of Health.

15 MR. CLAIBORNE: Dare I say the last one.

16 (Whereupon, Exhibit 34 was marked for  
17 identification.)

18 BY MR. CLAIBORNE

19 Q Handing you what we've marked as Exhibit 34,  
20 these are excerpts from Big Island Dairy's  
21 comprehensive site evaluation. Do you know what that  
22 document is?

23 A The Comprehensive Site Evaluation, it's my  
24 understanding that this was the site evaluation that  
25 was done pursuant to the NOVO that we issued.

1 Q In photograph 3-8, Kaohaoha Gulch above the  
2 dairy, do you see that photograph?

3 A I do.

4 Q What are the conditions of the flow that you  
5 see in that picture?

6 A Brown and foamy.

7 Q And if you turn to page three, photo 4-3,  
8 what condition is the water shown in that photograph?

9 A I think it's the same photograph.

10 Q It might be. Same answer?

11 A Yes.

12 Q Photo 4-4, what are the conditions of the  
13 water seen in that photo?

14 A It's brown.

15 MR. CLAIBORNE: No further questions.

16 MR. TEBBUTT: Do you have anything?

17 MR. BOHLEN: I don't have any followup.

18 MR. TEBBUTT: I have a few.

19 FURTHER EXAMINATION

20 BY MR. TEBBUTT

21 Q Mr. Kurano, let's look -- I'll do the best we  
22 can here in a short period of time. Let's take a look  
23 at Exhibit 33, which is the design drawing for the  
24 creamery.

25 A Okay.

1 Q And you testified that you believe the 40 --  
2 as this document shows, 40,625 square feet was for the  
3 building itself, right, the creamery building itself?

4 A Finished graded areas.

5 Q Yeah. And there were other areas where you  
6 said you saw equipment staging and  
7 construction-related activities in addition to that.  
8 Correct?

9 A That's what I remember.

10 Q Okay. And those would be part of what would  
11 be considered the area for disturbance for calculating  
12 whether the construction area was more than one acre,  
13 wouldn't they?

14 A Yes.

15 Q And also the silo tanks that were put in  
16 place above the creamery to handle some of those  
17 processing, they would be part and parcel of that  
18 project too, wouldn't they?

19 A Without looking at what the application is  
20 and the total common plan of development, I couldn't  
21 say for certain. However, it's my understanding that  
22 those silos were put in along with the creamery  
23 building, as they were supporting equipment with that  
24 project. So without having evaluated the project  
25 itself in totality, it would seem a reasonable

1 assumption.

2 Q Okay. Let's take a look at what's Exhibits  
3 29 and 4 together.

4 MR. CLAIBORNE: That was one I didn't have.

5 MR. TEBBUTT: Do you have 29 there in front  
6 of you? Yeah, let's mark that.

7 Q So Exhibit 29 is the letter dated  
8 February 27, 2017, which is a followup to your  
9 inspection from December of 2016. Correct?

10 A Yes.

11 Q And Mr. Claiborne asked you some questions  
12 and he indicated or you indicated that you did not see  
13 a discharge from the lagoon spillway in December of  
14 2016. Correct?

15 A Correct.

16 Q Between the time of this letter,  
17 February 27th, and your next inspection, which is  
18 Exhibit 4, March 28th and 29th of 2017, you did see  
19 evidence of a discharge from the lagoon spillway noted  
20 in that exhibit, didn't you?

21 A In Exhibit 4?

22 Q Exhibit 4.

23 A We saw evidence that there had been  
24 discharges, but we couldn't determine when those  
25 discharges had occurred.

1 Q Right. And based on your inspection in  
2 December, it would have happened somewhere -- sometime  
3 between your inspection in December and your  
4 inspection in March of --

5 A No.

6 Q Just four months later -- three months later.

7 A No. We never looked at the edge of that  
8 spillway, meaning the gulch side during the previous  
9 inspection.

10 Q In December?

11 A In December.

12 Q Okay.

13 A So it was only during March when we could  
14 see, standing in the gulch, looking up, that there was  
15 all those accumulated crystalline solids at the  
16 spillway.

17 Q Right. And those crystalline solids looked  
18 like residuals from manure?

19 A I don't actually know what they looked like,  
20 but by the way they accumulated, it was clear that  
21 they were associated with the spillway.

22 Q Okay. And so characteristics that you used  
23 to determine whether a discharge occurred, color,  
24 correct?

25 A On which day?

1 Q Any day. I mean, I'm just -- there are a  
2 number of different observational factors you would  
3 consider as to whether there was a manure discharge.  
4 Correct?

5 A Yes.

6 Q Color being one of them?

7 A Certainly.

8 Q Foam being another?

9 A Possibly.

10 Q Right. Sediment being another?

11 A Yes.

12 Q And smell?

13 A Yes.

14 Q Yes. And we didn't talk -- Mr. Claiborne  
15 didn't mention smell earlier. Phosphorus, do you know  
16 that phosphorus creates foam?

17 A I know that protein creates foam.

18 Q How about phosphorus, do you know if  
19 phosphorus creates foam?

20 A I didn't know.

21 Q Okay. You were asked some questions about  
22 point source, and if a point source were to discharge  
23 into the air and the air -- and that traveled from a  
24 point source through the air into a gulch, would that  
25 be a discharge from a point source?

1           A     I think the answer is yes, as long as that --  
2     the pollutant itself could be clearly tracked back to  
3     the source through a discrete conveyance.  So if I  
4     were shooting a hose and a clear stream went through  
5     from the hose to the stream, I could say that that was  
6     discrete, then it could be a regulated point source  
7     discharge.

8           Q     All right.  And so the big gun, have you seen  
9     the big gun in operation at the facility?

10          A     I've seen pictures of it; I haven't seen it  
11     in operation.

12                   MR. TEBBUTT:  Okay.

13                   (Whereupon, Exhibit 35 was marked for  
14     identification.)

15  BY MR. TEBBUTT

16          Q     Sir, do you have in front of you Exhibit 35?

17          A     Yes.

18          Q     And is this -- you've seen the big gun there,  
19     just not operating correctly --

20          A     Correct.

21          Q     -- correct?

22                   So I'll refer to this is a picture of the big  
23     gun operating at the Big Island Dairy property.

24                   Have you ever read any literature that talks  
25     about how far aerosols from this type of application

1 travel when they're blown out into the air like this?

2 A No.

3 Q Would it surprise you to know that these  
4 aerosols can travel for miles?

5 A It would surprise me for miles, but I suppose  
6 it's within the realm of belief, depending on the wind  
7 conditions and other factors.

8 Q And when I'm talking about an aerosol, I'm  
9 talking about fine droplets that you might not be able  
10 to observe with the naked eye. Those can travel  
11 miles. Would you have any reason to dispute that?

12 A No.

13 Q And just the visible projection from these  
14 big guns, if it was windy, would you believe that they  
15 could travel for hundreds of feet?

16 A I'd have no reason to believe otherwise.

17 Q Okay. Would you get Exhibit 26 in front of  
18 you, sir. It's this one.

19 MR. BOHLEN: Use this.

20 MR. TEBBUTT: We need his version.

21 MR. BOHLEN: Okay. Yeah.

22 MR. TEBBUTT: It's that, that one right  
23 there. Yeah.

24 Q And so you drew what you believed to be some  
25 of the production area. Correct?

1           A     Correct.

2           Q     How about the -- where it says "airstrip  
3 road," if there were animals housed in that pen in  
4 airstrip road, wouldn't that be considered part of the  
5 production area?

6           A     Yes, if your animals confined, fed, or  
7 watered.

8           Q     Can you circle, please, with this blue pen  
9 that area, please.

10          A     (Witness complies.)

11          Q     And any other appurtenances that were related  
12 to the operations of that airstrip?

13          A     (Witness complies.)

14          Q     Do you know what I mean by appurtenances?

15          A     I do understand what appurtenance means.

16          Q     And in this context, the well across the  
17 street from that heifer pen, wasn't that part of that  
18 waste handling from that pen?

19          A     I'm unfamiliar with a well.

20          Q     Or, sorry, a water -- big waste tank.

21          A     If still in operation, then the waste holding  
22 tank there would be part of it. But I'm unaware of it  
23 being in operation.

24          Q     Right. But when it was operating, that would  
25 be part of the production area. Correct?

1           A     Yes.

2           Q     Then we talked -- you and I talked yesterday  
3 about a number of places, including the compost area,  
4 the solid separation area, the upper cow or calf or  
5 heifer pens, and that there was potential for runoff  
6 to the gulches from all of those. Correct?

7           A     Yes.

8           Q     And so any of the roads that are impacted by  
9 that storm water, if storm water were to hit those  
10 production -- those areas and run off down the roads,  
11 those roads would then have to be considered part of  
12 the production area, wouldn't they?

13          A     It's a lot of ifs.

14                 MR. CLAIBORNE: Object to the legal  
15 conclusion there. Go ahead.

16          A     If any of the contaminated storm water or  
17 other wastewater products utilizes a conveyance,  
18 including a road, as its method of transport, then  
19 those areas should be required to be regulated as  
20 production areas, as the wastewater either transported  
21 or generated by those areas require handling in the  
22 wastewater system.

23 BY MR. TEBBUTT

24          Q     Right. And so all of those areas, if they  
25 were potentially impacted, are not within the area

1 that you drew on Exhibit 26, are they? Some of them  
2 are, some of them aren't?

3 A Yes, the roads weren't included. But it's  
4 not if they're potentially impacted; it's if they're  
5 impacted.

6 Q Right. And doesn't Exhibit 9 that was shown  
7 to you yesterday, this compost area -- the compost  
8 area, didn't you indicate that those areas would be  
9 impacted, that road itself would be impacted?

10 A Yes.

11 Q And that's just one of the examples that we  
12 discussed yesterday. Correct?

13 A Yes.

14 Q Now, you talked about food security being  
15 important in response to one of Mr. Claiborne's  
16 questions. Food security is obviously important for  
17 everyone in this world, but food security can't be --  
18 should food security be prioritized over damage to the  
19 environment?

20 A The question that was asked is if I  
21 personally believe food security was important. And  
22 as you've rhetorically said, food security is  
23 important to everyone.

24 The position of the DOH in its role in a clean  
25 water regulatory capacity is to ensure that any type of

1 activity, be it industrial, food generating, or  
2 otherwise, is done in a way consistent with state law and  
3 Federal Clean Water Act requirements that the receiving  
4 waters, in this case State waters, like streams, are  
5 protected, and that any type of discharge into it  
6 complies with a permit or other legal mechanism for the  
7 protection of human and environmental health.

8 Q Right. And so in order to produce food  
9 safely, a facility still has to be in compliance with  
10 the law, don't they?

11 A Of course.

12 Q And Big Island Dairy has not been in  
13 compliance with the law, have they?

14 A No.

15 Q And there were also questions asked about you  
16 inspecting the lagoons. You didn't -- in order to  
17 inspect the lagoons to determine if they're leaking,  
18 you would have to perform groundwater monitoring,  
19 wouldn't you? Or that would be one method of doing  
20 it?

21 A I'd have to speculate and leave that to an  
22 expert in that field. But in order to determine the  
23 integrity of a lagoon, monitoring groundwater, or  
24 drawing down and doing a physical inspection of the  
25 lagoon bottoms and barriers and membranes would also

1 be things that we would expect as part of some type of  
2 true inspection of integrity of the pond system.

3 Q All right.

4 A Inspections that we conduct are not for that.

5 MR. TEBBUTT: I think that's good enough for  
6 today since we have to go see the judge.

7 FURTHER EXAMINATION

8 BY MR. CLAIBORNE

9 Q Exhibit 35. Does the manure being applied  
10 have a green tint?

11 A It looks that way in this picture.

12 Q Does the big gun directly draw from the  
13 lagoon to irrigate?

14 MR. TEBBUTT: Calls for speculation.

15 A I think it does.

16 MR. CLAIBORNE: Nothing further.

17 MR. TEBBUTT: Thank you, Mr. Kurano.

18 MR. CLAIBORNE: Thank you.

19 A Welcome, guys.

20 (The deposition was concluded at 12:20 p.m.)

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## C E R T I F I C A T E

1  
2 I, HEDY COLEMAN, Certified Shorthand Reporter  
3 No. 116, in and for the State of Hawaii, do hereby  
4 certify: That on Thursday, October 18, 2018, appeared  
5 before me MATTHEW R. KURANO, the witness whose  
6 deposition is contained herein;

7 That prior to being examined, he was by me duly  
8 sworn; that the deposition was taken down by me in  
9 machine shorthand and reduced to typewriting; that the  
10 foregoing represents, to the best of my ability, a  
11 correct transcript of the proceedings had in the  
12 foregoing matter;

13 That pursuant to Rule 30(e) of the Hawaii Rules  
14 of Civil Procedure, a request for an opportunity to  
15 review and make changes to this transcript:

16  X  was MADE by the deponent or a party, and/or their  
17 attorney prior to the completion of the deposition.

18 \_\_\_\_\_ was NOT MADE by the deponent or a party, and/or  
19 their attorney prior to the completion of the deposition.

19 \_\_\_\_\_ was WAIVED.

20 I further certify that I am not counsel for any of  
21 the parties hereto, nor in any way concerned with the  
22 cause.

23 DATED: October 21, 2018

24 Hedy Coleman

25 HEDY COLEMAN, CSR #116

## C E R T I F I C A T E

I, MATTHEW R. KURANO, do hereby certify that I have read the foregoing pages 191 through 285, inclusive, and corrections, if any, were noted by me; and that same is now a true and correct transcript of my testimony.

Dated \_\_\_\_\_

\_\_\_\_\_  
MATTHEW R. KURANO

Number of correction sheets submitted: \_\_\_\_\_

or

Corrections were not necessary (Please initial): \_\_\_\_\_

Signed before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2018.

\_\_\_\_\_

Case: Kupale Ookala vs. Big Island Dairy

Civil No.: 17-00305-SOM-KSC

Date: 10-18-18, Hedy Coleman.